W. R. Berkley Corporation

2021 ANNUAL REPORT

Always Delivering Value

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Always Delivering Value

Since our beginning, the consistent values and focus of the dedicated individuals who comprise the Berkley team have enabled us to maintain a consistent presence through all types of economic and market conditions to meet the needs of our stakeholders and deliver strong risk-adjusted returns. Always being there consistently, every day, with valuable products and services that meet the needs of customers and a culture focused on serving our many stakeholders has engendered trust and fueled our success. Through our decentralized businesses, we are able to respond quickly and effectively to changing market conditions, address emerging risks and allocate capital to our best opportunities. It requires us to be aware of and thoughtful about what is happening in the world around us, and to always be looking forward.

2021 Financial Highlights

By taking advantage of challenging opportunities and bringing together talented people and capital, we feel confident that we will be able to continue to deliver outstanding long-term returns.

COMBINED RATIO
Averaged 94% over the past 5 years

89.6%

TOTAL REVENUES
Increased by 23.5% over the past 5 years

$9.5B

RETURN ON STOCKHOLDERS' EQUITY
Averaged 12% over the past 5 years

16.2%

BOOK VALUE PER SHARE
Grew 64% before dividends and share repurchases over the past 5 years

$25.09*

*Reflects the 3-for-2 common stock split effected on March 23, 2022.

To Our Shareholders

In 2021, the Company delivered an outstanding risk-adjusted return to its shareholders. We exceeded our targeted 15% after-tax return on equity and grew our net premiums written by over 22%. The low interest rate environment allowed us to restructure our balance sheet and extend our debt maturities at substantially lower rates. All of this was accomplished while returning over $478 million to shareholders through dividends and share repurchases and strengthening our capital base to ensure our capacity to continue supporting our future growth.

Our operating results from every perspective were outstanding.

Overall, underwriting results were the key driver behind our improved profitability. Not only did our business grow at a pace far greater than the industry, but we had a loss ratio of 61.1% and a combined ratio of under 90% — with record underwriting income. 2021 was a year during which we were able to raise prices in excess of expected increases in loss costs which, combined with improved risk selection and a better mix of business, resulted in improved underwriting margins.

LEFT TO RIGHT:

W. Robert Berkley, Jr., President and Chief Executive Officer

William R. Berkley, Executive Chairman

Always Valuing Our People

For 55 years, our people have been our greatest asset.

"A major factor in an organization's ongoing success is its ability to develop internally the skilled people necessary for its expansion and further development."

FROM OUR 1979 ANNUAL REPORT

"Every person in the organization is important; every task they accomplish makes a difference in our results."

FROM OUR 2005 ANNUAL REPORT

"The culture of our Company emphasizes that everything we do and every person who participates is important to our enterprise."

FROM OUR 2018 ANNUAL REPORT

We continue to be focused on inflation, both social and economic. This has the potential of adversely impacting our claims costs substantially. Social inflation causes juries to evaluate losses in a manner that may not be purely based upon the facts but is overly impacted by society's current view of what constitutes justice. Economic inflation may bring about an increase in the real cost of losses. These two items together require a keen focus on establishing adequate loss reserves. We work diligently to look ahead and take these factors into consideration, but in order to be prudent in this environment, a level of caution is necessary. Our claims teams continue to work with our actuaries to ensure we appropriately consider these trends. It is important that we continue to increase rates to offset the anticipated increase in claims costs.

Our outstanding underwriting results were not just a reflection of our improved loss ratio, but also of our dramatically improved expense ratio. The expense ratio improved both because the scale of our businesses grew and because we worked diligently to streamline administrative functions and centralize some areas of technology to lower our operating costs. In spite of the additional costs of operating in the current COVID environment, we were able to lower our expense ratio by approximately two points.

We started two new businesses in 2021. One specializes in small business and the second focuses on management protection. We have great expectations that over the next few years each of these businesses will contribute substantially to our future growth. Many of our newer businesses that we started in the past several years have begun to achieve scale and contribute to the profitability of our enterprise. As we build new businesses, it takes several years for each of them to achieve profitability. We are pleased that the hardening market has helped accelerate that pace. We are optimistic that 2022 will continue to show improvement in all of our recent start-ups. Our business strategy has focused on starting new enterprises rather than buying other people's business. We recognize this slower process has a cost of delayed returns, but the benefit in return makes it worthwhile. We continue to believe this is the best strategy for us.

Investments are a key element in determining the profitability of an insurance company and 2021 was a good year for our Company. During this period of low interest rates, we took steps to lower our risk by shortening the duration of our portfolio and maintaining the quality at AA-. We took these actions because we were concerned about inflation and the concomitant risks that it brought to the asset side of our balance sheet. This decision reduced investment income in the short term, but we were convinced the decision would be the appropriate one.

Our insurance business generated approximately $2.2 billion of operating cash flow that we needed to invest. We invested in real estate and investment funds, while improving liquidity with an increasingly cash-like portfolio given our expectation of an inflationary period. We had substantial realized gains from the sale of properties in our real estate portfolio in Florida and New York, since we felt this was a good opportunity to take advantage of the current market. All of our private equity funds

Total Revenues
(dollars in billions)

Investments
Market Value (dollars in billions)

RECORD GROSS AND NET PREMIUMS WRITTEN

$10.7B & $8.9B

Always Focused on Risk-Adjusted Return

Throughout our history, we have run our business with a real understanding of the risk being assumed.

"It is important that any business be well managed and capable of providing us with a return on investment that we consider appropriate in view of the risk inherent in the mix of business written by that company."

FROM OUR 1976 ANNUAL REPORT

"The enterprise of insurance is oriented towards assuming other businesses' risk. We try to be sure that we understand the risks we are taking. The concern in our business is never the risks we can define, but rather the uncertainty of what we do not know or understand."

FROM OUR 2004 ANNUAL REPORT

"In managing our business each day, we attempt to examine not just the profitability, but also the inherent risk and volatility or predictability of the business we underwrite. All returns are not created equal and one needs to be conscious of the risk embedded in achieving those returns."

FROM OUR 2015 ANNUAL REPORT

continued to deliver more than satisfactory returns, our merger/arbitrage results for the year were outstanding and we also had excellent results from our investment funds. Overall, our investment income increased for the year by nearly $88 million. We are especially pleased that our diverse investment portfolio with its low-risk structure is able to provide a consistent return from varying sources year in and year out. We look forward to an excellent 2022.

Our business is one that steps in to solve problems of uncertainty and unpredictability.

Our employees, agents and brokers, customers and communities in which we do business faced a myriad of challenges, making 2021 a year of uncertainty and anxiety. The constantly changing environment during COVID, and the varying ways our government and communities responded, appeared to create more uncertainty for the population as a whole. The political disruptions between the extreme right and extreme left continue the polarization within many countries around the world. Our nation and much of the world have moved away from compromise and understanding, thus creating further unpredictability and disruption for everyone. Fortunately, our business is one that steps in to solve problems of uncertainty and unpredictability. This is especially true in areas of our Company that specialize in excess and surplus lines and other specialty lines. So while we watch the turmoil and uncertainty evolve, we are fortunate that our Company not only helps our customers and communities, but continues to prosper in spite of the environment.

In addition to the current tensions, there is long-term stress coming about from global warming. Many people in our society want instant solutions to complex long-term problems. We are concerned about global warming and we consider it a problem for all of society. We believe we must solve the problems in the context of doing more good than the damage being created by many of the short-term solutions being applied. This means a balance must exist between finding solutions to eliminate the adverse impact of fossil fuels on clean air and water but not at a pace that prevents people from maintaining the necessities of life. These are complex problems. We need real solutions and they will not come overnight. But, they need to be fully thought through, considering and understanding the intended as well as the unintended consequences. People need to think about the forests that are cut down to make wood pellets that replace coal. Are there really net benefits? We need to make progress that is thoughtful and does not cause us to take steps backward rather than forward. These issues also bring about turmoil and uncertainty in our day-to-day economic environment. It is another area where we need to work together.

We are fortunate that our business continues to do well and we have been able to successfully adjust and adapt.

The most important task for our Company's management is managing our human capital. Every great company is only a reflection of the quality of its people. We are proud of our team. We can only do well because of their performance. This has been a very difficult two

Reserves for Losses and Loss Expenses
(dollars in billions)

Common Stockholders' Equity*
(dollars in billions)

*Net of $1.4 billion in special dividends and shares repurchased from 2017 to 2021

RECORD UNDERWRITING AND NET INCOME

$845M & $1.0B

Always Fulfilling Our Commitments

For over five decades, we have been meeting our responsibilities to stakeholders with integrity and compassion.

"We have worked not only to achieve financial returns, but to meet the needs of our customers, and to deliver on the promise that we make every day, to be there when our customers have a need."

FROM OUR 1995 ANNUAL REPORT

"The insurance business is all about trust and fulfilling the promise of coverage. We do this while ensuring we continue to be a valuable contributor to the society in which we operate."

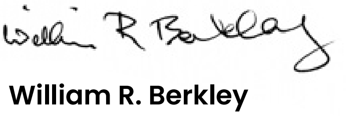
FROM OUR 2011 ANNUAL REPORT

"Through our business and our charitable works, we contribute to society in a manner that makes our world a better and more humane place."

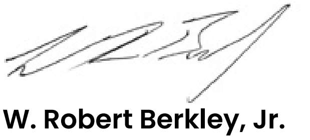
FROM OUR 2019 ANNUAL REPORT

years for everyone. The stresses and strains have been borne in different ways by different people. Anxiety caused by uncertainty and fear is something we all have to live with. We appreciate the fact that the vast majority of our employees have remained committed and continue to contribute every day to helping us fulfill the needs of our customers, agents, brokers and communities in which we operate. We are fortunate that our business continues to do well and we have been able to successfully adjust and adapt. It is our hope that we have generally seen the end of COVID.

We want to thank our directors for their incredible support during these very uncertain times when there was nothing more important than trust. We want to thank all of our employees who have gone through this period of time working hand-in-hand to help us fulfill our commitments to our customers. We want to thank our agents and brokers who have produced business that has allowed our enterprise to continue to prosper. Events such as COVID make us recognize what a small world we live in. We all need to maximize our tolerance and understanding of each other and recognize that we survive best when there is the most hope for our future.



William R. Berkley
Executive Chairman



W. Robert Berkley, Jr.
President and
Chief Executive Officer

Selected Financial Data

In thousands, except per share data

Years ended December 31,	2017	2018	2019	2020	2021
Total revenues	$ 7,684,764	$ 7,691,651	$ 7,902,196	$ 8,098,925	**$ 9,455,467**
Net premiums written	6,260,508	6,433,227	6,863,499	7,262,437	**8,862,867**
Net investment income	575,788	674,235	645,614	583,821	**671,618**
Net realized and unrealized gains on investments*	335,858	154,488	123,467	103,000	**90,632**
Insurance service fees	134,729	117,757	92,680	88,777	**93,857**
Net income to common stockholders	549,093	640,749	681,944	530,670	**1,022,490**

NET INCOME PER COMMON SHARE					
Basic	$ 1.95	$ 2.25	$ 2.38	$ 1.89	**$ 3.69**
Diluted	1.89	2.22	2.35	1.87	**3.66**
Return on common stockholders' equity	10.9%	11.8%	12.5%	8.7%	**16.2%**

AT YEAR END					
Total assets	$24,299,917	$24,895,977	$26,643,428	$28,606,913	**$ 32,086,414**
Total investments	17,450,508	17,723,089	18,473,674	18,481,767	**22,171,814**
Reserves for losses and loss expenses	11,670,408	11,966,448	12,583,249	13,784,430	**15,390,888**
Common stockholders' equity	5,411,344	5,437,851	6,074,939	6,310,802	**6,653,011**
Common shares outstanding	273,409	274,491	275,118	266,738	**265,172**
Common stockholders' equity per share	19.79	19.81	22.08	23.66	**25.09**

Per share data and common shares outstanding have been adjusted for the 3-for-2 common stock splits effected on April 2, 2019 and March 23, 2022.

*Beginning in 2018, net unrealized gains on equity securities are included within net income due to our adoption of ASU 2016-01 on January 1, 2018.

Always
Delivering Value

Our commitment to a core set of values that highlight the importance of people, allocating capital to the best opportunities and fulfilling our commitments has always set us apart. We are consistently focused on meeting the needs of our customers, distribution partners, employees and communities with the utmost integrity and care. We deliver value to our customers, with appropriate products, in an efficient manner that addresses their needs, by having specialized knowledge and expertise. Our guiding principles to always do right, recognize that everything counts and everyone matters, and act responsibly, allow us to have clarity in our purpose. In doing so, we are able to anticipate, innovate and respond to opportunities and challenges, and deliver the best risk-adjusted returns over the long run.

Always Valuing Our People

Always Focused on Risk-Adjusted Returns

Always Fulfilling Our Commitments

Always

Valuing Our People

From the day our Company was founded, our business has been about people. Our expertise in all that we do and the care in every action that we take make a difference to our employees, distribution partners, insureds and communities. We never lose sight of the fact that we are a company of people who serve people. This knowledge has enabled us to be successful for many decades and will continue to do so far into the future.

Our employees are our most valuable asset and we take the utmost care to make each team member feel that way. Like many organizations, we maintain robust communication, training, leadership and development programs. Yet our structure enables us to create core frameworks that each business can adapt to provide a tailored experience. Many of our programs have been derived from our unique "Innovation Through People" program that leads with cultivating the behaviors required to develop an innovative mindset, providing benefits in both our professional and personal lives. For example, Berkley One's approach to training and onboarding provides team members with the broadest possible perspective to demonstrate how everything fits together, Berkley Oil & Gas offers training to all employees that teaches critical thinking skills, Berkley Financial Solutions utilizes behavioral interviewing techniques and Berkley Re Solutions uses inspired story-telling to include, recognize and inspire all employees in their innovation journey toward meaningful outcomes. In addition, our diversity, inclusion and belonging program encompasses the concept of belonging, or how an individual feels when they are included, valued and recognized.

Just as importantly, valuing people in our business means going beyond the internal focus on our employees to engage our customers and distribution partners. The experience and expertise of our specialist underwriters and claims professionals provide an understanding of risk at a level not normally seen in the industry. Sharing that knowledge helps everyone

"What makes being a part of the Berkley team special for me is that I am given the ability and the tools to effectively help people during very difficult times in their lives and I get the satisfaction of knowing that I am making a difference by easing some of their concerns and assuring them that I work for a company that genuinely cares."

Claudia H., Major Case Claims Examiner, Preferred Employers Group

"We create an environment that people choose to be a part of because they can lean into strengths, develop new skills and make meaningful contributions to our Company, our industry and our community all at the same time."

Colin L.
Senior Vice President of Operations, Berkley Canada

manage risk and achieve better outcomes. Programs such as Union Standard's mock trials for agents, Berkley Technology Underwriters' rapid response initiative for private equity firms looking to close acquisitions, Berkley Agribusiness's safety training for its food team and Berkley Alliance Managers' design and construction information series demonstrate the many ways in which we tailor education to our specialized distribution and customer bases. We also work directly with these constituents to find out what is important to them on the front end. Examples include the development of a suite of admitted products based on interviews with customers and brokers at Berkley Life Sciences and its introduction of industry-specific training for less experienced brokers in its target markets, as well as the design of a platform and products based on information received through a Listening Lab at Berkley One.

Ultimately, our business plays an important role in our greater society. We help small businesses get back on their feet after a claim or workers achieve the best quality of life after an injury. Our businesses touch individual lives and each and every one of us has an important role to play as we develop deep relationships with one another and amongst those that our business touches.

123,604
total learning actions (up 31% from 2020)

20.63
average completed learning actions by employee (up 45% from 2020)

12 hours, 2 minutes
average learning time per employee

Always

Focused on Risk-Adjusted Returns

For 55 years, we have been focused on obtaining the best returns with a real understanding of the risk being assumed. We recognize that not all risks are created equal and evaluate the long-term potential for profitability as well as the inherent volatility in each risk. Our team members seek to weigh and assess all of the relevant issues in each opportunity, while supporting the evolution of our business and the economy. Over the long term, we have achieved industry-leading results with below-average volatility.

Focusing on risk-adjusted returns requires a constant evaluation of challenges, risks and opportunities. We direct resources to the best performing parts of our business, while pricing, terms and conditions appropriately reflect risk, even if they cause the market to move away from us for a time. Many of our businesses, such as Berkley Re UK and Berkley Pro, have the ability to move up or down the risk tower to a position where pricing is more adequate as market conditions change. Others, like Berkey Life Sciences, retain the flexibility to write on either an admitted or surplus lines basis. We leverage data and technology to become more efficient in the delivery of our products and services, as Berkley Fire and Marine has in its Xpress Builders Risk platform, and effective in the management of claims, as Berkley One has by using technology to inspect properties and adjust claims. In certain instances, we may pivot away from sectors with unfavorable characteristics, as Berkley Industrial Comp did in exiting coal mines and expanding its business beyond the mine site to provide high-quality monoline workers' compensation coverage to highly-regulated, high-hazard industries staffed with highly-skilled workers.

In addition, our ability to develop products and services to meet the needs of new or growing industries, address emerging markets or risks and societal issues, support underserved markets, or serve customers and distribution in new and better ways has provided us with a sustainable competitive advantage. We regularly start new businesses to address emerging markets or risks or increasingly important sectors of the economy, one of the most recent being Berkley Small Business Solutions. In doing so, we structure the business to achieve the best results and avoid potential legacy issues associated with acquisitions.

Moreover, our decentralized structure enables our businesses to remain true to their core missions, while finding new opportunities when expertise meets client needs to grow profitably. Examples include Berkley North Pacific's development of products for Delivery Service Partners and Implement Dealers within its regional footprint; Berkley Risk Solutions' workplace violence product that draws upon its capabilities in insuring emerging risks; Berkley Re Australia's transition from reinsurer to direct writer of construction professional coverage when the standard market withdrew;

"Risk-adjusted return is at the core of what we do. Every risk, every opportunity, whether for growth or cost savings, is assessed against the potential to enhance that return. Where the return cannot be supported, we are quick to make decisions and change tack so that we can allocate capital and focus on more rewarding opportunities."

Tony Wheatley
President, Berkley Insurance Australia

Berkley Life Sciences' underwriting of COVID trials, vaccines and therapies; Key Risk's introduction of their core workers' compensation expertise to additional industries through new PEO and specialty construction programs; and the creation of Berkley Renewable Energy to bring Berkley Oil & Gas's knowledge to the growing alternative energy sector.

Our excess and surplus lines businesses are particularly adept at underwriting risks in emerging industries, as Admiral Insurance has in the burgeoning virtual medicine industry, or those market segments being de-emphasized by the standard market, such as certain types of medical malpractice, nutraceuticals and construction risks, while Nautilus excels in insuring early-stage enterprises. Additionally, collaborations between our specialty businesses offer additional opportunities to profitably match expertise with needs. Berkley Risk Solutions has partnered with Berkley Cyber Risk Solutions to offer turnkey cyber risk coverages, while Berkley One works with Berkley Classics, Berkley Fire & Marine and Berkley Asset Protection to offer classic car, recreational marine and fine arts coverages to their high net worth clients.

"'Doing' gets a lot of credit, but 'not doing' is equally important. Sometimes our team delivers the best returns for our stakeholders when we opt not to take on suboptimal exposures or underpriced risks."

Arthur Davis, President, Vela Insurance Services

2 new businesses started in 2021

Always

Fulfilling Our Commitments

The culture of a successful business requires many things. Chief among them is a commitment to care and integrity in the way that we engage with others and a clear sense of responsibility to our stakeholders. Insurance is a promise to be there for our policyholders when things go wrong and we are committed to doing the right thing for them, our distribution partners and our employees. In addition, we always consider how our business fits into society and its impact on our communities. In the long run, our Company and its stakeholders benefit when we strive to do what is right for our constituents.

We serve our customers best by bringing expertise specific to the unique needs of each business's differentiated client base and being there to pay valid claims as they arise. An in-depth understanding of the risks, opportunities and economic factors in the businesses we insure enables us to achieve better outcomes for our customers and get them back on their feet in a timely fashion. Berkley Re recognizes the importance of paying storm claims quickly to help their insurance company clients with cash flow; Berkley Southeast has a "Back-in-Business" claim strategy to handle claims quickly while assuaging customer concerns so they can focus on their businesses; and Berkley Luxury Group increased the frequency of audits during the pandemic as restaurants were hard hit by shutdowns. This is especially true in Berkley Program Specialists' equine mortality business, where strong, emotional bonds are formed over time and the manner in which we meet these claim promises has made a positive difference during a more difficult time.

In addition, we provide valuable risk management resources tailored to our clients' businesses. For example, Acadia Insurance has developed a partnership with Professional Logging Contractors of Maine; Midwest Employers Casualty has a long-standing "Total Cost of Risk" approach that helps clients reduce risks to mitigate losses; and Berkley Accident & Health relies on its innovative suite of risk management tools called "Berkley Edge" to provide value-added solutions to customers that benefit their bottom line. We also provide access to third-party vendors for value-added services to round out our offerings to develop a complete solution for our customers.

"Midwest Employers Casualty delivers on its promise to clients to be a partner, a team player and a resource for claims management. Their standards and expectations are high, all with the desire for a good outcome from which everyone benefits, from the insurer to the insured worker. The MEC team doesn't keep its expertise and knowledge hidden. They share it. This is what sets MEC apart from the rest."

Cora Beth Hatfield, Fund Administrator for the MS Truck, Food & Fuel SIF, Jackson Mississippi

"Community is a big word in our organization, and we try to emphasize that within our day-to-day. We participate in many communities, both within the industry that we serve and in the places where we live and work. Building service into these communities is also an area where we show value to employees — both by exposing people to and recognizing the importance of participating in these communities, and leading by example. Whether it's spending time working with Kids' Chance, speaking to risk management insurance programs and local universities, being active in state insurance associations, or simply helping out with a local food drive — employees get value from our community involvement."

Brian Douglas
President, BerkleyNet

Our commitments extend beyond our insureds to the communities in which we operate, both geographically and professionally. Our operating structure enables each decentralized business to develop strong connections with its local community, where our team members live and work, and often where our clients and distribution partners are located, to focus on what is important to them. Continental Western Group has undertaken a "Greater Giving" initiative to increase its focus on doing more for local charities. Berkley Oil & Gas has created "BOG Cares" to recognize the positive contribution that it can make to local communities through varied interactions with local residents, businesses, schools and not-for-profit organizations, including fundraising or committing time to volunteer events. Carolina Casualty is dedicated to supporting food drives for Feeding Northeast Florida and Berkley Financial Specialists champions charities in both of its locations — Hands on Hartford in Connecticut and Project Place in Baltimore.

In addition, because the nature of our business is helping people, there is a deep connection between how our business itself serves the community and our charitable work. Kids' Chance, which supports children affected by a parent's work-related injury or death by helping to remove financial obstacles to pursuing their educational dreams, has a direct connection to our workers' compensation business and is supported financially, through leadership participation and through volunteerism at both the corporate level and by many of our businesses that underwrite workers' compensation insurance. Berkley Environmental is active in efforts to restore and protect the environment through its work with Wetlands Mitigation Banks. And because of its personal lines focus, Berkley One has implemented a program called "Moving Families Forward" that supports a myriad of charities providing assistance to families in need.

Our focus on meeting our commitments to our stakeholders highlights not only how we are all interconnected but also the how doing the right thing makes our business better.

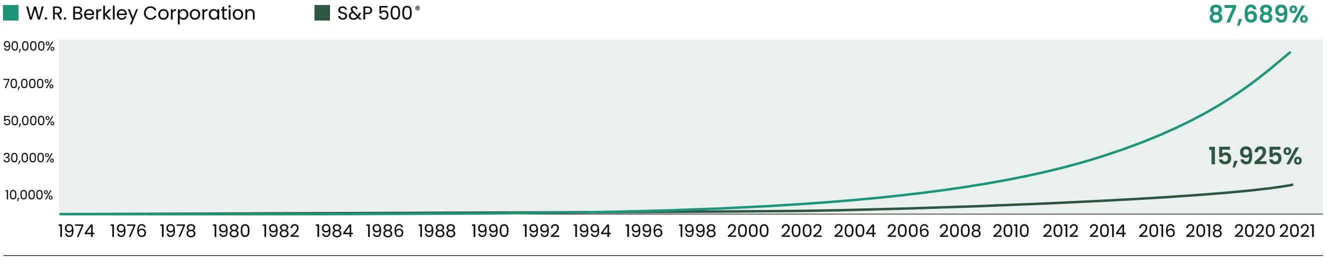
1,164 meal equivalents

Carolina Casualty donated cash and 180 pounds of food in a food drive for Feeding Northeast Florida

W. R. Berkley Corporation Performance vs. S&P 500®

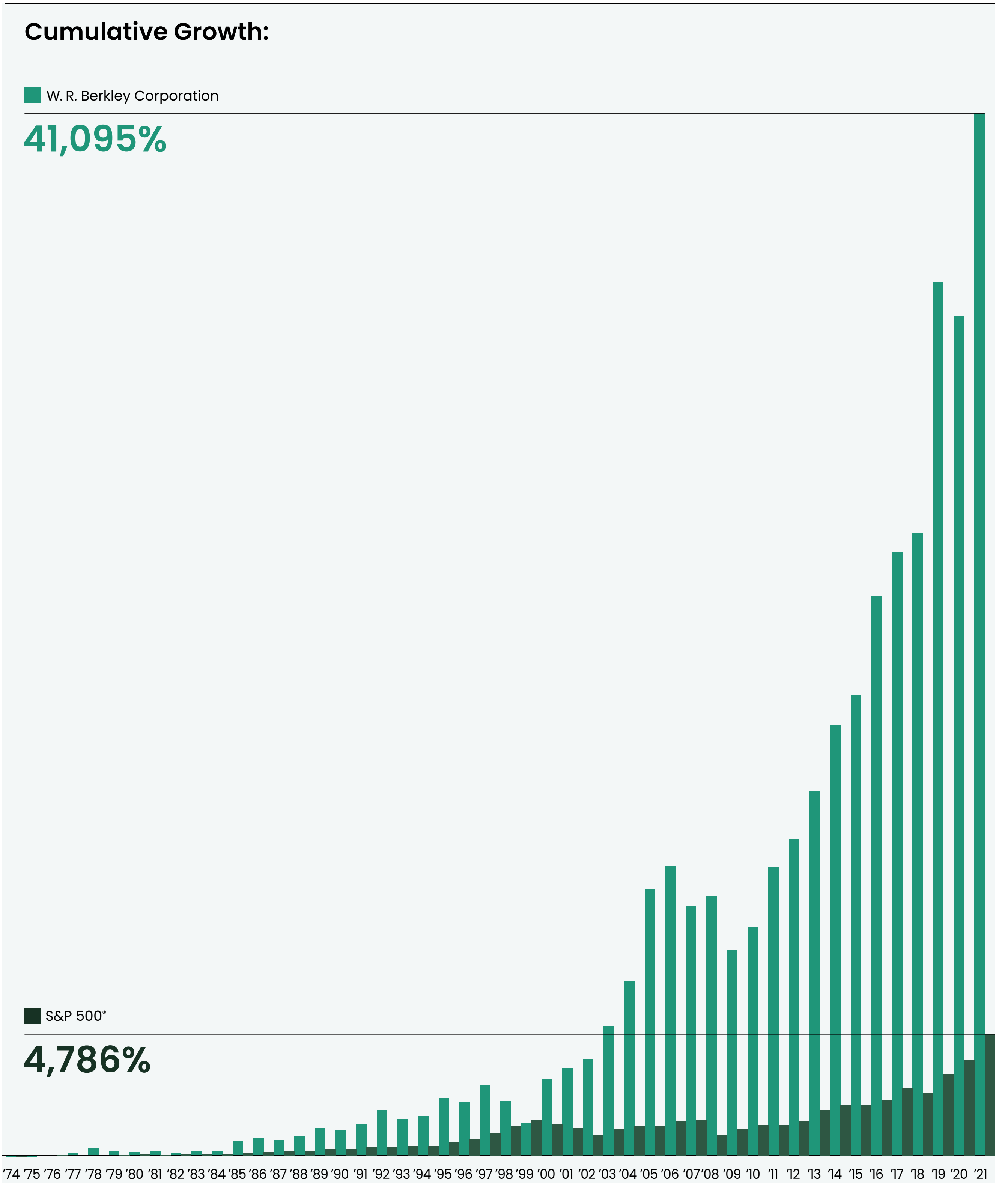
Annual Percentage Change

Year	In Per-Share Book Value of W. R. Berkley Corporation with Dividends Included (1)	In S&P 500® with dividends Included (2)	Relative Results (1)-(2)
1974	50%	-26.4%	76.4%
1975	12.5%	37.2%	-24.7%
1976	29.6%	23.6%	6.0%
1977	28.6%	-7.4%	36.0%
1978	24.4%	6.4%	18.0%
1979	18.2%	18.2%	0.0%
1980	9.4%	32.3%	-22.9%
1981	14.5%	-5.0%	19.5%
1982	-9.0%	21.4%	-30.4%
1983	-11.6%	22.4%	-34.0%
1984	-16.9%	6.1%	-23.0%
1985	59.6%	31.6%	28.0%
1986	106.8%	18.6%	88.2%
1987	23.5%	5.1%	18.4%
1988	22.5%	16.6%	5.9%
1989	13.2%	31.7%	-18.5%
1990	7.8%	-3.1%	10.9%
1991	20.8%	30.5%	-9.7%
1992	13.5%	7.6%	5.9%
1993	16.7%	10.1%	6.6%
1994	-10.8%	1.3%	-12.1%
1995	34.5%	37.6%	-3.1%
1996	7.9%	23.0%	-15.1%
1997	15.9%	33.4%	-17.5%
1998	1.9%	28.6%	-26.7%
1999	-18.1%	21.0%	-39.1%
2000	17.1%	-9.1%	26.2%
2001	7.6%	-11.9%	19.5%
2002	31.2%	-22.1%	53.3%
2003	26.7%	28.7%	-2.0%
2004	25.6%	10.9%	14.7%
2005	21.9%	4.9%	17.0%
2006	30.1%	15.8%	14.3%
2007	16.3%	5.5%	10.8%
2008	-5.6%	-37.0%	31.4%
2009	23.3%	26.5%	-3.2%
2010	15.4%	15.1%	0.3%
2011	12.2%	2.1%	10.1%
2012	14.8%	16.0%	-1.2%
2013	4.8%	32.4%	-27.6%
2014	14.8%	13.7%	1.1%
2015	4.3%	1.4%	3.0%
2016	15.7%	12.0%	3.7%
2017	10.6%	21.8%	-11.2%
2018	4.8%	-4.4%	9.2%
2019	17.1%	31.5%	-14.4%
2020	8.6%	18.4%	-9.8%
2021	11.7%	28.7%	-17.0%
Average Annual Gain — 1973-2021	16.6%	13.0%	3.6%
Overall Gain — 1973-2021	84,909%	19,031%	
Overall gain 1973-2021 with dividends compounded = **87,689%**			



Notes: W. R. Berkley Corporation's book value per share has been adjusted for stock dividends paid from 1975 to 1983. Stock dividends were 6% in each year from 1975 to 1978, 14% in 1979, and 7% in each year from 1980 to 1983. The Company has paid cash dividends each year since 1976.

Relative Stock Price Performance



Our Business

Today, as with yesterday and tomorrow, the combined expertise of underwriting, risk management, claims handling and investing will deliver outstanding risk-adjusted returns.

Insurance
Our Insurance businesses underwrite predominantly commercial insurance business, including excess and surplus lines and admitted lines, and specialty personal lines, throughout the United States, as well as insurance business in the United Kingdom, Continental Europe, South America, Canada, Scandinavia, Australia, Asia and Mexico.

2021 Results

TOTAL REVENUES

$7.7B

PRE-TAX INCOME

$1.2B

Reinsurance & Monoline Excess
Our Reinsurance & Monoline Excess businesses write reinsurance business on a facultative and treaty basis, primarily in the United States, United Kingdom, Continental Europe, Australia, the Asia-Pacific Region and South Africa. Monoline Excess units solely retain risk on an excess basis.

2021 Results

TOTAL REVENUES

$1.2B

PRE-TAX INCOME

$271M

Our Company

W. R. Berkley Corporation, founded in 1967, is one of the nation's premier commercial lines property casualty insurance providers. Each of the businesses within Berkley participates in a niche market requiring specialized knowledge about a territory or product.

Our competitive advantage lies in our long-term strategy of decentralized operations, allowing each of our businesses to identify and respond quickly and effectively to changing market conditions and local customer needs. This decentralized structure provides financial accountability and incentives to local management and enables us to attract and retain the highest-caliber professionals. We have the expertise and resources to utilize our strengths in the present environment, and the flexibility to anticipate, innovate and respond to whatever opportunities and challenges the future may hold.

How We Are Different

Risk-Adjusted Returns
Management company-wide is focused on obtaining the best potential returns with a real understanding of the amount of risk being assumed. Superior risk-adjusted returns are generated over the insurance cycle.

Accountability
The business is operated with an ownership perspective and a clear sense of fiduciary responsibility to shareholders.

People-Oriented Strategy
New businesses are started when opportunities are identified and, most importantly, when the right talent is found to lead a business. Of the Company's 56 businesses, 49 were developed internally and seven were acquired.

Responsible Financial Practices
Risk exposures are managed proactively. A strong balance sheet, including a high-quality investment portfolio, ensures ample resources to grow the business profitably whenever there are opportunities to do so.

Transparency
Consistent and objective standards are used to measure performance — and, the same standards are used regardless of the environment.

Segment Overview

Each of our two business segments — Insurance and Reinsurance & Monoline Excess — comprises individual businesses that serve a market defined by geography, products, services or types of customers.

Our growth is based on meeting the needs of customers, maintaining a high-quality balance sheet and allocating capital to our best opportunities.

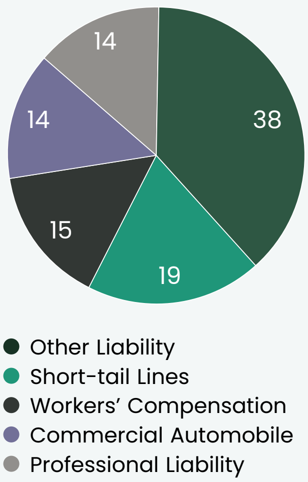
We combine capital with outstanding people and wrap it all in a culture that is focused on optimizing risk-adjusted returns. It creates a sustainable competitive advantage that can only be acquired over many years with consistent discipline.

2021 Segment Data

2021 Net Premiums Written by Major Line of Business (in percent)

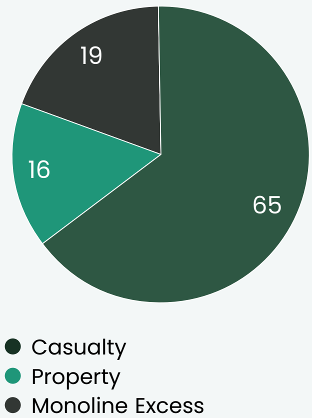
INSURANCE:

$7.7B



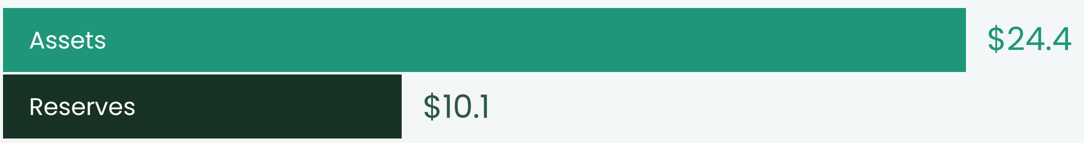
REINSURANCE & MONOLINE EXCESS:

$1.1B

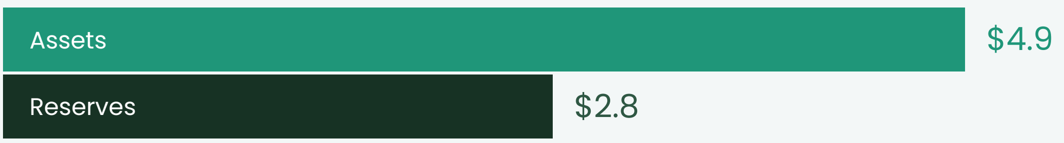


2021 Assets and Net Reserves (dollars in billions)

INSURANCE:



REINSURANCE & MONOLINE EXCESS:

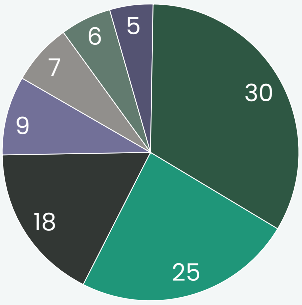


Investments

Over the past few years, we have shortened the duration of our fixed income portfolio to 2.4 years, while maintaining its high quality with an average rating of AA-. As a result, there has been less volatility in our book value from mark-to-market accounting and we are better able to manage the uncertain interest rate environment.

We manage our portfolio for total return, including capital gains. As investment income is an important component of our economic model, we will continue to seek out investment opportunities with above-average risk-adjusted returns and to position our fixed-maturity portfolio to manage the yield curve as well as the impact of potential inflation.

Breakdown of Fixed-Maturity Securities (including cash) (in percent)



- Corporate Bonds
- Asset-backed Securities
- State and Municipal Bonds
- Cash and Cash Equivalents
- Foreign Bonds
- Mortgage-backed Securities
- U.S. Government and Government Agency Bonds

Investment Data (dollars in millions)

	2020	2021
Cash and Invested Assets		
Invested assets	$18,482	$22,172
Cash and cash equivalents	$2,372	$1,569
Total	**$20,854**	**$23,741**
Net Investment Income	$584	$672
Net realized and unrealized gains on investments	$103	$91

W.R. Berkley Corporation
2021 Financial Information

Form

10-K

SECURITIES AND EXCHANGE COMMISSION
Washington, D.C. 20549

Form 10-K

(Mark One)

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

For the fiscal year ended December 31, 2021
OR

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

For the transition period from ______ to ______.

Commission file number 1-15202

W. R. BERKLEY CORPORATION

(Exact name of registrant as specified in its charter)

Delaware			**22-1867895**
(State or other jurisdiction of incorporation or organization)			*(I.R.S. Employer Identification Number)*
475 Steamboat Road	**Greenwich,**	**CT**	**06830**
(Address of principal executive offices)			*(Zip Code)*

Registrant's telephone number, including area code: (203) 629-3000

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

Title of each class	**Trading Symbol(s)**	**Name of each exchange on which registered**
Common Stock, par value $.20 per share	WRB	New York Stock Exchange
5.700% Subordinated Debentures due 2058	WRB-PE	New York Stock Exchange
5.100% Subordinated Debentures due 2059	WRB-PF	New York Stock Exchange
4.250% Subordinated Debentures due 2060	WRB-PG	New York Stock Exchange
4.125% Subordinated Debentures due 2061	WRB-PH	New York Stock Exchange

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

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

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

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

Indicate by check mark whether the registrant has submitted electronically every Interactive Data File required to be submitted pursuant to Rule 405 of Regulation S-T during the preceding 12 months (or for such shorter period that the registrant was required to submit such files). Yes ☒ No ☐

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

Large accelerated filer	☒	Accelerated filer	☐
Non-accelerated filer	☐	Smaller reporting company	☐
		Emerging growth company	☐

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

Indicate by check mark whether the registrant has filed a report on and attestation to its management's assessment of the effectiveness of its internal control over financial reporting under Section 404(b) of the Sarbanes-Oxley Act (15 U.S.C. 7262(b)) by the registered public accounting firm that prepared or issued its audit report. ☒

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

The aggregate market value of the registrant's common stock held by non-affiliates as of June 30, 2021, the last business day of the registrant’s most recently completed second fiscal quarter, was $10,893,170,124.

Number of shares of common stock, $.20 par value, outstanding as of February 17, 2022: 176,790,914

DOCUMENTS INCORPORATED BY REFERENCE

Portions of the Company’s definitive proxy statement, which will be filed with the Securities and Exchange Commission within 120 days after December 31, 2021, are incorporated herein by reference in Part III.

SAFE HARBOR STATEMENT
UNDER THE PRIVATE SECURITIES
LITIGATION REFORM ACT OF 1995

This is a "Safe Harbor" Statement under the Private Securities Litigation Reform Act of 1995. This document may contain forward-looking statements within the meaning of the Private Securities Litigation Reform Act of 1995. Some of the forward-looking statements can be identified by the use of forward-looking words such as "believes," "expects," "potential," "continued," "may," "will," "should," "seeks," "approximately," "predicts," "intends," "plans," "estimates," "anticipates" or the negative version of those words or other comparable words. Any forward-looking statements contained in this report including statements related to our outlook for the industry and for our performance for the year 2022 and beyond, are based upon our historical performance and on current plans, estimates and expectations. The inclusion of this forward-looking information should not be regarded as a representation by us that the future plans, estimates or expectations contemplated by us will be achieved. They are subject to various risks and uncertainties, including but not limited to:

- the cyclical nature of the property casualty industry;
- the impact of significant competition, including new entrants to the industry;
- the long-tail and potentially volatile nature of the insurance and reinsurance business;
- product demand and pricing;
- claims development and the process of estimating reserves;
- investment risks, including those of our portfolio of fixed maturity securities and investments in equity securities, including investments in financial institutions, municipal bonds, mortgage-backed securities, loans receivable, investment funds, including real estate, merger arbitrage, energy related and private equity investments;
- the effects of emerging claim and coverage issues;
- the uncertain nature of damage theories and loss amounts, including claims for cyber security related risks;
- natural and man-made catastrophic losses, including as a result of terrorist activities;
- the ongoing COVID-19 pandemic;
- the impact of climate change, which may alter the frequency and increase the severity of catastrophe events;
- general economic and market activities, including inflation, interest rates and volatility in the credit and capital markets;
- the impact of conditions in the financial markets and the global economy, and the potential effect of legislative, regulatory, accounting or other initiatives taken in response to it, on our results and financial condition;
- foreign currency and political risks (including those associated with the United Kingdom's withdrawal from the European Union, or "Brexit") relating to our international operations;
- our ability to attract and retain key personnel and qualified employees;
- continued availability of capital and financing;
- the success of our new ventures or acquisitions and the availability of other opportunities;
- the availability of reinsurance;
- our retention under the Terrorism Risk Insurance Program Reauthorization Act of 2019 ("TRIPRA");
- the ability or willingness of our reinsurers to pay reinsurance recoverables owed to us;
- other legislative and regulatory developments, including those related to business practices in the insurance industry;
- credit risk relating to our policyholders, independent agents and brokers;
- changes in the ratings assigned to us or our insurance company subsidiaries by rating agencies;
- the availability of dividends from our insurance company subsidiaries;
- potential difficulties with technology and/or cyber security issues;
- the effectiveness of our controls to ensure compliance with guidelines, policies and legal and regulatory standards; and
- other risks detailed in this Form 10-K and from time to time in our other filings with the Securities and Exchange Commission ("SEC").

We describe these risks and uncertainties in greater detail in Item 1A, Risk Factors. These risks and uncertainties could cause our actual results for the year 2022 and beyond to differ materially from those expressed in any forward-looking statement we make. Any projections of growth in our revenues would not necessarily result in commensurate levels of earnings. Our future financial performance is dependent upon factors discussed elsewhere in this Form 10-K and our other SEC filings. Forward-looking statements speak only as of the date on which they are made.

PART I

ITEM 1. BUSINESS

W. R. Berkley Corporation is an insurance holding company that is among the largest commercial lines writers in the United States and operates worldwide in two segments of the property casualty insurance business:

- Insurance - predominantly commercial insurance business, including excess and surplus lines, admitted lines and specialty personal lines throughout the United States, as well as insurance business in the United Kingdom, Continental Europe, South America, Canada, Mexico, Scandinavia, Asia and Australia.

- Reinsurance & Monoline Excess - reinsurance business on a facultative and treaty basis, primarily in the United States, the United Kingdom, Continental Europe, Australia, the Asia-Pacific region and South Africa, as well as operations that solely retain risk on an excess basis.

Our two reporting segments are each composed of individual businesses that serve a market defined by geography, products, services or industry served. Each of our businesses is positioned close to its customer base and participates in a niche market requiring specialized knowledge. This strategy of decentralized operations allows each of our businesses to identify and respond quickly and effectively to changing market conditions and specific customer needs, while capitalizing on the benefits of centralized capital, investment and reinsurance management, and corporate actuarial, financial, enterprise risk management and legal staff support.

Our business approach is focused on meeting the needs of our customers, maintaining a high quality balance sheet, and allocating capital to our best opportunities. New businesses are started when opportunities are identified and when the right talent and expertise are found to lead a business. Of our 56 businesses, 49 have been organized and developed internally and seven have been added through acquisition.

Net premiums written, as reported based on United States generally accepted accounting principles ("GAAP"), for each of our reporting segments for each of the past three years were as follows:

	Year Ended December 31,		
(In thousands)	**2021**	**2020**	**2019**
Net premiums written:			
Insurance	$ 7,743,814	$ 6,347,101	$ 6,086,009
Reinsurance & Monoline Excess	1,119,053	915,336	777,490
Total	$ 8,862,867	$ 7,262,437	$ 6,863,499
Percentage of net premiums written:			
Insurance	87.4 %	87.4 %	88.7 %
Reinsurance & Monoline Excess	12.6	12.6	11.3
Total	100.0 %	100.0 %	100.0 %

Thirty of our insurance company subsidiaries are rated by A.M. Best Company, Inc. ("A.M. Best") and have financial strength ratings of A+ (Superior) (the second highest rating out of 15 possible ratings). A.M. Best's ratings are based upon factors of concern to policyholders, insurance agents and brokers and are not directed toward the protection of investors. A.M. Best states: "A Best's Financial Strength Rating (FSR) is an independent opinion of an insurer's financial strength and ability to meet its ongoing insurance policy and contract obligations. An FSR is not assigned to specific insurance policies or contracts and does not address any other risk." A.M. Best reviews its ratings on a periodic basis, and its ratings of the Company's subsidiaries are therefore subject to change.

Our twenty-four insurance company subsidiaries rated by Standard & Poor's ("S&P") have financial strength ratings of A+ (the seventh highest rating out of twenty-seven possible ratings).

Our Moody's financial strength ratings are A1 for Berkley Insurance Company, Berkley Regional Insurance Company and Admiral Insurance Company (the sixth highest rating out of twenty-one possible ratings).

Our twenty-six insurance company subsidiaries rated by Fitch Ratings ("Fitch") have insurer financial strength ratings of A+ (the seventh highest rating out of twenty-seven possible ratings).

The following sections describe our reporting segments and their businesses in greater detail. These businesses underwrite on behalf of one or more affiliated insurance companies within the group. The businesses are identified by us for descriptive purposes only and are not legal entities, but for marketing purposes may sometimes be referred to individually as "a Berkley company" or collectively as "Berkley companies." Unless otherwise indicated, all references in this Form 10-K to “Berkley,” “we,” “us,” “our,” the “Company” or similar terms refer to W. R. Berkley Corporation together with its subsidiaries and businesses. W. R. Berkley Corporation is a Delaware corporation formed in 1970.

Insurance

Our U.S.-based businesses predominantly underwrite commercial insurance business primarily throughout the United States, although many units offer coverage globally, focusing on the following general areas:

Excess & Surplus Lines: A number of our businesses are dedicated to the U.S. excess and surplus lines market. They serve a diverse group of customers that often have complex risk or unique exposures that typically fall outside the underwriting guidelines of the standard insurance market. Lines of business underwritten by our excess and surplus lines businesses include premises operations, commercial automobile, property, products liability, general liability and professional liability lines. Products are generally distributed through wholesale agents and brokers.

Industry Specialty: Certain other businesses focus on providing specialty coverages to customers within a particular industry that are best served by underwriters and claims professionals with specialized knowledge of that industry. They offer multiple lines of business with policies tailored to address these unique exposures, often with the flexibility of providing coverages on either an admitted or a non-admitted basis in the U.S., as well as internationally. Each business delivers its products through one or more distribution channels, including retail and wholesale agents, brokers, and managing general agents (MGAs), depending on the customer and the particular risks insured.

Product Specialty: Other businesses specialize in providing specific lines of insurance coverage, such as workers’ compensation or professional liability, to a wide range of customers. They offer insurance products, analytical tools and risk management services such as loss control and claims management that enable clients to manage their risk appropriately. Business is typically written on an admitted basis, although some businesses may offer non-admitted products in the U.S. and offer products internationally. Independent agents and brokers are the primary means of distribution.

Regional: Certain businesses offer standard insurance products and services focused on meeting the specific needs of a geographically differentiated customer base. Key clients are small-to-midsized businesses. These regionally focused businesses provide a broad array of commercial insurance products to customers primarily in 45 states and the District of Columbia and have developed expertise in niches that reflect local economies. They are organized geographically in order to provide them with the flexibility to adapt quickly to local market conditions and customer needs.

In addition, through our non-U.S. insurance businesses, we write business in more than 60 countries worldwide, with branches or offices in 29 locations outside the United States, including the United Kingdom, Continental Europe, South America, Canada, Mexico, Scandinavia, Asia and Australia. In each of our operating territories, we have built decentralized structures that allow products and services to be tailored to each regional customer base. Our businesses are managed by teams of professionals with expertise in local markets and knowledge of regional environments.

In addition to providing insurance products, certain businesses also provide a wide variety of fee-based services, including claims, administrative and consulting services.

Businesses comprising the Insurance segment are as follows:

Acadia Insurance is a Northeast regional property casualty underwriter offering a broad portfolio of products exclusively through local independent agents in Connecticut, Maine, Massachusetts, New Hampshire, New York, Rhode Island and Vermont. In addition to its general offerings, Acadia has specialized expertise in insuring regional industries such as construction, service contractors, lumber, and transportation.

Admiral Insurance provides excess and surplus lines coverage for commercial risks that generally consist of hard-to- place, specialized risks that involve moderate to high degrees of hazard. In both general liability and professional lines, Admiral has a broad line of products to meet the needs of existing as well as emerging opportunities. The distribution of products is limited solely to wholesale brokers.

Berkley Accident and Health underwrites accident and health insurance and reinsurance products in four primary areas: medical stop loss, managed care, special risk and group captive. It has a diversified product and service portfolio serving a range of clients from small employers, health care organizations, and membership groups to Fortune 500 companies.

Berkley Agribusiness offers insurance for larger commercial risks across the United States involved in the supply, storage, handling, processing and distribution of commodities related to the agriculture and food industries.

Berkley Alliance Managers offers tailored insurance coverages and comprehensive risk management solutions designed to enhance profitability and reduce susceptibility to loss in four target markets - Design Professionals, Construction Professionals, Accounting Professionals and miscellaneous non-medical Service Professionals.

Berkley Aspire provides excess and surplus lines coverage on a national basis to small to medium-sized insureds with low to moderate insurance risk. Its product lines include general liability, liquor liability and some property and inland marine coverage. It serves a limited distribution channel, including select Berkley member company agents.

Berkley Asset Protection provides specialized insurance coverages for fine arts and jewelry exposures to commercial and individual clients.

Berkley Canada underwrites specialty, casualty and surety lines of business on behalf of the Canadian branch of Berkley Insurance Company. It specializes in commercial casualty and professional liability, and offers a broad portfolio of risk products that include commercial general liability, umbrella, professional liability, directors and officers, commercial property and surety, in addition to niche products for specific industries such as technology, life sciences and travel.

Berkley Construction Solutions provides excess liability coverage to residential and commercial contractors on a project or practice basis.

Berkley Custom Insurance focuses on the excess casualty insurance market and offers umbrella and excess liability coverages to clients from the small/middle market to Fortune 1000 companies in target classes of business including construction, manufacturing, retail/wholesale trade, finance, real estate, public entities and oil & gas.

Berkley Cyber Risk Solutions focuses on insurance and risk management products that respond to the changing cyber security vulnerabilities of organizations around the world. It offers specialty commercial cyber insurance coverages on a worldwide basis to clients of all sizes.

Berkley Entertainment underwrites property casualty insurance products, both on an admitted and non-admitted basis, for clients in the entertainment industry and sports-related organizations.

Berkley Environmental underwrites casualty and specialty environmental products for environmental customers including contractors, consultants, property owners and facilities operators.

Berkley Financial Specialists serves the insurance needs of companies in the financial services sector and beyond. Its Berkley Crime division provides crime and fidelity related insurance products for commercial organizations, financial sector businesses and governmental entities on a primary and excess basis. Its Financial Services segment provides management liability and fidelity products to financial institutions, insurance companies and asset management firms.

Berkley Fire & Marine offers a broad range of preferred inland marine and related property risks and services to customers throughout the United States. Products are distributed through independent agents and brokers.

Berkley Global Product Recall Management provides worldwide insurance protection and technical assistance to help clients with the prevention, management and indemnification of product recall and contamination events.

Berkley Healthcare underwrites customized, comprehensive insurance solutions for the full spectrum of healthcare providers. Through Berkley Healthcare Medical Professional, it offers a wide range of medical professional coverages. Through Berkley Healthcare Financial Lines, it offers a comprehensive suite of financial lines coverages.

Berkley Human Services provides property casualty insurance coverages to human services organizations, including nonprofit and for-profit organizations, public schools, sports and recreational organizations, and special events. Its product offerings include traditional primary coverages and risk purchasing groups, as well as alternative market solutions for clients who wish to retain a larger share of their risks.

Berkley Industrial specializes in writing workers' compensation insurance for diverse high hazard industries in select states. Its products are distributed by a select group of independent retail agents.

Berkley Insurance Asia underwrites specialty commercial insurance coverages to clients in North Asia and Southeast Asia through offices in Hong Kong, Singapore, Labuan and Shanghai.

Berkley Insurance Australia underwrites general insurance business in Australia, including professional indemnity insurance for companies of all sizes.

Berkley Latinoamérica is a leading provider of property, casualty, automobile, surety, group life and workers' compensation products and services in its operating territories of Argentina, Brazil, the Caribbean, Colombia, Mexico and Uruguay.

Berkley Life Sciences offers a comprehensive spectrum of property casualty products to the life sciences industry on a global basis, including both primary and excess product liability coverages. It serves pharmaceutical and biotech companies, medical device companies, dietary supplement companies, medical and research related software developers, contract research and manufacturing organizations, research institutions and organizations, and other related businesses.

Berkley Luxury Group provides commercial package insurance programs for high-end cooperative, condominium, and quality rental apartment buildings and upscale restaurants in the New York, New Jersey, Chicago and Washington, D.C. metropolitan markets, as well as other select markets.

Berkley Management Protection offers a modular suite of management liability products for small and middle market companies through a bespoke and easy to use platform tailored towards independent agents. The management liability coverages they provide include directors and officers, employment practices, fiduciary, cyber, crime and miscellaneous professional liability.

Berkley Mid-Atlantic Group provides commercial property casualty coverages to a wide variety of businesses in Delaware, the District of Columbia, Maryland, Ohio, Pennsylvania, and Virginia. Focusing on small and middle market accounts, it complements its standard writings with specialized products in areas such as construction.

Berkley Net Underwriters focuses on small and medium-sized commercial risks, using a web-based system to allow producers to quote, bind and service workers' compensation insurance products on behalf of Berkley member insurance companies.

Berkley North Pacific offers preferred insurance products and services to a broad range of small to medium size commercial entities. It operates through independent agents in Idaho, Montana, Oregon, Utah and Washington.

Berkley Offshore Underwriting Managers is a specialist global underwriter of energy and marine risks. Its three divisions provide specialty insurance products in the energy upstream, energy liability and marine sectors.

Berkley Oil & Gas provides property casualty products and risk services to the United States energy sector. Its customer base includes risks of all sizes that work in the oil patch, including operators, drillers, geophysical contractors, well-servicing contractors, and manufacturers/distributors of oil field products, as well as those in the renewable energy sector.

Berkley One provides a customizable suite of personal lines insurance solutions including home, condo/co-op, auto, liability and collectibles. Berkley One targets high net worth individuals and families with sophisticated risk management needs.

Berkley Professional Liability specializes in professional liability insurance for publicly-traded and private entities on a worldwide basis. Its liability coverages include directors and officers, errors and omissions, fiduciary, employment practices, and sponsored insurance agents' errors and omissions. Berkley Transactional, a division of Berkley Professional Liability, underwrites a full suite of transactional insurance products, including representations and warranties insurance, tax opinion insurance and contingency liability insurance.

Berkley Program Specialists is a program management company offering both admitted and non-admitted insurance support on a nationwide basis for commercial casualty and property program administrators with specialized insurance expertise. Its book is built around blocks of homogeneous business, or programs, allowing for efficient processes, effective oversight of existing programs and sound implementation of new programs.

Berkley Public Entity specializes in providing excess coverage and services to individual governmental and scholastic entities and intergovernmental risk sharing groups. Products include general liability, automobile liability, law enforcement liability, public officials and educator's legal liability, employment practices liability, incidental medical, property and crime.

Berkley Risk provides at-risk and alternative risk insurance program management services for a broad range of groups and individuals including public entity pools, professional associations, captives and self-insured clients. As a third party administrator, it manages workers’ compensation, liability and property claims nationwide.

Berkley Select specializes in underwriting professional liability insurance for law firms and accounting firms, as well as other professional firms and their practices. It also offers executive liability products, including directors and officers liability, employment practices and fiduciary liability, to small to middle market privately held and not for profit customers. Berkley Select provides these insurance products on both an admitted and surplus lines basis.

Berkley Small Business Solutions offers commercial insurance products for small businesses through a modern technology platform that leverages data and analytics. Its initial product offering focuses on preferred risks in the non-fleet transportation market.

Berkley Southeast offers a wide array of commercial lines products in six southeastern states: Alabama, Georgia, Mississippi, North Carolina, South Carolina and Tennessee, specializing in small to mid-sized accounts.

Berkley Surety provides a full spectrum of surety bonds for construction, environmental and commercial surety accounts in the U.S. and Canada, through an independent agency and broker platform across 20 field locations.

Berkley Technology Underwriters provides a broad range of first and third-party insurance programs for technology exposures and technology industries on both a local and global basis.

Carolina Casualty is a national provider of primary commercial insurance products and services to the transportation industry. It underwrites on an admitted basis in all 50 states and the District of Columbia.

Continental Western Group is a Midwest regional property and casualty insurance operation based in Des Moines, Iowa, providing underwriting and risk management services to a broad array of regional businesses in thirteen Midwest states. In addition to its generalist portfolio, Continental Western offers specialty underwriting solutions for diversified agriculture, construction, light manufacturing, transportation, volunteer fire departments, rural utilities and public entities.

Gemini Transportation is a national provider of excess liability insurance for various domestic surface transportation businesses, including the railroad industry as well as the trucking, busing and other industries that use rubber-wheeled vehicles for over-the-road use.

Intrepid Direct provides business insurance coverages through a direct distribution model focused on the franchise market, with specialties in the restaurant, garage and fitness industries.

Key Risk specializes in writing workers' compensation insurance for diverse industries including healthcare, human services, transportation, temporary staffing, professional employer organizations and contractors requiring coverage under the United States Longshore and Harbor Workers' Compensation Act (USL&H). Its products are distributed by a select group of independent retail agents and wholesale brokers located throughout the United States.

Nautilus Insurance Group insures excess and surplus lines risks for small to medium-sized commercial risks with low to moderate susceptibility to loss. It writes commercial excess and surplus lines business nationwide and admitted lines commercial business in a limited number of states. A substantial portion of Nautilus' business is written through its close, long-standing network of general agents, who are chosen on a highly selective basis.

Preferred Employers Insurance focuses exclusively on workers' compensation products and services for businesses based in California. It serves thousands of customers covering a broad spectrum of industries throughout the state.

Union Standard offers preferred commercial property and casualty insurance products and services to a wide range of small to medium size commercial entities with a focus on the construction, farm/ranch, retail and service industries. It operates through independent agents in Arizona, Arkansas, New Mexico, Oklahoma and Texas.

Vela Insurance Services specializes in commercial casualty insurance on an excess and surplus lines basis. Its primary focus is on general liability insurance for construction, manufacturing and general casualty clients as well as products liability and miscellaneous professional liability coverages distributed through wholesale insurance brokers.

Verus Specialty Insurance offers general liability, professional liability and property coverages for small to mid-sized commercial risks in the excess and surplus lines insurance market through a select group of appointed wholesale brokers.

W R B Europe is comprised of specialist operating units offering a focused range of insurance products to markets in Continental Europe.

W / R / B Underwriting provides a broad range of leading insurance products to the Lloyd's marketplace, with a concentration in specialist classes of business including property, professional indemnity and crisis management.

The following table sets forth the percentage of gross premiums written by each Insurance business:

	Year Ended December 31,		
	2021	2020	2019
Acadia Insurance	5.5%	6.0%	5.9%
Admiral Insurance	5.9	5.6	5.9
Berkley Accident and Health	5.0	5.2	5.7
Berkley Agribusiness	0.8	1.2	1.1
Berkley Alliance Managers	2.8	2.8	3.0
Berkley Aspire	0.7	0.5	0.4
Berkley Asset Protection	0.8	0.8	0.6
Berkley Canada	1.2	1.1	1.0
Berkley Construction Solutions	—	—	—
Berkley Custom Insurance	3.2	3.5	3.1
Berkley Cyber Risk Solutions	0.8	0.5	0.3
Berkley Entertainment	1.8	2.1	2.7
Berkley Environmental	5.2	5.4	4.9
Berkley Financial Specialists	0.6	0.8	0.9
Berkley Fire & Marine	0.8	0.8	0.7
Berkley Global Product Recall Management	0.4	0.4	0.5
Berkley Healthcare	1.8	1.7	1.6
Berkley Human Services	1.0	1.0	0.8
Berkley Industrial	0.8	0.8	0.9
Berkley Insurance Asia	0.8	0.7	0.6
Berkley Insurance Australia	1.7	1.4	1.2
Berkley Latinoamérica	2.7	2.8	3.6
Berkley Life Sciences	0.5	0.5	0.7
Berkley Luxury Group	0.9	1.1	1.3
Berkley Management Protection	—	—	—
Berkley Mid-Atlantic Group	1.3	1.2	1.2
Berkley Net Underwriters	2.1	2.2	3.0
Berkley North Pacific	0.7	0.7	0.8
Berkley Offshore Underwriting Managers	1.5	1.5	1.2
Berkley Oil & Gas	3.0	3.2	4.1
Berkley One	1.2	0.7	0.3
Berkley Professional Liability	7.5	4.8	2.9
Berkley Program Specialists	2.0	1.7	1.1
Berkley Public Entity	0.6	0.5	0.4
Berkley Risk	0.2	0.3	0.3
Berkley Select	2.0	2.4	2.8
Berkley Small Business Solutions	—	—	—
Berkley Southeast	2.3	2.3	2.0
Berkley Surety	1.1	1.2	1.2
Berkley Technology Underwriters	0.6	0.7	0.7
Carolina Casualty	1.3	0.6	0.7
Continental Western Group	2.5	2.8	2.6
Gemini Transportation	3.0	3.4	2.9
Intrepid Direct	1.1	0.9	0.5
Key Risk	2.5	2.5	2.7
Nautilus Insurance Group	4.5	4.9	4.8
Preferred Employers Insurance	1.5	1.9	2.4
Union Standard	1.7	2.0	2.1
Vela Insurance Services	2.6	2.6	2.8
Verus Specialty Insurance	0.8	0.7	0.8
WRB Europe	1.1	1.0	1.4
W/R/B Underwriting	4.0	4.3	3.9
Other	1.6	2.3	3.0
Total	100.0%	100.0%	100.0%

The following table sets forth percentages of gross premiums written, by line, by our Insurance operations:

	Year Ended December 31,		
	2021	2020	2019
Other liability	35.2%	35.5%	33.9%
Short-tail lines (1)	22.2	23.3	23.5
Professional liability	17.7	15.1	13.3
Workers' compensation	12.4	14.3	17.8
Commercial auto	12.5	11.8	11.5
Total	100.0%	100.0%	100.0%

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(1) Short-tail lines include commercial multi-peril (non-liability), inland marine, accident and health, fidelity and surety, boiler and machinery and other lines.

Reinsurance & Monoline Excess

We provide other insurance companies and self-insureds with assistance in managing their net risk through reinsurance on either a portfolio basis, through treaty reinsurance, or on an individual basis, through facultative reinsurance. Our monoline excess operations solely retain risk on an excess basis.

Businesses comprising the Reinsurance & Monoline Excess segment are as follows:

Berkley Re America provides treaty and facultative reinsurance solutions on a variety of product lines through reinsurance brokers to companies whose primary operations are within the United States and Canada.

Berkley Re Asia Pacific provides property and casualty reinsurance to the Asia Pacific marketplace. With offices in Brisbane, Melbourne, Sydney, Beijing, Hong Kong, Labuan and Singapore, each branch focuses on excess of loss reinsurance, targeting both property and casualty treaty and facultative contracts, through multiple distribution channels.

Berkley Re Solutions is a direct casualty facultative reinsurance underwriter serving clients through a nationwide network of regional offices. Its facultative reinsurance products include automatic, semi-automatic and individual risk assumed reinsurance. It also provides its customers with turnkey products such as cyber, employment practices liability insurance ("EPLI"), and liquor liability insurance to help enhance their clients' product offerings, along with underwriting, claims, and actuarial consultation.

Berkley Re UK writes international property casualty treaty and property facultative accounts. Its territorial scope includes reinsured clients domiciled in the United Kingdom, Europe, Africa, the Middle East and the Caribbean.

Lloyd's Syndicate 2791 Participation represents the Company's minority participation in a Lloyd's syndicate that writes a broad range of mainly short-tail classes of business.

Midwest Employers Casualty provides excess workers' compensation insurance products to individual employers, groups and workers' compensation insurance companies across the United States. Its workers' compensation excess of loss products include self-insured excess of loss coverages and large deductible policies. Through its relationship with Berkley Net Underwriters, Midwest Employers Casualty also offers multi-state coverage for group self-insureds. It has developed sophisticated, proprietary analytical tools and risk management services designed to help its insureds lower their total cost of risk.

The following table sets forth the percentages of gross premiums written by each Reinsurance & Monoline Excess business:

	Year Ended December 31,		
	2021	2020	2019
Berkley Re America	31.2 %	31.6 %	34.2 %
Berkley Re Asia Pacific	15.4	13.5	12.0
Berkley Re Solutions	13.8	14.4	12.2
Berkley Re UK	13.8	14.7	15.3
Lloyd's Syndicate 2791 Participation	6.8	6.0	4.8
Midwest Employers Casualty	19.0	19.8	21.5
Total	100.0 %	100.0 %	100.0 %

The following table sets forth the percentages of gross premiums written, by line, by our Reinsurance & Monoline Excess operations:

	Year Ended December 31,		
	2021	2020	2019
Casualty	61.8 %	58.1 %	55.7 %
Property	19.2	22.1	22.8
Monoline Excess	19.0	19.8	21.5
Total	100.0 %	100.0 %	100.0 %

Results by Segment

Summary financial information about our segments is presented on a GAAP basis in the following table:

	Year Ended December 31,		
(In thousands)	2021	2020	2019
Insurance			
Revenue	$ 7,578,592	$ 6,478,834	$ 6,397,074
Income before income taxes	1,219,798	668,012	814,862
Reinsurance & Monoline Excess			
Revenue	1,203,647	1,009,203	877,551
Income before income taxes	270,563	205,587	189,188
Other (1)			
Revenue	673,227	610,888	627,571
Loss before income taxes	(207,456)	(168,797)	(151,130)
Total			
Revenue	$ 9,455,466	$ 8,098,925	$ 7,902,196
Income before income taxes	$ 1,282,905	$ 704,802	$ 852,920

(1) Represents corporate revenues and expenses, net investment gains and losses, and revenues and expenses from non-insurance businesses that are consolidated for financial reporting purposes.

The table below represents summary underwriting ratios on a GAAP basis for our segments. Loss ratio is losses and loss expenses incurred expressed as a percentage of net premiums earned. Expense ratio is underwriting expenses expressed as a percentage of net premiums earned. Underwriting expenses do not include expenses related to insurance services or unallocated corporate expenses. Combined ratio is the sum of the loss ratio and the expense ratio. The combined ratio represents a measure of underwriting profitability, excluding investment income. A number in excess of 100 indicates an underwriting loss; a number below 100 indicates an underwriting profit:

	Year Ended December 31,		
	2021	2020	2019
Insurance			
Loss ratio	61.1 %	64.9 %	62.4 %
Expense ratio	28.3	30.3	31.1
Combined ratio	89.4 %	95.2 %	93.5 %
Reinsurance & Monoline Excess			
Loss ratio	61.0 %	61.3 %	61.5 %
Expense ratio	29.7	31.8	35.0
Combined ratio	90.7 %	93.1 %	96.5 %
Total			
Loss ratio	61.1 %	64.5 %	62.3 %
Expense ratio	28.5	30.4	31.5
Combined ratio	89.6 %	94.9 %	93.8 %

Investments

Investment results, before income taxes, were as follows:

	Year Ended December 31,		
(In thousands)	2021	2020	2019
Average investments, at cost (1)	$ 22,234,975	$ 20,012,182	$ 19,145,567
Net investment income (1)	$ 671,618	$ 583,821	$ 645,614
Percent earned on average investments (1)	3.0 %	2.9 %	3.4 %
Net investment gains (2)	$ 90,632	$ 103,000	$ 120,703
Change in unrealized investment (losses) gains (3)	$ (254,939)	$ 164,645	$ 261,970

(1) Includes investments, cash and cash equivalents, trading accounts receivable (payable) from brokers and clearing organizations, trading account securities sold but not yet purchased and unsettled purchases.

(2) The inclusion of the allowance for expected credit losses on investments commenced January 1, 2020 due to the adoption of ASU 2016-13. See Note 10 of the Consolidated Financial Statements for components of net investment gains.

(3) Represents the change in unrealized investment gains (losses) for available for sale securities recognized in stockholders' equity.

For comparison, the following are the coupon returns for the Barclays U.S. Aggregate Bond Index and the dividend returns for the S&P 500® Index:

	Year Ended December 31,		
	2021	2020	2019
Barclays U.S. Aggregate Bond Index	2.3 %	2.8 %	3.2 %
S&P 500® Index	1.8	1.8	2.3

The percentages of the fixed maturity portfolio categorized by contractual maturity, based on fair value, on the dates indicated, are set forth below. Actual maturities may differ from contractual maturities because certain issuers may have the right to call or prepay certain obligations.

	Year Ended December 31,		
	2021	2020	2019
1 year or less	9.5 %	11.4 %	6.5 %
Over 1 year through 5 years	46.1	38.9	35.9
Over 5 years through 10 years	25.2	25.0	24.7
Over 10 years	12.7	17.4	21.4
Mortgage-backed securities	6.5	7.3	11.5
Total	100.0 %	100.0 %	100.0 %

At December 31, 2021, the fixed maturity portfolio, including cash and cash equivalents, had an effective duration of 2.4 years, and 2.4 years for 2020 and 2.8 years for 2019.

Loss and Loss Expense Reserves

To recognize liabilities for unpaid losses, either known or unknown, insurers establish reserves, which is a balance sheet account representing estimates of future amounts needed to pay claims and related expenses with respect to insured events which have occurred. Estimates and assumptions relating to reserves for losses and loss expenses are based on complex and subjective judgments, often including the interplay of specific uncertainties with related accounting and actuarial measurements. Such estimates are also susceptible to change as significant periods of time may elapse between the occurrence of an insured loss, the report of the loss to the insurer, the ultimate determination of the cost of the loss and the insurer's payment of that loss.

In general, when a claim is reported, claims personnel establish a "case reserve" for the estimated amount of the ultimate payment based upon known information about the claim at that time. The estimate represents an informed judgment based on general reserving practices and reflects the experience and knowledge of the claims personnel regarding the nature and value of the specific type of claim. Reserves are also established on an aggregate basis to provide for losses incurred but not reported ("IBNR") to the insurer, potential inadequacy of case reserves and the estimated expenses of settling claims, including legal and other fees and general expenses of administrating the claims adjustment process. Reserves are established based upon the then current legal interpretation of coverage provided.

In examining reserve adequacy, several factors are considered in estimating the ultimate economic value of losses. These factors include, among others, historical data, legal developments, changes in social attitudes and economic conditions, including the effects of inflation. The actuarial process relies on the basic assumption that past experience, adjusted judgmentally for the effects of current developments and anticipated trends, is an appropriate basis for predicting future outcomes. Reserve amounts are necessarily based on management's informed estimates and judgments using currently available data. As additional experience and other data become available and are reviewed, these estimates and judgments may be revised. This may result in reserve increases or decreases that would be reflected in our results in periods in which such estimates and assumptions are changed.

The risk and complexity of estimating loss reserves are greater when economic conditions are uncertain. It is especially difficult to estimate the impact of inflation on loss reserves given the current economic environment and related government actions. Whereas a slowing economy would generally lead to lower inflation or even deflation, increased government spending would generally lead to higher inflation. A change in our assumptions regarding inflation would result in reserve increases or decreases that would be reflected in our earnings in periods in which such assumptions are changed.

Reserves do not represent an exact calculation of liability. Rather, reserves represent an estimate of what management expects the ultimate settlement and claim administration will cost. While the methods for establishing the reserves are well tested over time, some of the major assumptions about anticipated loss emergence patterns are subject to unanticipated fluctuation. These estimates, which generally involve actuarial projections, are based on management's assessment of facts and circumstances then known, as well as estimates of trends in claims severity and frequency, judicial theories of liability and other factors, including the actions of third parties, which are beyond the Company's control. These variables are affected by external and internal events, such as inflation and economic volatility, judicial and litigation trends, reinsurance coverage, legislative changes and claim handling and reserving practices, which make it more difficult to accurately predict claim costs. The inherent uncertainties of estimating reserves are greater for certain types of liabilities where long periods of time elapse before a definitive determination of liability is made. Although the loss reserves included in the Company's financial statements represent management's best estimates, setting reserves is inherently uncertain and the Company cannot provide assurance that its current reserves will prove adequate in light of subsequent events.

The Company discounts its liabilities for certain workers' compensation reserves. The amount of workers' compensation reserves that were discounted was $1,387 million and $1,655 million at December 31, 2021 and 2020, respectively. The aggregate net discount for those reserves, after reflecting the effects of ceded reinsurance, was $452 million and $483 million at December 31, 2021 and 2020, respectively. At December 31, 2021, discount rates by year ranged from 0.7% to 6.5%, with a weighted average discount rate of 3.4%.

Substantially all discounted workers' compensation reserves (97% of total discounted reserves at December 31, 2021) are excess workers' compensation reserves. In order to properly match loss expenses with income earned on investment securities supporting the liabilities, reserves for excess workers' compensation business are discounted using risk-free discount rates determined by reference to the U.S. Treasury yield curve. These rates are determined annually based on the weighted average rate for the period. Once established, no adjustments are made to the discount rate for that period, and any increases or decreases in loss reserves in subsequent years are discounted at the same rate, without regard to when any such adjustments are recognized. The expected loss and loss expense payout patterns subject to discounting are derived from the Company's loss payout experience.

The Company also discounts reserves for certain other long-duration workers' compensation reserves (representing approximately 3% of total discounted reserves at December 31, 2021), including reserves for quota share reinsurance and reserves related to losses regarding occupational lung disease. These reserves are discounted at statutory rates permitted by the Department of Insurance of the State of Delaware.

To date, known environmental and asbestos claims have not had a material impact on the Company's operations, because its subsidiaries generally did not insure large industrial companies that are subject to significant environmental or asbestos exposures prior to 1986 when an absolute exclusion was incorporated into standard policy language.

The Company's net reserves for losses and loss expenses relating to environmental and asbestos claims on policies written before adoption of the absolute exclusion was $20 million at December 31, 2021 and $19 million at December 31, 2020. The estimation of these liabilities is subject to significantly greater than normal variation and uncertainty because it is difficult to make an actuarial estimate of these liabilities due to the absence of a generally accepted actuarial methodology for these exposures and the potential effect of significant unresolved legal matters, including coverage issues, as well as the cost of litigating the legal issues. Additionally, the determination of ultimate damages and the final allocation of such damages to financially responsible parties are highly uncertain.

The table below provides a reconciliation of the beginning of year and end of year property casualty reserves for the indicated years:

(In thousands)	2021	2020	2019
Net reserves at beginning of year	$ 11,620,393	$ 10,697,998	$ 10,248,883
Cumulative effect adjustment resulting from changes in accounting principles (1)	—	5,927	—
Restated net reserves at beginning of period	11,620,393	10,703,925	10,248,883
Net provision for losses and loss expenses:			
Claims occurring during the current year (2)	4,921,191	4,432,937	4,057,989
Increase in estimates for claims occurring in prior years (3)	863	627	34,079
Loss reserve discount amortization	31,906	35,142	39,048
Total	4,953,960	4,468,706	4,131,116
Net payments for claims:			
Current year	887,896	921,054	985,599
Prior years	2,777,798	2,677,595	2,673,803
Total	3,665,694	3,598,649	3,659,402
Foreign currency translation	(60,297)	46,411	(22,599)
Net reserves at end of year	12,848,362	11,620,393	10,697,998
Ceded reserves at end of year	2,542,526	2,164,037	1,885,251
Gross reserves at end of year	$ 15,390,888	$ 13,784,430	$ 12,583,249
Net change in premiums and losses occurring in prior years:			
Increase in estimates for claims occurring in prior years (3)	$ (863)	$ (627)	$ (34,079)
Retrospective premium adjustments for claims occurring in prior years (4)	7,510	16,807	53,511
Net favorable premium and reserve development on prior years	$ 6,647	$ 16,180	$ 19,432

(1) The cumulative effect adjustment resulting from changes in accounting principals relates to the allowance for expected credit losses on reinsurance recoverables that commenced on January 1, 2020 due to the adoption of ASU 2016-13. See Note 1 for more details.
(2) Claims occurring during the current year are net of loss reserve discounts of $21 million, $10 million and $20 million in 2021, 2020 and 2019, respectively.
(3) The change in estimates for claims occurring in prior years is net of loss reserve discount. On an undiscounted basis, the estimates for claims occurring in prior years decreased by $19 million in 2021 and $21 million in 2020 and increased by $19 million in 2019, respectively.
(4) For certain retrospectively rated insurance policies and reinsurance agreements, changes in loss and loss expenses for prior years are offset by additional or return premiums.

Also, see Item 7, "Management's Discussion and Analysis of Financial Condition and Results of Operations" and note 13, Reserves for Losses and Loss Expenses included in our audited consolidated financial statements for further information regarding the changes in estimates for claims occurring in prior years.

A reconciliation between the reserves as of December 31, 2021 as reported in the accompanying consolidated GAAP financial statements and those reported on the basis of statutory accounting principles ("SAP") in the Company's U.S. regulatory filings is as follows:

(In thousands)		
Net reserves reported in U.S. regulatory filings on a SAP basis	$	12,339,921
Reserves for non-U.S. companies		587,002
Loss reserve discounting (1)		(85,689)
Ceded reserves		2,542,526
Allowance for expected credit losses on due from reinsurers		7,128
Gross reserves reported in the consolidated GAAP financial statements	$	15,390,888

(1) For statutory purposes, the Company discounts its workers' compensation reinsurance reserves at 2.5% as prescribed or permitted by the Department of Insurance of the State of Delaware. In its GAAP financial statements, the Company discounts excess workers' compensation reserves at the risk-free rate and assumed workers' compensation reserves at the statutory rate.

Reinsurance

We follow a common industry practice of reinsuring a portion of our exposures and paying to reinsurers a portion of the premiums received on the policies that we write. Reinsurance is purchased principally to reduce net liability on individual risks and to protect against catastrophic losses. Although reinsurance does not legally discharge an insurer from its primary liability for the full amount of the policies, it does make the assuming reinsurer contractually liable to the insurer to the extent of the reinsurance coverage. We monitor the financial condition of our reinsurers and attempt to place our coverages only with substantial, financially sound carriers. As a result, generally the reinsurers who reinsure our casualty insurance must have an A.M. Best rating of "A (Excellent)" or better with at least $1 billion in policyholder surplus and the reinsurers who cover our property insurance must have an A.M. Best rating of "A- (Excellent)" or better with at least $1 billion in policyholder surplus.

Regulation

U.S. Regulation

Our U.S. insurance subsidiaries are principally regulated by their domiciliary state insurance departments and are subject to varying degrees of regulation and supervision in the other U.S. jurisdictions in which they do business. As of January 1, 2022, there are six domiciliary states related to our U.S. insurance subsidiaries.

Overview. Our domestic insurance subsidiaries are subject to statutes which delegate regulatory, supervisory and administrative powers to state insurance commissioners. This regulation relates to such matters as the standards of solvency which must be met and maintained; the licensing of insurers and their agents; the nature of and limitations on investments; deposits of securities for the benefit of policyholders; approval of certain policy forms and premium rates; periodic examination of the affairs of insurance companies; annual and other reports required to be filed on the financial condition of insurers or for other purposes; establishment and maintenance of reserves for unearned premiums, loss expenses and losses; and requirements regarding numerous other matters. Our property casualty subsidiaries, other than our excess and surplus lines and reinsurance subsidiaries, must generally file all rates with the insurance department of each state in which they operate. Our excess and surplus lines and reinsurance subsidiaries generally operate free of rate and form regulation.

Legislative and Regulatory Activity Related to the COVID-19 Pandemic. In 2020, U.S. state insurance regulators issued directives and guidance in response to the economic impacts of the COVID-19 pandemic, which encouraged or directed insurance companies to implement accommodations such as extending grace periods for premium payments and forbearing on the cancellation or non-renewal of policies due to non-payment of premiums. In addition, there has been industry and regulatory discussion regarding the appropriate role of pandemic business interruption coverage, and whether insurers should be required to provide such coverage. In 2020, legislators of several states proposed bills that would mandate retroactive coverage of pandemic-related business interruption losses. To date, however, none of these proposals has meaningfully progressed or been enacted. There appears to be a broadly held and bipartisan consensus that pandemic risk is generally uninsurable absent some kind of publicly-funded backstop. At the federal level, there are ongoing discussions regarding a federal response to the risk of future pandemics, some of which include proposals to create public-private partnerships with insurers. It is too early to determine which proposal, if any, may ultimately gain the support of Congress, and how any new legislation might affect our business. See "Risk Factors — Risks Related to Our Industry — The COVID-19 pandemic has materially and adversely affected our results of operations, and is expected to continue and therefore may materially and adversely affect, our results of operations, financial position and liquidity."

Holding Company Statutes. In addition to regulatory supervision of our insurance subsidiaries, we are subject to state statutes governing insurance holding company systems. Under the terms of applicable state statutes, any person or entity desiring to purchase more than a specified percentage (commonly 10%) of our outstanding voting securities would be required to obtain prior regulatory approval of the purchase. Typically, such statutes require that we periodically file information with the appropriate state insurance commissioner, including information concerning our capital structure, ownership, financial condition and general business operations.

We must also annually submit to our lead state regulator an "enterprise risk management report" which identifies the activities and circumstances of any affiliated company that might have a material adverse effect on the financial condition of our group or our U.S. licensed insurers.

In addition, all states have adopted changes to the holding company act that authorize U.S. insurance regulators to lead or participate in the group-wide supervision of certain international insurance groups. In November 2019, the International Association of Insurance Supervisors ("IAIS"), an international standard setter, adopted a global framework for the supervision of internationally active insurance groups, as discussed below under "- International Regulation." This framework includes a risk-based, group-wide global insurance capital standard ("ICS"), which is undergoing a five-year monitoring period that started in January 2020.

In the United States, the National Association of Insurance Commissioners (the "NAIC") has developed a group capital calculation tool that uses a risk-based capital aggregation methodology for all entities in an insurance holding company system. The goal is to provide U.S. regulators with a method to aggregate the available capital and the minimum capital of each entity in a group in a way that applies to all companies regardless of their structure. In 2020, the NAIC adopted amendments to the model holding company act and regulation that implement the group capital calculation by requiring the ultimate controlling person of an insurer subject to holding company registration to file the group capital calculation with its lead state regulator. The annual filing requirement will become effective once the states have adopted the NAIC holding company amendments. The NAIC has proposed an accreditation standard for these amendments for a one-year comment period starting on January 1, 2022.

All states have adopted the NAIC's Risk Management and Own Risk and Solvency Assessment Model Act (the "ORSA Model Act"), which requires an insurance holding company system's chief risk officer to submit annually to its lead state insurance regulator an Own Risk and Solvency Assessment Summary Report ("ORSA Report"). The ORSA Report is a confidential internal assessment of the material and relevant risks associated with an insurer's current business plan and the sufficiency of capital resources to support those risks. Under the ORSA Model Act, as enacted by the states, we are required to:

- regularly, no less than annually, conduct an ORSA to assess the adequacy of our risk management framework, and current and estimated projected future solvency position;
- internally document the process and results of the assessment; and
- provide an ORSA Report annually to the Commissioner of Insurance of the State of Delaware (our lead state commissioner).

Cybersecurity Regulations. New York has adopted a cybersecurity regulation for financial services institutions that are authorized by the New York State Department of Financial Services (the "NYDFS"), which applies to our insurance subsidiaries licensed in New York. The regulation requires these entities to assess risks associated with their information systems and establish and maintain a cybersecurity program designed to protect consumers' private data and the confidentiality, integrity and availability of the licensee's information systems. The NAIC has adopted the Insurance Data Security Model Law (the "Cybersecurity Model Law") for consideration by state legislatures, which, when adopted by the states, establishes standards for data security, the investigation of cybersecurity events involving unauthorized access to, or the misuse of, certain nonpublic information, and reporting to insurance commissioners. The Cybersecurity Model Law imposes significant regulatory burdens intended to protect the confidentiality, integrity and availability of information systems. As of December 31, 2021, the Cybersecurity Model Law, or a form thereof, had been adopted by several states, including two of our U.S. insurance subsidiaries' domiciliary states. A drafting note in the Cybersecurity Model Law states that a licensee's compliance with the New York cybersecurity regulation is intended to constitute compliance with the Cybersecurity Model Law, but compliance remains a state-by-state issue and we would need to consider any differences in implementation and enforcement of the Cybersecurity Model Law as part of our compliance efforts. Additionally, the Federal Trade Commission amended the "Standards for Safeguarding Customer Information Rules (otherwise known as the "Safeguards Rule") in 2021 to require covered financial institutions to implement certain data security measures and practices in their information security programs. Many of the requirements of the amended Safeguards Rule are similar to the New York cybersecurity regulation and the Cybersecurity Model Law, but there are some differences that may impose increased operational burdens and compliance costs.

Certain states are developing or have developed regulations related to privacy and data security. For example, in 2018 California enacted the California Consumer Privacy Act ("CCPA"), which broadly regulates the collection, processing and disclosure of California residents' personal information, imposes limits on the "sale" of personal information and grants California residents certain rights to, among other things, access and delete data about them in certain circumstances. CCPA also established a private right of action, with potentially significant statutory damages, whereby businesses that fail to implement reasonable security measures to protect against breaches of personal information could be liable to affected consumers. CCPA became effective on January 1, 2020. California subsequently enacted the California Privacy Rights Act ("CPRA"), which amends the CCPA to impose additional limitations and obligations with respect to covered businesses' use and sharing of certain personal data. The CPRA will come into full effect in January 2023; compliance with CCPA/CPRA may increase the cost of providing our services in California. Other states have considered – and some states have adopted - similar proposals. For instance, Virginia and Colorado enacted data privacy laws in 2021 that will come into effect in January 2023 and July 2023, respectively. These laws establish in those states many of the same data privacy and security requirements as other existing laws, such as the CCPA. We cannot predict the impact, if any, that any proposed or future cybersecurity regulations or state laws will have on our business, financial condition or results of operations.

Risk-Based Capital Requirements. The NAIC utilizes a Risk-Based Capital ("RBC") formula that is designed to measure the adequacy of an insurer's statutory surplus in relation to the risks inherent in its business. The RBC formula develops a risk adjusted target level of adjusted statutory capital by applying certain factors to various asset, premium and reserve items. The NAIC RBC Model Law provides for four incremental levels of regulatory attention for insurers whose surplus is below the calculated RBC target. These levels of attention range in severity from requiring the insurer to submit a plan for corrective action to actually placing the insurer under regulatory control. The RBC of each of our domestic insurance subsidiaries was above any RBC action level as of December 31, 2021.

Insurance Regulatory Information System. The NAIC also has developed a set of 13 financial ratios for property and casualty insurers referred to as the Insurance Regulatory Information System ("IRIS"). On the basis of statutory financial statements filed with state insurance regulators, the NAIC annually calculates these IRIS ratios to assist state insurance regulators in monitoring the financial condition of insurance companies. The NAIC has established an acceptable range for each of the IRIS financial ratios.

Guaranty Funds. Our U.S. insurance subsidiaries are also subject to assessment by state guaranty funds when an insurer in a particular jurisdiction has been judicially declared insolvent and the insolvent company's available funds are insufficient to pay policyholders and claimants the amounts to which they are entitled. The protection afforded under a state's guaranty fund to policyholders of the insolvent insurer varies from state to state. Generally, all licensed property casualty insurers are considered to be members of the fund, and assessments are based upon their pro rata share of direct written premiums in that state. The NAIC Post-Assessment Property and Liability Insurance Guaranty Association Model Act, which many states have adopted, limits assessments to an insurer to 2% of its subject premium and permits recoupment of assessments through rate setting. Likewise, several states (or underwriting organizations of which our insurance subsidiaries are required to be members) have limited assessment authority with regard to deficits in certain lines of business.

Additionally, state insurance laws and regulations require us to participate in mandatory property-liability "shared market," "pooling" or similar arrangements that provide certain types of insurance coverage to individuals or others who otherwise are unable to purchase coverage voluntarily provided by private insurers. Shared market mechanisms include assigned risk plans and fair access to insurance requirement or "FAIR" plans. In addition, some states require insurers to participate in reinsurance pools for claims that exceed specified amounts. Our participation in these mandatory shared market or pooling mechanisms generally is related to the amount of our direct writings for the type of coverage written by the specific arrangement in the applicable state.

Dividends. We receive funds from our insurance company subsidiaries in the form of dividends and management fees for certain management services. Annual dividends in excess of maximum amounts prescribed by state statutes may not be paid without the approval of the insurance commissioner of the state in which an insurance subsidiary is domiciled. See "Management's Discussion and Analysis of Financial Condition and Results of Operations-Liquidity and Capital Resources."

Trade Practices. State insurance laws and regulations include numerous provisions governing trade practices and the marketplace activities of insurers, including provisions governing marketing and sales practices, policyholder services, claims management and complaint handling. State regulatory authorities generally enforce these provisions through periodic market conduct examinations.

Investment Regulation. Investments by our domestic insurance companies must comply with applicable laws and regulations which prescribe the kind, quality and concentration of investments. In general, these laws and regulations permit investments in federal, state and municipal obligations, corporate bonds, preferred and common equity securities, mortgage loans, real estate and certain other investments, subject to specified limits and certain other qualifications. Investments that do not comply with these limits and qualifications are deducted in our insurance subsidiaries' calculation of their statutory capital and surplus.

Terrorism Risk Insurance. The Terrorism Risk Insurance Act of 2002 established a Federal program that provides for a system of shared public and private compensation for insured losses resulting from acts of terrorism. Pursuant to the Terrorism Risk Insurance Program Reauthorization Act of 2019 ("TRIPRA"), the program was extended until December 31, 2027.

TRIPRA provides a federal backstop to all U.S. based property and casualty insurers for insurance related losses resulting from any act of terrorism on U.S. soil or against certain U.S. air carriers, vessels or foreign missions. TRIPRA is applicable to almost all commercial lines of property and casualty insurance but excludes commercial auto, burglary and theft, surety, professional liability and farm owners' multi-peril insurance. Insurers with direct commercial property and casualty insurance exposure in the United States are required to participate in the program and make available coverage for certified acts of terrorism. TRIPRA's definition of certified acts includes domestic terrorism. Federal participation will be triggered under TRIPRA when the Secretary of Treasury certifies an act of terrorism.

Under the program, the federal government will pay 80% of an insurer's covered losses in excess of the insurer's applicable deductible. The insurer's deductible is based on 20% of earned premium for the prior year for covered lines of commercial property and casualty insurance. Based on our 2021 earned premiums, our aggregate deductible under TRIPRA during 2022 will be approximately $1,135 million. The federal program will not pay losses for certified acts unless such losses exceed $200 million industry-wide for any calendar year after 2020. TRIPRA limits the federal government's share of losses at $100 billion for a program year. In addition, an insurer that has satisfied its deductible is not liable for the payment of losses in excess of the $100 billion cap.

Excess and Surplus Lines. The regulation of our U.S. subsidiaries' excess and surplus lines insurance business differs significantly from the regulation of our admitted business. Our surplus lines subsidiaries are subject to the surplus lines regulation and reporting requirements of the jurisdictions in which they are eligible to write surplus lines insurance. Although the surplus lines business is generally less regulated than admitted business, principally with respect to rates and policy forms, strict regulations apply to surplus lines placements in the laws of every state and the regulation of surplus lines insurance may undergo changes in the future. Federal or state measures may be introduced to increase the oversight of surplus lines insurance in the future.

Climate Change and Financial Risks. The topic of climate risk has come under increased scrutiny by insurance regulators. In September 2020, the NYDFS issued a circular letter to New York domestic and foreign authorized insurance companies, which impacts our insurance subsidiaries licensed in New York. The circular letter states that the NYDFS expects insurers to integrate financial risks related to climate change into their governance frameworks, risk management processes and business strategies. For example, the letter states that an insurer should designate a board member or board committee, as well as a senior management function, that oversees the management of the financial risks associated with climate change.

The NYDFS also adopted an amendment to the regulation that governs enterprise risk management, effective as of August 13, 2021, that requires an insurance group to include certain additional risks, such as climate change risk, in its enterprise risk management function.

In addition, the Federal Insurance Office (the "FIO") has been instructed by President Biden's Executive Order on Climate-Related Financial Risk, dated May 20, 2021, to seek public comment on a series of questions that "will help inform FIO's assessment of climate-related financial risks for the insurance sector." The FIO's Request for Information notes that it "plans to … take a leadership role in analyzing how the insurance sector may help mitigate climate-related risks [and to that end, it] will engage with the insurance sector to assess how the sector may help achieve national climate-related goals, including mitigation, adaptation and transition to a lower carbon economy.” The comment period ended in November 2021.

Diversity and Corporate Governance. Insurance regulators are also focused on the topic of race, diversity and inclusion. On March 16, 2021, the NYDFS issued a circular letter stating that it expects the insurers it regulates, such as our insurance subsidiaries licensed in New York, to make diversity of their leadership a business priority and a key element of their corporate governance. See “ – Human Capital Resources” below.

Federal Regulation. The federal government and its regulatory agencies generally do not directly regulate the business of insurance, although federal initiatives could have an impact on our business in a variety of ways. The Dodd-Frank Wall Street Reform and Consumer Protection Act of 2010 (the “Dodd-Frank Act”) effected sweeping changes to financial services regulation in the United States, and created two new federal government bodies, the FIO and the Financial Stability Oversight Council (the “FSOC”). The FIO does not have general supervisory or regulatory authority over the business of insurance, although it has preemption authority over state insurance laws that conflict with certain international agreements, as discussed below. The FIO has authority to represent the United States in international insurance matters and is authorized to monitor the U.S. insurance industry and identify potential regulatory gaps that could contribute to systemic risk. The Economic Growth, Regulatory Relief and Consumer Protection Act addresses the roles played by federal regulators at international insurance standard-setting forums, and it directs the Director of the FIO and the Board of Governors of the Federal Reserve to support increased transparency at international standard-setting regulatory forums (e.g., the IAIS). These federal regulations also instruct the FIO and the Federal Reserve to achieve consensus positions with the states through the NAIC prior to taking a position on any insurance proposal by a global insurance regulatory forum.

The Dodd-Frank Act authorizes the Secretary of the Treasury and U.S. Trade Representative to enter into international agreements of mutual recognition regarding the prudential regulation of insurance or reinsurance. The U.S. and the European Union ("EU") signed such a covered agreement (the "EU Covered Agreement") in September 2017. The EU Covered Agreement addresses three areas of prudential supervision: reinsurance, group supervision and the exchange of information between the U.S. and EU. Under the EU Covered Agreement, reinsurance collateral requirements will no longer apply to qualifying EU reinsurers that sell reinsurance to the U.S. market, and U.S. reinsurers operating in the EU market will no longer be subject to “local presence” requirements. The EU Covered Agreement establishes group supervision practices that apply only to U.S. and EU insurance groups operating in both territories. For instance, the EU Covered Agreement states that, provided the U.S. has adopted group supervision including worldwide group governance, solvency, capital and reporting, U.S.-headquartered insurance groups with operations in the EU will be supervised at the worldwide level only by U.S. insurance regulators precluding EU insurance supervisors from exercising solvency and capital requirements over the worldwide operations of those insurers.

In December 2018, the U.S. Department of the Treasury and the Office of the U.S. Trade Representative entered into a covered agreement with the U.K. (the “U.K. Covered Agreement,” and together with the EU Covered Agreement, the “Covered Agreements”) in anticipation of the U.K.’s exit from the EU. The U.K. Covered Agreement largely reflects the provisions of the EU Covered Agreement and incorporates the same timeframes within it. Under the Dodd-Frank Act, the FIO has preemption authority over state insurance laws that conflict with the Covered Agreements.

Under the terms of the Covered Agreements, state credit for reinsurance laws that result in non-U.S. reinsurers subject to the Covered Agreements being treated less favorably than U.S. reinsurers may be preempted by the applicable Covered Agreement beginning on September 1, 2022. Accordingly, in June 2019, the NAIC adopted amendments to its Credit for Reinsurance Model Law in order to satisfy the substantive and timing requirements of the Covered Agreements, which amendments have been adopted by our U.S. insurance subsidiaries’ domiciliary states. These amendments will become an NAIC accreditation standard beginning on September 1, 2022, with enforcement beginning on January 1, 2023. The amended Credit for Reinsurance Model Law also extends the zero reinsurance collateral provisions in the Covered Agreements to qualified reinsurers domiciled in U.S. jurisdictions that are accredited by the NAIC and to non-U.S. jurisdictions that have not entered into a covered agreement with the U.S. but which the NAIC has identified as “reciprocal jurisdictions” pursuant to the NAIC Qualified Jurisdiction Process. We cannot currently predict the impact of these changes to the law or whether any other covered agreements will be successfully adopted, and cannot currently estimate the impact of these changes to the law and any such adopted covered agreements on our business, financial condition or operating results.

The FIO also can recommend to the FSOC that it designate an insurer as an entity posing risks to the United States’ financial stability in the event of the insurer’s material financial distress or failure, i.e., a “systemically important financial institution” or a “non-bank SIFI.” An insurer so designated by the FSOC will be subject to Federal Reserve supervision and heightened prudential standards. There are currently no such non-bank SIFIs designated by the FSOC. The FSOC changed its process for designating non-bank SIFIs, effective in January 2020, by adopting an activities-based approach and moving away from the entities-based approach.

Based upon our current business model and balance sheet, we do not believe that we will be designated by the FSOC as such an institution. Although the potential impact of any future amendments to the Dodd-Frank Act on the U.S. insurance industry is not clear, our business could be affected by changes to the U.S. system of insurance regulation or our designation or the designation of insurers or reinsurers with which we do business as systemically important non-bank financial companies.

International Regulation

Our insurance subsidiaries based in the United Kingdom are regulated by the Prudential Regulation Authority (“PRA”) and/or the Financial Conduct Authority (“FCA”). The PRA’s primary objectives with regard to insurers are to promote the safety and soundness of insurers and to contribute to the securing of an appropriate degree of protection for current and future policyholders, while the FCA has three operational objectives: (i) to secure an appropriate degree of protection for consumers, (ii) to protect and enhance the integrity of the United Kingdom’s financial system, and (iii) to promote effective competition in the interests of consumers in the financial services markets. The PRA and FCA employ a variety of regulatory tools to achieve their objectives, including periodic auditing and reporting requirements, risk assessment reviews, minimum solvency margins and individual capital assessment requirements, dividend restrictions, in certain cases, approval requirements governing the appointment of key officers, approval requirements governing controlling ownership interests and various other requirements.

Our Lloyd’s managing agency is also regulated by Lloyd’s, and the Lloyd’s syndicate business is subject to Lloyd’s supervision. Through Lloyd’s, we are licensed to write business in various countries throughout the world by virtue of Lloyd’s international licenses. In each such country, we are subject to the laws and insurance regulation of that country. Our insurance subsidiary based in Liechtenstein is regulated by the Financial Market Authority of Liechtenstein ("FMA"), which has regulatory tools analogous to those of the U.K. regulators noted above.

Additionally, U.K. and Liechtenstein laws and regulations also impact us as “controllers” of our European-regulated subsidiaries, whereby we are required to notify the appropriate authorities about significant events relating to such regulated subsidiaries’ controllers (i.e. persons or entities which have certain levels of direct or indirect voting power or economic interests in the regulated entities) as well as changes of control, and to submit annual reports regarding their controllers. The PRA/FCA’s Senior Managers and Certification Regime and analogous regulation in Liechtenstein further provide regulatory frameworks for standards of fitness and propriety, conduct and accountability for individuals in positions of responsibility at insurers. In addition, certain employees are individually registered at Lloyd’s.

Following the expiry of the transition period for the United Kingdom’s withdrawal from the EU on December 31, 2020, an insurance company with authorization to write insurance business in the U.K. is no longer permitted to provide cross-border services on a “passporting” basis in the remaining member states of the European Economic Area (“EEA”), a group including member states of the EU and Norway, Liechtenstein and Iceland. Instead, U.K. insurance companies are now required to establish either a subsidiary or a branch in an EEA member state and apply for direct authorization with the local regulator in that jurisdiction.

EEA insurers have similarly lost their right to provide cross-border services on a “passporting” basis into the U.K. As a result, the U.K. branch of our Liechtenstein subsidiary has applied for direct authorization to carry on insurance business in the U.K. In the meantime, the branch is currently able to perform regulated insurance business in the U.K. under the supervision of the PRA/FCA pursuant to the U.K. ‘Temporary Permissions Regime’ while the application is being considered.

See below “Risks Relating To Our Business-The United Kingdom leaving the EU could adversely affect our business” for more information.

Our insurance business throughout the EU and EEA is subject to “Solvency II,” an insurance regulatory regime governing, among other things, capital adequacy and risk management which became effective on January 1, 2016. Following the U.K.’s withdrawal from the EU, and the expiry of the transition period on December 31, 2020, our Lloyd’s managing agency (and the U.K. branch of our Liechtenstein subsidiary) are now subject to a separate U.K. prudential regime. This domestic regime is identical to Solvency II from January 1, 2021. However, the two regimes may diverge over time. The U.K. has undertaken a review of Solvency II and of the regulatory regime applicable to U.K. authorized insurers and reinsurers.
The U.K. has undertaken a review of Solvency II and of the regulatory regime applicable to U.K. authorized insurers and reinsurers. The U.K.’s HM Treasury is now working alongside the PRA to prepare a package of proposed reforms to the U.K.’s domestic regulatory regime for consultation in early 2022. Similarly, the European Commission has undertaken its own review of Solvency II and, on September 22, 2021, published a package of proposed legislative reforms for amending the existing regulatory framework. This proposed legislation is now being discussed by the European Parliament and Council.

Solvency II provides for the supervision of group solvency. Under Solvency II, it is possible that the U.S. parent of a European Union subsidiary could be subject to certain Solvency II requirements if the U.S. company is not already subject to regulations deemed “equivalent” to Solvency II. Currently, the U.S. system of insurance regulation relating to group supervision is not deemed “equivalent” to Solvency II by European Union authorities. The PRA will also perform separate, but comparable, supervision of group solvency under the U.K.'s own domestic prudential regime where a U.S. holding company is a parent of a subsidiary U.K. insurer or reinsurer.

The Liechtenstein financial services regulator, the FMA, is the group supervisor for our European-regulated subsidiaries. However, the Covered Agreements prohibit any EU supervisor or the PRA (as applicable) from exercising group-wide supervision at any level above the highest company organized in the country of that supervisor.

We must also comply with the EU General Data Protection Regulation (EU) 2016/879) ("GDPR"), which took effect in May 2018. The regulation's goal is to impose increased individual rights and protections for all personal data located in or originating from the EU. The Data Protection Act 2018 and the U.K. General Data Protection Regulation, which is the retained EU law version of the GDPR by virtue of the European Union (Withdrawal) Act 2018 and as amended by the Data Protection, Privacy and Electronic Communications (Amendments etc.) (EU Exit) Regulations 2019 (together, "U.K. GDPR"), regulate data protection for all individuals within the U.K. Both the GDPR and the U.K. GDPR are extraterritorial in that they apply to all businesses in the EU and the U.K. respectively and any business outside the EU and the U.K. that process EU and/or U.K. personal data of individuals in the EU and/or the U.K. Moreover, there are significant fines associated with non-compliance. In particular, we need to monitor our compliance with all relevant member states' laws and regulations, including where permitted derogations from the GDPR and the U.K. GDPR are introduced. The introduction of the GDPR and the U.K. GDPR, and any resultant changes in EU member states' or U.K. national laws and regulations, has increased our compliance obligations and has necessitated the review and implementation of policies and processes relating to our collection and use of data, and has required us to change our business practices regarding these matters.

In addition, we may become subject to or affected by regulatory policies adopted by the IAIS, an international standard setter consisting of supervisors and regulators from more than 200 jurisdictions. The IAIS has been working on several initiatives to consider changes to insurer solvency standards and group supervision of companies in a holding company system in response to the increasing globalization of the insurance sector. In November 2019, the IAIS formally adopted a global framework for the supervision of internationally active insurance groups ("IAIGs"), which is referred to as the Common Framework for the Supervision of Internationally Active Insurance Groups, or "ComFrame." ComFrame is intended to provide a framework of basic standards for IAIGs and a process for supervisors to cooperate in the supervision of IAIGs. Also in November 2019, the IAIS adopted a risk-based group-wide global insurance capital standard ("ICS") that will apply to IAIGs and ultimately form a part of ComFrame. The ICS commenced a five-year monitoring period in January 2020 which is being used for confidential reporting and discussion in supervisory colleges to provide feedback to the IAIS on the ICS's design and performance, but will not trigger any supervisory action. Following this monitoring period, the ICS is expected to be implemented in 2025 as a group-wide prescribed capital requirement for IAIGs and integrated into the rest of ComFrame. As noted above under "- U.S. Regulation," it is unclear how the development of the ICS will interact with existing capital requirements for insurance companies in the United States and the NAIC's development of the GCC.

Our international operations are also subject to varying degrees of regulation in Mexico, Australia and Canada and in certain other countries in Europe, South America, and Southeast Asia. Generally, our subsidiaries must satisfy local regulatory requirements. While each country imposes licensing, solvency, auditing and financial reporting requirements, the type and extent of the requirements differ substantially. Key areas where country regulations may differ include: (i) the type of financial reports to be filed; (ii) a requirement to use local intermediaries; (iii) the amount of reinsurance permissible; (iv) the scope of any regulation of policy forms and rates; and (v) the type and frequency of regulatory examinations.

Competition

The property casualty insurance and reinsurance businesses are highly competitive, with many insurance companies of various sizes, as well as other entities offering risk alternatives such as self-insured retentions or captive programs, transacting business in the United States and internationally. We compete directly with a large number of these companies. Competition in our industry is largely measured by the ability to provide insurance and services at a price and on terms that are reasonable and acceptable to the customer. Our strategy in this highly fragmented industry is to seek specialized areas or geographic regions where our businesses can gain a competitive advantage by responding quickly to changing market conditions. Our businesses establish their own pricing practices based upon a Company-wide philosophy to price products with the intent of making an underwriting profit.

Competition for insurance business within the United States comes from other specialty insurers, regional carriers, large national multi-line companies and reinsurers. Our specialty businesses compete with excess and surplus insurers as well as standard carriers. Our regional businesses compete with mutual and other regional stock companies as well as national carriers. Additionally, direct writers of property casualty insurance compete with our regional businesses by writing insurance through their salaried employees, generally at a lower acquisition cost than through independent agents such as those used by the Company. We compete internationally with native insurance operations both large and small, which in some cases are related to government entities, as well as with branches or local subsidiaries of multinational companies.

Competition for reinsurance business, which is especially strong, comes from domestic and foreign reinsurers, which produce their business either on a direct basis or through the broker market. These competitors include Swiss Re, Munich Re, Berkshire Hathaway, Transatlantic Reinsurance, Partner Re and others.

In recent years, various institutional investors have increasingly sought to participate in the property and casualty insurance and reinsurance industries. Well-capitalized new entrants to the property and casualty insurance and reinsurance industries, or existing competitors that receive substantial infusions of capital, provide increasing competition, which may adversely impact our business and profitability. Further, an expanded supply of reinsurance capital may lower costs for insurers that rely on reinsurance and, as a consequence, those insurers may be able to price their products more competitively.

Human Capital Resources

As of January 15, 2022, we employed 7,681 individuals. Of this number, our subsidiaries employed 7,545 individuals and the remaining individuals were employed at the parent company.

We believe that our people are our greatest asset and that our corporate culture is the most important intangible driver of long-term value creation for our Company and the highest priority for pursuing long-term risk-adjusted returns and growth in stockholder value.

Human Capital Management: The Company fosters a performance culture. We are focused on creating a respectful, rewarding, diverse, and inclusive work environment that allows our employees to build meaningful and productive careers. The success of these human capital management objectives is essential to our strategy, as it is our people who drive our success. We invest in their growth as individuals and professionals through training and engagement, as well as in their well-being through robust health and wellness programs and a commitment to diversity.

The Company provides developmental opportunities for our employees through formal and informal programs that focus on enabling employees to build skills and thought leadership in specific facets of our business. Our leadership programs cultivate the talent of our high-potential, strong-performing employees as we strive to deepen, enhance and diversify the Company’s leadership team.

We strive to align employee incentives with the risk and performance frameworks of the Company. The Company’s “pay for performance” philosophy connects individual, business and Company results to employee compensation, providing employees with opportunities to share in the Company’s overall growth and success. The Company offers employees a comprehensive benefits package, including health and wellness, financial, educational and life management benefits. In addition, we support employees in making an impact in their local communities and globally through environmental and social efforts that are meaningful to them.

Our Board of Directors engages with our senior leadership team, including our senior vice president - human resources, on a periodic basis across a range of human capital management issues, including succession planning and development, compensation, benefits, talent recruiting and retention, engagement, diversity and inclusion, and employee feedback.

Culture: The Board of Directors has recognized Accountability, People Oriented Strategy, Responsible Financial Practices, Risk-Adjusted Returns and Transparency as the elements of corporate culture necessary for the Company to achieve success. Our culture unifies our employees across our decentralized business model, positions us to serve our diverse clients globally and propels the Company’s continuous evolution.

We are committed to fostering a unifying culture and encouraging innovation across our enterprise. Our culture encompasses the beliefs that (i) specialized knowledge and having a customer-centric focus are competitive advantages and (ii) an environment that promotes integrity, embraces the commitment to “always do right,” fosters entrepreneurship and innovation, and values making thoughtful decisions for the long-term benefit of our enterprise. While there is no one “Berkley” way, each of our businesses has its own culture that embodies a shared set of values that define our enterprise. Our structure, with more than 50 distinct businesses, facilitates the prompt identification of and appropriate action with respect to addressing individual business or cultural issues arising within a business, without affecting the larger enterprise. Furthermore, our businesses are overseen by senior corporate business managers and senior corporate functional managers, including actuarial, claims, underwriting, compliance and finance, providing a governance oversight structure that makes it easier to identify such issues. Because our Board of Directors diligently exercises its risk management oversight through, among other activities, regular interactions with employees beyond corporate senior management, our directors have visibility into and receive timely feedback on cultural issues that may affect our business.

As significant owners of our Company who are required to hold their shares until separation from service, each of our directors and senior executives have a vested interest in cultivating talent and perpetuating a culture that facilitates the execution of our long-term objectives.

Other Information about the Company's Business

We maintain an interest in the acquisition and startup of complementary businesses and continue to evaluate possible acquisitions and new ventures on an ongoing basis. In addition, our businesses develop new coverages or enter lines of business to meet the needs of insureds.

Seasonal weather variations and other events affect the severity and frequency of losses sustained by the insurance and reinsurance businesses. Although the effect on our business of catastrophes such as tornadoes, hurricanes, hailstorms, wildfires, earthquakes and terrorist acts may be mitigated by reinsurance, they nevertheless can have a significant impact on the results of any one or more reporting periods.

We have no customer that accounts for 10 percent or more of our consolidated revenues.

Compliance by W. R. Berkley and its subsidiaries with federal, state and local provisions that have been enacted or adopted regulating the discharge of materials into the environment, or otherwise relating to protection of the environment, has not had a material effect upon our capital expenditures, earnings or competitive position.

The Company's internet address is www.berkley.com. The information on our website is not incorporated by reference in this annual report on Form 10-K. The Company's annual report on Form 10-K, quarterly reports on Form 10-Q, current reports on Form 8-K, amendments to those reports filed or furnished pursuant to Section 13(a) or 15(d) of the Securities Exchange Act and other reports filed by us or with respect to our securities by others are accessible free of charge through this website as soon as reasonably practicable after they have been electronically filed with or furnished to the SEC.

ITEM 1A. RISK FACTORS

Our businesses face significant risks. If any of the events or circumstances described as risks below occur, our businesses, results of operations and/or financial condition could be materially and adversely affected. In addition to those described below, our businesses may also be adversely affected by risks and uncertainties not currently known to us or that we currently consider immaterial.

Risks Relating to Our Industry

Our results may fluctuate as a result of many factors, including cyclical changes in the insurance and reinsurance industry.

The results of companies in the property casualty insurance industry historically have been subject to significant fluctuations and uncertainties in demand and pricing, causing cyclical changes in the insurance and reinsurance industry. The demand for insurance is influenced primarily by general economic conditions, while the supply of insurance is often directly related to available capacity or the perceived profitability of the business. In recent years, we have faced significant competition in our business, as a result of new entrants and capital providers, as well as existing insurers seeking to gain or maintain market share. Recently, premium rates have increased at an accelerating pace for most lines of business, while they have decreased in others, most notably workers' compensation. The adequacy of premium rates is affected mainly by the severity and frequency of claims, which are influenced by many factors, including natural disasters, regulatory measures and court decisions that define and expand the extent of coverage and the effects of economic or social inflation on the amount of compensation due for injuries or losses. In addition, investment rates of return have impacted rate adequacy, with interest rates remaining at or near historic lows. These factors can have a significant impact on ultimate profitability because a property casualty insurance policy is priced before its costs are known as premiums usually are determined long before claims are reported. These factors could produce results that would have a negative impact on our results of operations and financial condition.

We face significant competitive pressures in our businesses, which can pressure premium rates in certain areas and could harm our ability to maintain or increase our profitability and premium volume in some parts of our business.

We compete with a large number of other companies in our selected lines of business. We compete, and will continue to compete, with major U.S. and non-U.S. insurers and reinsurers, other regional companies, as well as mutual companies, specialty insurance companies, underwriting agencies, diversified financial services companies and insurtech companies. Competitiveness in our businesses is based on many factors, including premium charges, ratings assigned by independent rating agencies, commissions paid to producers, the perceived financial strength of the company, other terms and conditions offered, services provided (including ease of doing business over the internet), speed of claims payment and reputation and experience in the lines to be written. In recent years, the insurance industry has undergone consolidation, which may further increase competition in some parts of our business and may cause our insurance subsidiaries to incur greater customer retention and acquisition expenses, affecting the profitability of existing and new business.

Some of our competitors, particularly in the reinsurance business, have greater financial and/or marketing resources than we do. These competitors within the reinsurance market include Swiss Re, Munich Re, Berkshire Hathaway, Transatlantic Reinsurance, and Partner Re. We expect that perceived financial strength, in particular, will become more important as customers seek high quality reinsurers.

The insurance industry continues to attract new capital which leads to increased competition in our business. Recently, insurance prices have generally increased for most lines of business, excluding workers' compensation. However, loss costs have also increased and the duration and magnitude of the improving pricing environment remains uncertain. With the low level of interest rates available, current price levels for certain lines of business may remain below the prices required for us to achieve our long-term return objectives. We expect to continue to face strong competition in some parts of our business.

In recent years, various types of investors have increasingly sought to participate in the property and casualty insurance and reinsurance industries. Well-capitalized new entrants to the property and casualty insurance and reinsurance industries, or existing competitors that receive substantial infusions of capital or access to third-party capital, provide increasing competition, which may adversely impact our business and profitability. Further, an expanded supply of reinsurance capital may lower costs for insurers that rely on reinsurance and, as a consequence, those insurers may be able to price their products more competitively. In addition, technology companies or other third parties have created, and may in the future create, technology-enabled business models, processes, platforms or alternate distribution channels that may adversely impact our competitive position in some parts of our business.

This intense competition could cause the supply and/or demand for insurance or reinsurance to change, which affect our ability to price our products at attractive rates and retain existing business or write new products at adequate rates or on terms and conditions acceptable to us. If we are unable to retain existing business or write new business at adequate rates or on terms and conditions acceptable to us, our results of operations could be materially and adversely affected.

Our actual claims losses may exceed our reserves for claims, which may require us to establish additional reserves.

Our gross reserves for losses and loss expenses were approximately $15.4 billion as of December 31, 2021. Our loss reserves reflect our best estimates of the cost of settling claims and related expenses with respect to insured events that have occurred.

Reserves do not represent an exact calculation of liability. Rather, reserves represent an estimate of what management expects the ultimate settlement and claims administration will cost for claims that have occurred, whether known or unknown. The major assumptions about anticipated loss emergence patterns are subject to unanticipated fluctuation. These estimates, which generally involve actuarial projections, are based on management's assessment of facts and circumstances then known, as well as estimates of future trends in claims severity and frequency, inflation, judicial theories of liability, reinsurance coverage, legislative changes and other factors, including the actions of third parties, which are beyond our control.

The inherent uncertainties of estimating reserves are greater for certain types of liabilities, where long periods of time elapse before a definitive determination of liability is made and settlement is reached. In periods with increased economic volatility, it becomes more difficult to accurately predict claim costs. It is especially difficult to estimate the impact of inflation on loss reserves given the current economic environment and related government actions. Both inflation overall and medical cost inflation, which has historically been greater than inflation overall, can have an adverse impact. In addition, although the Company has estimated the potential COVID-19 impact to its contingency and event cancellation, workers' compensation, and other lines of business under a number of possible scenarios, due to COVID-19's continued evolving impact, there remains a high degree of uncertainty around the Company's COVID-19-related reserves.

Reserve estimates are continually refined in an ongoing process as experience develops and further claims are reported and settled. Adjustments to reserves are reflected in the results of the periods in which such estimates are changed. Because setting reserves is inherently uncertain, we cannot assure that our current reserves will prove adequate in light of subsequent events. Should we need to increase our reserves, our pre-tax income for the reporting period would decrease by a corresponding amount.

We discount our reserves for excess and assumed workers' compensation business because of the long period of time over which losses are paid. Discounting is intended to appropriately match losses and loss expenses to income earned on investment securities supporting liabilities. The expected loss and loss expense payout pattern subject to discounting is derived from our loss payout experience. Changes in the loss and loss expense payout pattern are recorded in the period they are determined. If the actual loss payout pattern is shorter than anticipated, the discount will be reduced and pre-tax income will decrease by a corresponding amount.

The effects of emerging claim and coverage issues on our business are uncertain.

As industry practices and economic, legal, judicial, social, technological and other environmental conditions change, unexpected and unintended issues related to claim and coverage may emerge. These issues may adversely affect our business by either extending coverage beyond our underwriting intent or by increasing the number or size of claims. Examples of emerging claims and coverage issues include, but are not limited to:

- judicial expansion of policy coverage and a greater propensity to grant claimants more favorable amounts and the impact of new theories of liability;
- plaintiffs targeting property and casualty insurers, including us, in purported class action litigation relating to claims-handling and other practices;
- social inflation trends, including higher and more frequent claims, more favorable judgments and legislated increases;
- medical developments that link health issues to particular causes, resulting in liability claims;
- claims relating to unanticipated consequences of current or new technologies, including cyber security related risks;
- claims relating to potentially changing climate conditions; and
- increased claims due to third party funding of litigation.

In some instances, these emerging issues may not become apparent for some time after we have issued the affected insurance policies. As a result, the full extent of liability under our insurance policies may not be known until many years after the policies are issued.

In addition, the potential passage of new legislation designed to expand the right to sue, to remove limitations on recovery, to extend the statutes of limitations or otherwise to repeal or weaken tort reforms could have an adverse impact on our business.

The effects of these and other unforeseen emerging claim and coverage issues are difficult to predict and could harm our business and materially and adversely affect our results of operations.

As a property casualty insurer, we face losses from natural and man-made catastrophes.

Property casualty insurers are subject to claims arising out of catastrophes that may have a significant effect on their results of operations, liquidity and financial condition. Catastrophe losses have had a significant impact on our results. For example, catastrophe losses net of reinsurance recoveries were $202 million in 2021 (including COVID-19 related losses), $340 million in 2020 (including COVID-19 related losses), and $90 million in 2019. Similarly, man-made catastrophes can also have a material impact on our financial results.

Catastrophes can be caused by various events, including hurricanes, windstorms, earthquakes, tsunamis, hailstorms, explosions, severe winter weather and fires, pandemics, as well as terrorist and other man-made activities, including drilling, mining and other industrial accidents, the bankruptcy of a major company, war or other military actions, social unrest,
cyber events or terrorist activities. The incidence and severity of catastrophes are inherently unpredictable, and longer-term natural catastrophe trends may be changing due to climate change causing increased variability and unpredictability. The extent of losses from a catastrophe is a function of both the total amount of insured exposure in the area affected by the event and the severity of the event. Some catastrophes are restricted to small geographic areas; however, hurricanes, earthquakes, tsunamis and other disasters may produce significant damage in large, heavily populated areas. Catastrophes can cause losses in a variety of our property and casualty lines, and most of our past catastrophe-related claims have resulted from severe storms. Seasonal weather variations or the impact of climate change may affect the severity and frequency of our losses. Insurance companies are not permitted to reserve for a catastrophe until it has occurred. It is therefore possible that a catastrophic event or multiple catastrophic events could produce significant losses and have a material adverse effect on our results of operations and financial condition.

The COVID-19 pandemic has previously materially and adversely affected our results of operations, and may further materially and adversely affect our results of operations, financial position and liquidity.

The ongoing COVID-19 pandemic, including the related impact on the U.S. and global economies, had materially and adversely affected our results of operations. We expect the pandemic and its impact on our business may continue, and potentially even worsen, but we cannot predict the magnitude or duration of its continued impact, particularly given the great uncertainties associated with COVID-19, including regarding the reopening of the U.S. and global economies and the recovery from its devastating economic and other effects. The ultimate impact of COVID-19 on our results of operations, financial position and liquidity is not yet known, and likely will not be known for some time, but includes the following:

Adverse Legislative and Regulatory Action. Legislative and regulatory initiatives taken or which may be taken in response to COVID-19 may adversely affect us, particularly in our workers' compensation and property coverages businesses. For example, our business may be subject to, certain initiatives, including, but not limited to: legislative and regulatory action that seeks to retroactively mandate coverage for losses that our insurance policies would not otherwise cover and which were not priced to cover; legislative and regulatory action providing for shifting presumptions with respect to the burdens of proof for "essential" workers on workers' compensation coverages and varying definitions of "essential" workers; actions prohibiting us from cancelling insurance policies in accordance with our policy terms or non-renewing policies at their natural expiration; and/or orders to provide premium refunds, grant extended grace periods for premium payments, and provide extended time to pay past due premiums. Any such action would likely increase both our underwriting losses and our expenses and any legal challenges to any such action could take years to resolve.

Claim Losses Related to COVID-19 May Exceed Reserves. As of December 31, 2021, we recorded approximately $274 million for COVID-19-related losses. Of the $274 million of COVID-19-related losses, $239 million are reported losses and $35 million is booked as IBNR. Our reserves do not represent an exact calculation of liability, but represent an estimate of what management expects the ultimate settlement and claims administration will cost for claims that have occurred, whether known or unknown. Given the great uncertainties associated with COVID-19 and its impact and the limited information upon which our current assumptions and assessments have been made, our reserves and the underlying estimated level of claim losses and costs arising from COVID-19 may materially change.

Claim Losses and Adjustment Expenses May Increase. As the effects of COVID-19 on industry practices and economic, legal, judicial, social and other environmental conditions occur, unexpected and unintended issues related to claims and coverages may emerge. These issues may adversely affect our business by extending coverage beyond our underwriting intent (including in the area of property coverages where physical damage requirements and communicable disease exclusions are currently being challenged) or by increasing the number and/or size of claims, each of which could adversely impact our results.

Reinsurance. We purchase reinsurance in order to transfer part of the risk that we have assumed by writing insurance policies to reinsurance companies in exchange for part of the premium we receive in connection with assuming such risk. Although reinsurance makes the reinsurer contractually liable to us to the extent the risk is transferred to the reinsurer, it does not relieve us of our liability to our policyholders. There may be uncertainty surrounding the availability of reinsurance coverage for COVID-19-related losses as our reinsurers may dispute the applicability of reinsurance to such losses (including the application of reinsurance reinstatements) and, as a result, our reinsurers may refuse to pay reinsurance recoverables related thereto or they may not pay them on a timely basis. In addition, we may be unable to renew our current reinsurance coverages or obtain appropriate new reinsurance covers with respect to certain exposures under our policies, including COVID-19-related exposures, and therefore our net exposures could increase, or if we are unwilling to bear such increase in net exposure, we may reduce our level of underwriting commitments.

Premium Volumes May Be Negatively Impacted. The demand for insurance is significantly influenced by general economic conditions. Consequently, reduced economic activity relating to the COVID-19 pandemic is likely to decrease demand for our insurance products and services and negatively impact our premium volumes (and, in certain cases, may result in return of premiums due to a decrease in exposures). This may continue for an indefinite period, with the magnitude of the impact impossible to predict. In addition, as we continue to evaluate the effects of COVID-19 on the insurance coverages we currently offer, our appetite for providing certain coverages in various jurisdictions may change which could further negatively impact our premium volumes. Any such reduction in our premiums would likely cause our expense ratio to rise.

Investments. Further disruptions in global financial markets due to the continuing impact of COVID-19 could cause us to incur additional unrealized and/or realized investment losses (beyond the investment fund losses incurred in prior years), including impairments in our fixed maturity portfolio and other investments. In addition, the economic uncertainty resulting from COVID-19 may result in a further decline in interest rates, which may negatively impact our net investment income from future investment activity.

Credit Risk. As credit risk is generally a function of the economy, we face greater credit risk from our policyholders, independent agents and brokers in connection with the payment and remittance of premiums as a result of the economic conditions caused by COVID-19. Similarly, our credit risk related to the reimbursement of deductibles from policyholders and in connection with reinsurance recoverables has increased.

Operational Disruptions and Costs. Our operations could be disrupted if key members of our senior management or a significant percentage of our workforce or the workforce of our agents, brokers, suppliers or other third party service providers are unable to continue to work because of illness, government directives or otherwise. In addition, our agents, brokers, suppliers and other third party service providers, which we rely on for key aspects of our operations, are subject to risks and uncertainties related to the COVID-19 pandemic, which may interfere with their ability to fulfill their respective commitments and responsibilities to us in a timely manner and in accordance with the agreed-upon terms. In response to the COVID-19 pandemic, we have in place remote working policies which have resulted in disruptions to our business routines, heightened risk to cybersecurity attacks and data security incidents and a greater dependency on internet and telecommunication access and capabilities.

Changing climate conditions may alter the frequency and increase the severity of catastrophic events and thereby adversely affect our financial condition and results.

Over the past several years, changing weather patterns and climatic conditions, such as global warming, appear to have contributed to the unpredictability, frequency and severity of natural disasters and created additional uncertainty as to future trends and exposures. There is a growing scientific consensus that global warming and other climate change are altering the frequency, severity and/or peril characteristics of catastrophic weather events, such as hurricanes, windstorms, floods and other natural disasters. Such changes make it more difficult for us to predict and model catastrophic events, reducing our ability to accurately price our exposure to such events and mitigate our risks. Any increase in the frequency or severity of natural disasters may adversely affect our financial condition and results.

We, as a primary insurer, may have significant exposure for terrorist acts.

To the extent an act of terrorism, whether a domestic or foreign act, is certified by the Secretary of Treasury, we may be covered under the Terrorism Risk Insurance Program Reauthorization Act of 2019 (“TRIPRA”), for up to 80% of our covered losses for certain property/casualty lines of insurance. However, any such coverage would be subject to a mandatory deductible based on 20% of earned premium for the prior year for the covered lines of commercial property and casualty insurance. Based on our 2021 earned premiums, our aggregate deductible under TRIPRA during 2022 is approximately $1,135 million. In addition, the coverage provided under TRIPRA does not apply to reinsurance that we write. To the extent that our reinsurers have excluded coverage for certain terrorist acts or have priced this coverage at rates that make purchasing such coverage economically infeasible, we may not have reinsurance protection and could be exposed to potential losses as a result of any acts of terrorism.

We are subject to extensive governmental regulation, which increases our costs and could restrict the conduct of our business.

We are subject to extensive governmental regulation and supervision in both the United States and foreign jurisdictions. Most insurance regulations are designed to protect the interests of policyholders rather than stockholders and other investors. This system of regulation, generally administered in the United States by a department of insurance in each state in which we do business, relates to, among other things:

- standards of solvency, including risk-based capital measurements;
- restrictions on the nature, quality and concentration of investments;
- limitations on the amount of dividends, tax distributions, intercompany loans and other payments that can be made without prior regulatory approval;
- requirements pertaining to certain methods of accounting;
- evaluating enterprise risk to an insurer;
- rate and form regulation pertaining to certain of our insurance businesses;
- potential assessments for the provision of funds necessary for the settlement of covered claims under certain policies provided by impaired, insolvent or failed insurance companies; and
- involvement in the payment or adjudication of catastrophe or other claims beyond the terms of the policies.

State insurance departments conduct periodic examinations of the affairs of insurance companies and require the filing of annual and other reports relating to the financial condition of insurance companies, holding company issues and other matters. Our Insurance business internationally is also generally subject to a similar regulatory scheme in each of the jurisdictions where we conduct operations outside the United States.

Federal financial services modernization legislation and legislative and regulatory initiatives taken or which may be taken in response to conditions in the financial markets, global insurance supervision and other factors may lead to additional federal regulation of the insurance industry in the coming years.

The Dodd-Frank Act effected sweeping changes to financial services regulation in the United States. The Dodd-Frank Act established the Financial Stability Oversight Council (“FSOC”), which is authorized to recommend that certain systemically significant non-bank financial companies, including insurance companies, be regulated by the Board of Governors of the Federal Reserve. The Dodd-Frank Act also established a Federal Insurance Office (“FIO”) which is authorized to study, monitor and report to Congress on the U.S. insurance industry and the significance of global reinsurance to the U.S. insurance market. The FIO also can recommend to the FSOC that it designate an insurer as an entity posing risks to the United States financial stability in the event of the insurer's material financial distress or failure. Our business could be affected by changes, whether as a result of potential changes to the Dodd-Frank Act, to the U.S. system of insurance regulation or our designation or the designation of insurers or reinsurers with which we do business as systemically significant non-bank financial companies.

The topic of climate risk has come under increased scrutiny by insurance regulators. In September 2020, the NYDFS issued a circular letter to New York domestic and foreign authorized insurance companies, which impacts our insurance subsidiaries licensed in New York. The circular letter states that the NYDFS expects insurers to integrate financial risks related to climate change into their governance frameworks, risk management processes and business strategies. The NYDFS also adopted an amendment to the regulation that governs enterprise risk management, effective as of August 13, 2021, that requires an insurance group to include certain additional risks, such as climate change risk, in its enterprise risk management function. In addition, the FIO has been instructed by President Biden’s Executive Order on Climate-Related Financial Risk, dated May 20, 2021, to seek public comment on a series of questions that “will help inform FIO’s assessment of climate-related financial risks for the insurance sector.” The FIO’s Request for Information notes that it “plans to … take a leadership role in analyzing how the insurance sector may help mitigate climate-related risks [and to that end, it] will engage with the insurance sector to assess how the sector may help achieve national climate-related goals, including mitigation, adaptation and transition to a lower carbon economy.” These measures may subject us to increased oversight at the state and federal level.

State regulation is the primary form of regulation of insurance and reinsurance in the United States, although Congress has considered various proposals regarding federal regulation of insurance, in addition to the changes brought about by the Dodd-Frank Act, such as proposals for the creation of an optional federal charter for insurance companies. We may be subject to potentially increased federal oversight as a financial institution. In addition, the new U.S. administration and the volatile political environment may increase the chance of other federal legislative and regulatory changes that could affect us in ways we cannot predict.

With respect to international measures, Solvency II, the EU regime concerning the capital adequacy, risk management and regulatory reporting for insurers and reinsurers may affect our insurance businesses. Implementation of Solvency II in EU member states occurred on January 1, 2016, and as the Solvency II regime evolves over time, we may be required to utilize a significant amount of resources to ensure compliance. In particular, the European Commission has undertaken a review of Solvency II and on September 22, 2021, published a package of proposed legislative reforms for amending the existing regulatory framework. This proposed legislation is now being discussed by the European Parliament and the European Commission. In addition, despite the waiver of the Solvency II group capital requirements we received, Solvency II may have the effect of increasing the capital requirements of our EU domiciled insurers. Additionally, our capital requirements and compliance requirements may be adversely affected if the European Commission does not deem the insurance regulatory regimes of the jurisdictions outside the EU in which we have insurance or reinsurance companies domiciled to be “equivalent” to Solvency II.

Similarly, following the U.K.’s withdrawal from the EU, and the expiry of the transition period on December 31, 2020, our U.K. subsidiaries are now subject to a separate U.K. prudential regime, to which the same considerations will apply. The U.K.’s domestic prudential regime is currently identical to Solvency II, although the two regimes, and their respective requirements, may diverge over time. The U.K. has already declared that it considers the Solvency II regime as “equivalent” to its own. However, the EU is still determining whether to make “equivalency” declarations in respect of the U.K.’s prudential regime. It is also possible that any “equivalency” determinations made by either side could be withdrawn in the future, which would adversely affect our capital and compliance requirements.

If our compliance with Solvency II, the U.K.’s prudential regime or any other regulatory regime is challenged, we may be subject to monetary or other penalties. In addition, in order to ensure compliance with applicable regulatory requirements or as a result of any investigation, including remediation efforts, we could be required to incur significant expenses and undertake additional work, which in turn may divert resources from our business.

We may be unable to maintain all required licenses and approvals and our business may not fully comply with the wide variety of applicable laws and regulations or the relevant authority's interpretation of the laws and regulations. Also, some regulatory authorities have relatively broad discretion to grant, renew or revoke licenses and approvals. If we do not have the requisite licenses and approvals or do not comply with applicable regulatory requirements, the insurance regulatory authorities could preclude or temporarily suspend us from carrying on some or all of our activities or monetarily penalize us. Also, changes in the level of regulation of the insurance industry, whether federal, state or foreign, or changes in laws or regulations themselves or interpretations by regulatory authorities, may further restrict the conduct of our business.

Risks Relating to Our Business

Our expanding international operations expose us to increased investment, political, legal/regulatory, and economic risks, including foreign currency and credit risk.

Our expanding international operations in the United Kingdom, Continental Europe, South America, Canada, Mexico, Scandinavia, the Asia-Pacific region, South Africa and Australia expose us to increased investment, political, legal/regulatory, and economic risks, including foreign currency and credit risk. Changes in the value of the U.S. dollar relative to other currencies could have an adverse effect on our results of operations and financial condition.

Our investments in non-U.S.-denominated assets are subject to fluctuations in non-U.S. securities and currency markets, and those markets can be volatile. Non-U.S. currency fluctuations also affect the value of any dividends paid by our non-U.S. subsidiaries to their parent companies in the U.S.

We face additional risks as a result of our international operations which could have an adverse effect on our results of operations and financial condition including: burdens and costs of compliance with a variety of foreign laws and regulations and the associated risk and costs of non-compliance; exposure to undeveloped or evolving legal systems, which may result in unpredictable or inconsistent application of laws and regulations; exposure to commercial, political, legal or regulatory corruption; political, economic or other instability in countries in which we conduct business, including possible terrorist acts; the imposition of tariffs, trade barriers or other protectionist laws or business practices that favor local competition, increased costs and adverse effects on our business; changes to visa or immigration policies; diminished ability to enforce our contractual rights; potential increased risk of data breaches; differences in cultural environments; sociopolitical instability; social, political or economic instability resulting from climate change; changes in regulatory requirements, including changes in regulatory treatment of certain products or services; exposure to local economic conditions and its impact on our clients' performance and creditworthiness; and restrictions on the repatriation of non-U.S. investments and earnings.

The United Kingdom leaving the EU could adversely affect our business.

In accordance with the withdrawal agreement implementing the U.K. leaving the EU ("Brexit"), the U.K. formally left the EU on January 31, 2020. The agreement provided for a transitional period, which ended on December 31, 2020, during which time the U.K. continued to enjoy the same rights and obligations as it had as a member state, though without participating in the EU institutions. During the transitional period, the U.K. and the EU negotiated a long-term agreement covering, among other things, the terms of trade between them, culminating in the execution of the entry into a "Trade and Cooperation Agreement".

However, notwithstanding the finalization of the Trade and Cooperation Agreement between the U.K. and the EU, uncertainty remains regarding the impact of Brexit, including the implementation and enforcement of terms and conditions of the agreement, and the U.K.'s future relationship with the EU. Brexit could also lead to legal uncertainty and differing laws and regulations between the U.K. and the EU. Specifically in relation to financial services, the Trade and Cooperation Agreement
did not provide for EU and U.K. regulated firms to be able to access each other's markets via passporting rights. Both EU and U.K. insurers therefore lost their respective passporting rights from January 1, 2021. It is also unclear whether the EU will make "equivalence" determinations in respect of relevant aspects of U.K. financial services regulation. As a result, the U.K. branch of our Liechtenstein subsidiary has applied to be directly authorized to perform insurance business in the U.K., which application remains under consideration.

More generally, barriers to trade resulting from Brexit could affect the attractiveness of the U.K. and impact our U.K. business. We also face risks associated with the potential uncertainty and consequences related to Brexit, including with respect to volatility in financial markets, exchange rates and interest rates. These uncertainties could increase the volatility of, or reduce, our investment results in particular periods or over time. Brexit could adversely affect European or worldwide political, regulatory, economic or market conditions and could contribute to instability in political institutions and regulatory agencies.

Any of these potential effects, and others we cannot anticipate, could adversely affect our results of operations or financial condition.

We may be unable to attract and retain key personnel and qualified employees.

We depend on our ability to attract and retain key personnel, including our President and CEO, Executive Chairman, senior executive officers, presidents of our businesses, experienced underwriters and other skilled employees who are knowledgeable about our business. If the quality of our underwriting team and other personnel decreases, we may be unable to maintain our current competitive position in the specialized markets in which we operate, and be unable to expand our operations into new products and markets.

We cannot guarantee that our reinsurers will pay in a timely fashion, if at all, and, as a result, we could experience losses.

We purchase reinsurance by transferring part of the risk that we have assumed, known as ceding, to a reinsurance company in exchange for part of the premium we receive in connection with the risk. Although reinsurance makes the reinsurer contractually liable to us to the extent the risk is transferred or ceded to the reinsurer, it does not relieve us, the reinsured, of our liability to our policyholders. Our reinsurers may not pay the reinsurance recoverables that they owe to us or they may not pay such recoverables on a timely basis. This failure to pay or failure to pay on a timely basis may be due to factors such as whether reinsurers, their affiliates or certain indemnitors have the financial capacity and willingness to make payments under the terms of a reinsurance treaty or contract. Accordingly, we bear credit risk with respect to our reinsurers, and if our reinsurers fail to pay us, our financial results would be adversely affected. Underwriting results and investment returns of some of our reinsurers may affect their future ability to pay claims. As of December 31, 2021, the amount due from our reinsurers was approximately $2,923 million, including amounts due from state funds and industry pools where it was intended that we would bear no risk. Certain of these amounts are secured by letters of credit or by funds held in trust on our behalf.

We are subject to credit risk relating to our policyholders, independent agents and brokers.

In addition to exposure to credit risk related to our reinsurance recoverables and investment portfolio, we are exposed to credit risk in several other areas of our business, including credit risk relating to policyholders, independent agents and brokers. For example our policyholders, independent agents or brokers may not pay a part of or the full amount of premiums owed to us or our brokers or other third party claim administrators may not deliver amounts owed on claims under our insurance and reinsurance contracts for which we have provided funds.

As credit risk is generally a function of the economy, we face a greater credit risk in an economic downturn. While we attempt to manage credit risks through underwriting guidelines, collateral requirements and other oversight mechanisms, our efforts may not be successful. For example, to reduce such credit risk, we require certain third parties to post collateral for some or all of their obligations to us. In cases where we receive pledged securities and the applicable counterparty is unable to honor its obligations, we may be exposed to credit risk on the securities pledged and/or the risk that our access to that collateral may be stayed as a result of bankruptcy. In cases where we receive letters of credit from banks as collateral and one of our counterparties is unable to honor its obligations, we are exposed to the credit risk of the banks that issued the letters of credit.

We are rated by A.M. Best, Standard & Poor's, Moody's, and Fitch, and a decline in these ratings could affect our standing in the insurance industry and cause our sales and earnings to decrease.

Ratings have become an increasingly important factor in establishing the competitive position of insurance companies. Certain of our insurance company subsidiaries are rated by A.M. Best, Standard & Poor's, Moody's and Fitch. Our ratings are subject to periodic review, and we cannot assure you that we will be able to retain our current or any future ratings, especially given that rating agencies may change their criteria or increase capital requirements for various rating levels. For instance, Standard & Poor's has recently proposed changes to its rating model which could impact our rating depending on final changes that are implemented.

If our ratings are reduced from their current levels by A.M. Best, Standard & Poor's, Moody's or Fitch, our competitive position in the insurance industry could suffer and it would be more difficult for us to market our products. A ratings downgrade could also adversely limit our access to capital markets, which may increase the cost of debt. A significant downgrade could result in a substantial loss of business as policyholders move to other companies with higher financial strength ratings.

If market conditions cause reinsurance to be more costly or unavailable, we may be required to bear increased risks or reduce the level of our underwriting commitments.

As part of our overall risk and capacity management strategy, we purchase reinsurance for certain amounts of risk underwritten by our insurance company subsidiaries, especially catastrophe risks and those risks with relatively high policy limits. We also purchase reinsurance on risks underwritten by others which we reinsure. Market conditions beyond our control determine the availability and cost of the reinsurance protection we seek to purchase, which may affect the level of our business and profitability. Our reinsurance contracts are generally subject to annual renewal, and we may be unable to maintain our current reinsurance contracts or to obtain other reinsurance contracts in adequate amounts and at favorable rates. In addition, we may be unable to obtain reinsurance on terms acceptable to us relating to certain lines of business that we intend to begin writing. If we are unable to renew our expiring contracts or to obtain new reinsurance contracts, either our net exposures would increase or, if we are unwilling to bear an increase in net exposures, we would have to reduce the level of our underwriting commitments, especially catastrophe exposed risks.

Depending on conditions in the financial markets and the general economy, we may be unable to raise debt or equity capital if needed.

If conditions in the financial markets and the general economy are unfavorable, which may result from disruptions, uncertainty or volatility in the capital and credit markets, we may be unable to access debt or equity capital on acceptable terms if needed, which could have a negative impact on our ability to invest in our insurance company subsidiaries and/or to take advantage of opportunities to expand our business, such as possible acquisitions and the creation of new ventures, and inhibit our ability to refinance our existing indebtedness if we desire to do so, on terms acceptable to us.

We may not find suitable acquisition candidates or new insurance ventures and even if we do, we may not successfully integrate any such acquired companies or successfully invest in such ventures.

As part of our present strategy, we continue to evaluate possible acquisition transactions and the start-up of complementary businesses on an ongoing basis, and at any given time we may be engaged in discussions with respect to possible acquisitions and new ventures. We cannot assure you that we will be able to identify suitable acquisition targets or insurance ventures, that such transactions will be financed and completed on acceptable terms or that our future acquisitions or start-up ventures will be successful. Our financial results could be adversely affected by acquired businesses not performing as projected, unforeseen liabilities, routine and unanticipated transaction-related charges, diversion of management time and resources to acquisition integration challenges or growth strategies, loss of key employees, challenges in integrating information technology systems of acquired companies with our own, amortization of expenses related to intangibles, charges for impairment of long-term assets or goodwill and indemnification. The process of integrating any companies we do acquire or investing in new ventures may have a material adverse effect on our results of operations and financial condition.

If we experience difficulties with our information technology, telecommunications or other computer systems, our ability to conduct our business could be negatively or severely impacted.

Our business is highly dependent upon our employees' ability to perform necessary business functions in an efficient and uninterrupted fashion. A shut-down of, or inability to access, one or more of our facilities, a power outage or a failure of one or more of our information technology, telecommunications or other computer systems could significantly impair our employees' ability to perform such functions on a timely basis. In the event of a disaster such as a natural catastrophe, terrorist attack or industrial accident, or the infection of our systems by a malicious computer virus, our systems could be inaccessible for an extended period of time. In addition, because our information technology and telecommunications systems interface with and depend on third-party systems, we could experience service denials or failures of controls if demand for our service exceeds capacity or a third-party system fails or experiences an interruption. If our business continuity plans or system security does not sufficiently address such a business interruption, system failure or service denial, our ability to write and process new and renewal business, provide customer service, pay claims in a timely manner or perform other necessary business functions could be significantly impaired and our business could be harmed.

Failure to maintain the security of our networks and confidential data may expose us to liability.

Although we have taken steps intended to protect our data and information technology systems and mitigate the risk of harm caused by cybersecurity incidents or breaches, no safeguards are perfect and any failure of these safeguards could cause a substantial disruption of our business operations, which could result in service interruptions, data security compromises, regulatory action, and other similar operational and legal issues, as well as substantial remediation and other costs. While, to our knowledge, we have not recently experienced any material security incidents, we are constantly managing an influx of attempts and efforts to infiltrate and compromise our systems and data. Our operations rely on the secure processing, storage and transmission of confidential and other information in our computer systems and networks. Computer viruses, hackers, employee misconduct and other external hazards could expose our data systems to security breaches. Our electronic transmission of personal, confidential and proprietary information to third parties with whom we have business relationships and our outsourcing of certain technology and business process functions to third parties may expose us to enhanced risk related to data security. While we attempt to develop secure data transmission capabilities with these third-party vendors and others with whom we do business, our vendors and third parties could still suffer data breaches that could result in the exposure of sensitive data and the infiltration of our computer systems. Our failure to effectively protect sensitive personal and/or proprietary information, whether owing to breaches of our own systems or those of our vendors, could result in significant monetary and reputational damages, material adverse effects to our financial condition, costly litigation, or other regulatory enforcement actions. These increased risks, and expanding regulatory requirements regarding data security, including required compliance with the GDPR, CCPA, CPRA and additional state-specific privacy statutes and regulations, could expose us to data loss, monetary and reputational damages and significant increases in compliance costs. As a result, our ability to conduct our business could be materially and adversely affected.

We could be adversely affected if our controls to ensure compliance with guidelines, policies and legal and regulatory standards are not effective.

Our business is highly dependent on our ability to engage on a daily basis in a large number of insurance underwriting, claim processing and investment activities, many of which are highly complex. These activities often are subject to internal guidelines and policies, as well as legal and regulatory standards, including those related to privacy, anti-corruption, anti-bribery and global finance and insurance matters. Our continued expansion into new international markets has brought about additional requirements. A control system, no matter how well designed and operated, can provide only reasonable assurance that the control system's objectives will be met. If our controls are not effective, it could lead to financial loss, unanticipated risk exposure (including underwriting, credit and investment risk) or damage to our reputation.

We could be adversely affected by recent and future changes in U.S. Federal income tax laws.

Tax legislation commonly referred to as the Tax Cuts and Jobs Act, which was signed into law on December 22, 2017, fundamentally overhauled the U.S. tax system by, among other significant changes, reducing the U.S. corporate income tax rate to 21%. In the context of the taxation of U.S. property/casualty insurance companies such as the Company, the Act also modifies the loss reserve discounting rules and the proration rules that apply to reduce reserve deductions to reflect the lower corporate income tax rate. It is possible that other legislation could be introduced and enacted by the current Congress or future Congresses that could have an adverse impact on us. New regulations or pronouncements interpreting or clarifying provisions of the Act may be forthcoming. We cannot predict if, when or in what form such regulations or pronouncements may be provided, whether such guidance will have a retroactive effect or their potential impact on us.

Limitations in risk management and loss limitation methods may adversely impact our business.

We seek to effectively manage risk and limit our losses in a variety of ways including through effective underwriting, tailoring policy terms, and the use of reinsurance. However, there are certain limitations in these and similar tactics and as a result, loss levels may be higher than modeled or otherwise expected, which could have a material adverse effect on our business.

Increased scrutiny on social responsibility and the efforts we take to implement related measures, or the failure to take such measures, may adversely impact our business.

There is increased scrutiny from regulators and investors on the measures companies take to be socially responsible. Although we have made efforts to be responsible in this manner, for example through our commitment to fostering a unifying culture and encouraging innovation across our operating units, these types of pressures may nonetheless present challenges and have an adverse impact on our business. In addition, we may be subject to negative publicity based on a failure or perceived failure to achieve various social responsibility initiatives and goals relating to diversity, equity and inclusion, and commitment to long-term sustainability we may announce from time to time, or based on an actual or perceived increase in related risks as a result of our or our industry’s business activities.

Risks Relating to Our Investments

A significant amount of our assets is invested in fixed maturity securities and is subject to market fluctuations.

Our investment portfolio consists substantially of fixed maturity securities. As of December 31, 2021, our investment in fixed maturity securities was approximately $16.6 billion, or 69.9% of our total investment portfolio, including cash and cash equivalents. As of that date, our portfolio of fixed maturity securities consisted of the following types of securities: U.S. Government securities (5.2%); state and municipal securities (20.3%); corporate securities (33.7%); asset-backed securities (27.0%); mortgage-backed securities (6.5%) and foreign government (7.3%).

The fair value of these assets and the investment income from these assets fluctuate depending on general economic and market conditions. The fair value of fixed maturity securities generally decreases as interest rates rise. If significant inflation or an increase in interest rates were to occur, the fair value of our fixed maturity securities would be negatively impacted. Conversely, if interest rates decline, investment income earned from future investments in fixed maturity securities will be lower. Some fixed maturity securities, such as mortgage-backed and other asset-backed securities, also carry prepayment risk as a result of interest rate fluctuations. Additionally, given the low interest rate environment, we may not be able to successfully reinvest the proceeds from maturing securities at yields commensurate with our target performance goals.

The value of investments in fixed maturity securities is subject to impairment as a result of deterioration in the credit worthiness of the issuer, default by the issuer (including states and municipalities) in the performance of its obligations in respect of the securities and/or increases in market interest rates. To a large degree, the credit risk we face is a function of the economy; accordingly, we face a greater risk in an economic downturn or recession. During periods of market disruption, it may be difficult to value certain of our securities, particularly if trading becomes less frequent and/or market data becomes less observable. There may be certain asset classes that were in active markets with significant observable data that become illiquid due to the then current financial environment. In such cases, more securities may require additional subjectivity and management judgment.

Although the historical rates of default on state and municipal securities have been relatively low, our state and municipal fixed maturity securities could be subject to a higher risk of default or impairment due to declining municipal tax bases and revenue. Many states and municipalities operate under deficits or projected deficits, the severity and duration of which could have an adverse impact on both the valuation of our state and municipal fixed maturity securities and the issuer's ability to perform its obligations thereunder. Additionally, our investments are subject to losses as a result of a general decrease in commercial and economic activity for an industry sector in which we invest, as well as risks inherent in particular securities.

Although we attempt to manage these risks through the use of investment guidelines and other oversight mechanisms and by diversifying our portfolio and emphasizing preservation of principal, our efforts may not be successful. Impairments, defaults and/or rate increases could reduce our net investment income and net realized investment gains or result in investment losses. Investment returns are currently, and will likely continue to remain, under pressure due to actions by the Federal Reserve, economic uncertainty, more generally, and the shape of the yield curve. As a result, our exposure to the risks described above could materially and adversely affect our results of operations, liquidity and financial condition.

We have invested a portion of our assets in equity securities, merger arbitrage securities, investment funds, private equity, loans and real estate related assets, which are subject to significant volatility and may decline in value.

We invest a portion of our investment portfolio in equity securities, merger arbitrage securities, investment funds, private equity, loans and real estate related assets. At December 31, 2021, our investment in these assets was approximately $5.6 billion, or 23.5%, of our investment portfolio, including cash and cash equivalents.

Merger and arbitrage trading securities were $1.2 billion, or 5.0% of our investment portfolio, including cash and cash equivalents at December 31, 2021. Merger arbitrage involves investing in the securities of publicly held companies that are the targets in announced tender offers and mergers. Merger arbitrage differs from other types of investments in its focus on transactions and events believed likely to bring about a change in value over a relatively short time period, usually four months or less. Our merger arbitrage positions are exposed to the risk associated with the completion of announced deals, which are subject to regulatory as well as political and other risks.

Real estate related investments, including directly owned, investment funds and loans receivable, were $2.2 billion, or 9.3% of our investment portfolio, including cash and cash equivalents, at December 31, 2021. We also invest in real estate, financial services, energy, transportation and other investment funds. The values of these investments are subject to fluctuation based on changes in the economy and interest rates in general and the related asset valuations in particular. In addition, our investments in real estate related assets and other alternative investments are less liquid than our other investments.

These investments are subject to significant volatility as a result of the conditions in the financial and commodity markets and the global economy.

Risks Relating to Limitations on Dividends from Subsidiaries and Anti-Takeover Provisions

We are an insurance holding company and, therefore, may not be able to receive dividends in needed amounts.

As an insurance holding company, our principal assets are the shares of capital stock of our insurance company subsidiaries. We have to rely on dividends from our insurance company subsidiaries to meet our obligations for paying principal and interest on outstanding debt obligations, paying dividends to stockholders and repurchasing our shares and paying corporate expenses. The payment of dividends by our insurance company subsidiaries is subject to regulatory restrictions and competitive pressures on maintaining financial strength ratings and will depend on the surplus and future earnings of these subsidiaries. During 2022, the maximum amount of dividends that can be paid without regulatory approval is approximately $966 million. Future regulatory actions could further restrict our insurance subsidiaries' ability to pay us dividends. As a result, in the future we may not be able to receive dividends from these subsidiaries at times and in amounts necessary to meet our obligations, pay dividends or repurchase shares.

Laws and regulations of the jurisdictions in which we conduct business could delay, deter or prevent an attempt to acquire control of us that stockholders might consider to be desirable, and may restrict a stockholder's ability to purchase our common stock.

Generally, United States insurance holding company laws require that, before a person can acquire control of an insurance company, prior written approval must be obtained from the insurance regulatory authorities in the state in which that insurance company is domiciled. Pursuant to applicable laws and regulations, “control” over an insurer is generally presumed to exist if any person, directly or indirectly, owns, controls, holds the power to vote, or holds proxies representing 10% or more of the voting securities of that insurer or any parent company of such insurer. Indirect ownership includes ownership of the shares of our common stock. Thus, the insurance regulatory authorities of the states in which our insurance subsidiaries are domiciled are likely to apply these restrictions on acquisition of control to any proposed acquisition of our common stock. Some states require a person seeking to acquire control of an insurer licensed but not domiciled in that state to make a filing prior to completing an acquisition if the acquirer and its affiliates, on the one hand, and the target insurer and its affiliates, on the other hand, have specified market shares in the same lines of insurance in that state. Additionally, many foreign jurisdictions where we conduct business impose similar restrictions and requirements.

These provisions can also lead to the imposition of conditions on an acquisition that could delay or prevent its consummation. These laws may discourage potential acquisition proposals and may delay, deter or prevent a change in control of us through transactions, and in particular unsolicited transactions, that some or all of our stockholders might consider to be desirable.

Certain provisions in our organizational documents may have the effect of hindering, delaying or preventing third party takeovers and thus may prevent our stockholders from receiving premium prices for their shares in an unsolicited takeover or make it more difficult for third parties to replace our current management.

Provisions of our Restated Certificate of Incorporation and By-Laws, as well as state insurance statutes, may hinder, delay or prevent unsolicited acquisitions or changes of our control. These provisions may also have the effect of making it more difficult for third parties to cause the replacement of our current management without the concurrence of our board of directors.

These provisions include:

- our classified board of directors and the ability of our board to increase its size and to appoint directors to fill newly created directorships;
- the requirement that 80% of our stockholders must approve mergers and other transactions between us and the holder of 5% or more of our shares, unless the transaction was approved by our board of directors prior to such holder's acquisition of 5% of our shares; and
- the need for advance notice in order to raise business or make nominations at stockholders' meetings.

These provisions may discourage potential acquisition proposals and may delay, deter or prevent a change in control of us through transactions, and in particular unsolicited transactions, that some or all of our stockholders might consider to be desirable.

ITEM 1B. UNRESOLVED STAFF COMMENTS

There are no unresolved written comments that were received from the SEC staff 180 days or more before the end of our fiscal year relating to our periodic or current reports under the Securities Exchange Act of 1934.

ITEM 2. PROPERTIES

W. R. Berkley and its subsidiaries own or lease office buildings or office space suitable to conduct their operations. At December 31, 2021, the Company had aggregate office space of 4,276,456 square feet, of which 1,105,205 were owned and 3,171,251 were leased.

Rental expense for the Company's operations was approximately $44,051,000, $44,291,000 and $44,107,000 for 2021, 2020 and 2019, respectively. Future minimum lease payments, without provision for sublease income, are $44,962,000 in 2022, $43,674,000 in 2023 and $155,277,000 thereafter.

ITEM 3. LEGAL PROCEEDINGS

The Company's subsidiaries are subject to disputes, including litigation and arbitration, arising in the ordinary course of their insurance and reinsurance businesses. The Company's estimates of the costs of settling such matters are reflected in its aggregate reserves for losses and loss expenses, and the Company does not believe that the ultimate outcome of such matters will have a material adverse effect on its financial condition or results of operations.

ITEM 4. MINE SAFETY DISCLOSURES

Not applicable.

PART II

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

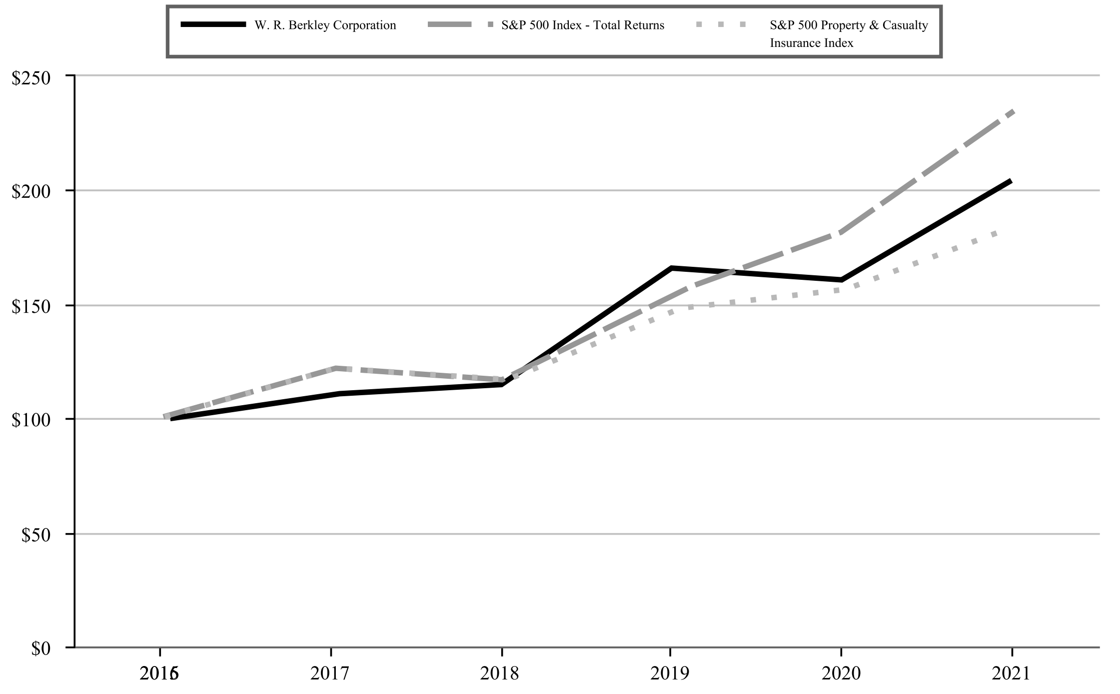
In 2021, the Board declared regular quarterly cash dividends of $0.12 per share in the first quarter, and $0.13 per share in each of the remaining three quarters, and special dividends of $0.50 per share in the second quarter and $1.00 per share in the fourth quarter. Subject to availability, the Board currently expects to continue such regular quarterly cash dividends.

The approximate number of record holders of the common stock on February 17, 2022 was 302.

The chart below shows a comparison of 5 year cumulative total return.

Comparison of 5 Year Cumulative Total Return

Assumes initial investment of $100 on January 1, 2016, with dividends reinvested.



The S&P 500® Property and Casualty Insurance Index consists of Allstate Corporation, Chubb, Ltd., Cincinnati Financial Corporation, Progressive Corporation, The Travelers Companies, Inc., and W. R. Berkley Corporation (added Dec. 2019).

		2016	**2017**	**2018**	**2019**	**2020**	**2021**
W. R. Berkley Corporation	Cum $	100.00	110.18	115.26	165.78	160.56	204.45
S&P 500 Index - Total Returns	Cum $	100.00	121.83	116.48	153.15	181.30	233.29
S&P 500 Property and Casualty Insurance Index	Cum $	100.00	122.39	116.64	146.82	156.12	183.45

Set forth below is a summary of the shares repurchased by the Company during the fourth quarter of 2021 and the remaining number of shares authorized for purchase by the Company during such period.

	Total Number of Shares Purchased	**Average Price Paid per Share**	**Total Number of Shares Purchased as Part of Publicly Announced Plans or Programs**	**Maximum Number of Shares that may yet be Purchased Under the Plans or Programs**
October 2021	—	—	—	4,982,103
November 2021 (1)	—	—	—	10,000,000
December 2021	—	—	—	10,000,000

(1) The Company's repurchase authorization was increased to 10,000,000 shares on November 5, 2021.

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

Overview

W. R. Berkley Corporation is an insurance holding company that is among the largest commercial lines writers in the United States and operates worldwide in two segments of the property and casualty business: Insurance and Reinsurance & Monoline Excess. Our decentralized structure provides us with the flexibility to respond quickly and efficiently to local or specific market conditions and to pursue specialty business niches. It also allows us to be closer to our customers in order to better understand their individual needs and risk characteristics. While providing our business units with certain operating autonomy, our structure allows us to capitalize on the benefits of economies of scale through centralized capital, investment, reinsurance, enterprise risk management, and actuarial, financial and corporate legal staff support. The Company’s primary sources of revenues and earnings are its insurance operations and its investments.

An important part of our strategy is to form new businesses to capitalize on various opportunities. Over the years, the Company has formed numerous businesses that are focused on important parts of the economy in the U.S., including healthcare, cyber security, energy and agriculture, and on growing international markets, including the Asia-Pacific region, South America and Mexico.

The profitability of the Company’s insurance business is affected primarily by the adequacy of premium rates. The ultimate adequacy of premium rates is not known with certainty at the time an insurance policy is issued because premiums are determined before claims are reported. The ultimate adequacy of premium rates is affected mainly by the severity and frequency of claims, which are influenced by many factors, including natural and other disasters, regulatory measures and court decisions that define and change the extent of coverage and the effects of economic or social inflation on the amount of compensation for injuries or losses. General insurance prices are also influenced by available insurance capacity, i.e., the level of capital employed in the industry, and the industry’s willingness to deploy that capital.

The Company’s profitability is also affected by its investment income and investment gains. The Company’s invested assets are invested principally in fixed maturity securities. The return on fixed maturity securities is affected primarily by general interest rates, as well as the credit quality and duration of the securities. Returns available on fixed maturity investments have been at low levels for an extended period.

The Company also invests in equity securities, merger arbitrage securities, investment funds, private equity, loans and real estate related assets. The Company's investments in investment funds and its other alternative investments have experienced, and the Company expects to continue to experience, greater fluctuations in investment income. The Company's share of the earnings or losses from investment funds is generally reported on a one-quarter lag in order to facilitate the timely completion of the Company's consolidated financial statements.

On February 23, 2022, the Company announced that it has entered into an agreement for the sale of a real estate investment consisting of an office building located at 52 Lime Street, London, U.K. (known as “The Scalpel”) for £718 million, subject to agreed upon adjustments. The transaction is scheduled to close on March 7, 2022. The Company estimates that it will realize a pretax gain of more than $300 million in the first quarter of 2022, subject to adjustment for final transaction expenses and certain items, including the impact of the foreign exchange rate at the date of the close.

The COVID-19 pandemic, including the related impact on the U.S. and global economies, has materially and adversely affected our results of operations. For the year ended December 31, 2021, the Company recorded approximately $58 million for current accident year COVID-19-related losses, net of reinsurance. At the same time, COVID-19 has led to reduced loss frequency in certain lines of business (which has begun to return to pre-pandemic levels as many economies and legal systems have reopened as a result of higher levels of vaccination). The ultimate impact of COVID-19 on the economy and the Company’s results of operations, financial position and liquidity is not within the Company’s control and remains unclear due to, among other factors, uncertainty in connection with its claims, reserves and reinsurance recoverables.

The scope, duration and magnitude of the direct and indirect effects of COVID-19 continue to evolve in ways that are difficult or impossible to anticipate. While many of the potential impacts on the Company have receded as populations have begun to become vaccinated, new variants of the COVID-19 virus, including the “Omicron” variant, and the slowing of vaccination rates among certain populations, continue to create risks to the Company. As a result, the impact of COVID-19 on the Company’s results of operations for the year of 2021 is not necessarily indicative of its impact for 2022 or beyond. Despite the effects of COVID-19 to date, the Company’s financial position and liquidity improved for the year ended December 31, 2021.

Critical Accounting Estimates

The following presents a discussion of accounting policies and estimates relating to reserves for losses and loss expenses, assumed reinsurance premiums and other-than-temporary impairments of investments. Management believes these policies and estimates are the most critical to its operations and require the most difficult, subjective and complex judgments.

Reserves for Losses and Loss Expenses. To recognize liabilities for unpaid losses, either known or unknown, insurers establish reserves, which is a balance sheet account representing estimates of future amounts needed to pay claims and related expenses with respect to insured events which have occurred. Estimates and assumptions relating to reserves for losses and loss expenses are based on complex and subjective judgments, often including the interplay of specific uncertainties with related accounting and actuarial measurements. Such estimates are also susceptible to change as significant periods of time may elapse between the occurrence of an insured loss, the report of the loss to the insurer, the ultimate determination of the cost of the loss and the insurer's payment of that loss.

In general, when a claim is reported, claims personnel establish a "case reserve" for the estimated amount of the ultimate payment based upon known information about the claim at that time. The estimate represents an informed judgment based on general reserving practices and reflects the experience and knowledge of the claims personnel regarding the nature and value of the specific type of claim. Reserves are also established on an aggregate basis to provide for losses incurred but not reported ("IBNR") to the insurer, potential inadequacy of case reserves and the estimated expenses of settling claims, including legal and other fees and general expenses of administrating the claims adjustment process. Reserves are established based upon the then current legal interpretation of coverage provided.

In examining reserve adequacy, several factors are considered in estimating the ultimate economic value of losses. These factors include, among other things, historical data, legal developments, changes in social attitudes and economic conditions, including the effects of inflation. The actuarial process relies on the basic assumption that past experience, adjusted judgmentally for the effects of current developments and anticipated trends, is an appropriate basis for predicting future outcomes. Reserve amounts are based on management's informed estimates and judgments using currently available data. As additional experience and other data become available and are reviewed, these estimates and judgments may be revised. This may result in reserve increases or decreases that would be reflected in our results in periods in which such estimates and assumptions are changed.

Reserves do not represent a certain calculation of liability. Rather, reserves represent an estimate of what management expects the ultimate settlement and claim administration will cost. While the methods for establishing reserves are well tested over time, the major assumptions about anticipated loss emergence patterns are subject to uncertainty. These estimates, which generally involve actuarial projections, are based on management's assessment of facts and circumstances then known, as well as estimates of trends in claims severity and frequency, judicial theories of liability and other factors, including the actions of third parties which are beyond the Company's control. These variables are affected by external and internal events, such as inflation and economic volatility, judicial and litigation trends, reinsurance coverage, legislative changes and claim handling and reserving practices, which make it more difficult to accurately predict claim costs. The inherent uncertainties of estimating reserves are greater for certain types of liabilities where long periods of time elapse before a definitive determination of liability is made. Because setting reserves is inherently uncertain, the Company cannot provide assurance that its current reserves will prove adequate in light of subsequent events.

Loss reserves included in the Company's financial statements represent management's best estimates based upon an actuarially derived point estimate and other considerations. The Company uses a variety of actuarial techniques and methods to derive an actuarial point estimate for each business. These methods include paid loss development, incurred loss development, paid and incurred Bornhuetter-Ferguson methods and frequency and severity methods. In circumstances where one actuarial method is considered more credible than the others, that method is used to set the point estimate. For example, the paid loss and incurred loss development methods rely on historical paid and incurred loss data. For new lines of business, where there is insufficient history of paid and incurred claims data, or in circumstances where there have been significant changes in claim practices, the paid and incurred loss development methods would be less credible than other actuarial methods. The actuarial point estimate may also be based on a judgmental weighting of estimates produced from each of the methods considered. Industry loss experience is used to supplement the Company's own data in selecting "tail factors" and in areas where the Company's own data is limited. The actuarial data is analyzed by line of business, coverage and accident or policy year, as appropriate, for each business.

The establishment of the actuarially derived loss reserve point estimate also includes consideration of qualitative factors that may affect the ultimate losses. These qualitative considerations include, among others, the impact of re-underwriting initiatives, changes in the mix of business, changes in distribution sources and changes in policy terms and conditions. Examples of changes in terms and conditions that can have a significant impact on reserve levels are the use of aggregate policy limits, the expansion of coverage exclusions, whether or not defense costs are within policy limits, and changes in deductibles and attachment points.

The key assumptions used to arrive at the best estimate of loss reserves are the expected loss ratios, rate of loss cost inflation, and reported and paid loss emergence patterns. Expected loss ratios represent management's expectation of losses at the time the business is priced and written, before any actual claims experience has emerged. This expectation is a significant determinant of the estimate of loss reserves for recently written business where there is little paid or incurred loss data to consider. Expected loss ratios are generally derived from historical loss ratios adjusted for the impact of rate changes, loss cost trends and known changes in the type of risks underwritten. Expected loss ratios are estimated for each key line of business within each business. Expected loss cost inflation is particularly important for the long-tail lines, such as excess casualty, and claims with a high medical component, such as workers' compensation. Reported and paid loss emergence patterns are used to project current reported or paid loss amounts to their ultimate settlement value. Loss development factors are based on the historical emergence patterns of paid and incurred losses, and are derived from the Company's own experience and industry data. The paid loss emergence pattern is also significant to excess and assumed workers' compensation reserves because those reserves are discounted to their estimated present value based upon such estimated payout patterns. Management believes the estimates and assumptions it makes in the reserving process provide the best estimate of the ultimate cost of settling claims and related expenses with respect to insured events which have occurred; however, different assumptions and variables could lead to significantly different reserve estimates.

Loss frequency and severity are measures of loss activity that are considered in determining the key assumptions described in our discussion of loss and loss expense reserves, including expected loss ratios, rate of loss cost inflation and reported and paid loss emergence patterns. Loss frequency is a measure of the number of claims per unit of insured exposure, and loss severity is a measure of the average size of claims. Factors affecting loss frequency include the effectiveness of loss controls and safety programs and changes in economic activity or weather patterns. Factors affecting loss severity include changes in policy limits, retentions, rate of inflation and judicial interpretations.

Another factor affecting estimates of loss frequency and severity is the loss reporting lag, which is the period of time between the occurrence of a loss and the date the loss is reported to the Company. The length of the loss reporting lag affects our ability to accurately predict loss frequency (loss frequencies are more predictable for lines with short reporting lags) as well as the amount of reserves needed for incurred but not reported losses (less IBNR is required for lines with short reporting lags). As a result, loss reserves for lines with short reporting lags are likely to have less variation from initial loss estimates. For lines with short reporting lags, which include commercial automobile, primary workers' compensation, other liability (claims-made) and property business, the key assumption is the loss emergence pattern used to project ultimate loss estimates from known losses paid or reported to date. For lines of business with long reporting lags, which include other liability (occurrence), products liability, excess workers' compensation and liability reinsurance, the key assumption is the expected loss ratio since there is often little paid or incurred loss data to consider. Historically, the Company has experienced less variation from its initial loss estimates for lines of businesses with short reporting lags than for lines of business with long reporting lags.

The key assumptions used in calculating the most recent estimate of the loss reserves are reviewed each quarter and adjusted, to the extent necessary, to reflect the latest reported loss data, current trends and other factors observed. If the actual level of loss frequency and severity are higher or lower than expected, the ultimate losses will be different than management's estimate. The following table reflects the impact of changes (which could be favorable or unfavorable) in frequency and severity, relative to our assumptions, on our loss estimate for claims occurring in 2021:

(In thousands)	**Frequency (+/-)**		
Severity (+/-)	**1%**	**5%**	**10%**
1%	$ 98,916	$ 297,732	$ 546,252
5%	297,732	504,422	762,785
10%	546,252	762,785	1,033,450

Our net reserves for losses and loss expenses of approximately $12.8 billion as of December 31, 2021 relate to multiple accident years. Therefore, the impact of changes in frequency or severity for more than one accident year could be higher or lower than the amounts reflected above. The impact of such changes would likely be manifested gradually over the course of many years, as the magnitude of the changes became evident.

Approximately $2.8 billion, or 22%, of the Company's net loss reserves as of December 31, 2021 relate to the Reinsurance & Monoline Excess segment. There is a higher degree of uncertainty and greater variability regarding estimates of excess workers' compensation and assumed reinsurance loss reserves. In the case of excess workers' compensation, our policies generally attach at $1 million or higher. The claims which reach our layer therefore tend to involve the most serious injuries and many remain open for the lifetime of the claimant, which extends the claim settlement tail. These claims also occur less frequently but tend to be larger than primary claims, which increases claim variability. In the case of assumed reinsurance our loss reserve estimates are based, in part, upon information received from ceding companies. If information received from ceding companies is not timely or correct, the Company's estimate of ultimate losses may not be accurate. Furthermore, due to delayed reporting of claim information by ceding companies, the claim settlement tail for assumed reinsurance is also extended. Management considers the impact of delayed reporting and the extended tail in its selection of loss development factors for these lines of business.

Information received from ceding companies is used to set initial expected loss ratios, to establish case reserves and to estimate reserves for incurred but not reported losses on assumed reinsurance business. This information, which is generally provided through reinsurance intermediaries, is gathered through the underwriting process and from periodic claim reports and other correspondence with ceding companies. The Company performs underwriting and claim audits of selected ceding companies to determine the accuracy and completeness of information provided to the Company. The information received from the ceding companies is supplemented by the Company's own loss development experience with similar lines of business as well as industry loss trends and loss development benchmarks.

Following is a summary of the Company's reserves for losses and loss expenses by business segment as of December 31, 2021 and 2020:

(In thousands)	2021	2020
Insurance	$ 10,060,420	$ 9,034,969
Reinsurance & Monoline Excess	2,787,942	2,585,424
Net reserves for losses and loss expenses	12,848,362	11,620,393
Ceded reserves for losses and loss expenses	2,542,526	2,164,037
Gross reserves for losses and loss expenses	$ 15,390,888	$ 13,784,430

Following is a summary of the Company's net reserves for losses and loss expenses by major line of business as of December 31, 2021 and 2020:

(In thousands)	Reported Case Reserves	Incurred But Not Reported	Total
December 31, 2021			
Other liability	$ 1,724,907	$ 3,319,665	$ 5,044,572
Workers' compensation (1)	1,016,014	903,448	1,919,462
Professional liability	468,680	1,019,344	1,488,024
Commercial automobile	504,821	424,382	929,203
Short-tail lines (2)	322,917	356,242	679,159
Total Insurance	4,037,339	6,023,081	10,060,420
Reinsurance & Monoline Excess (1) (3)	1,475,623	1,312,319	2,787,942
Total	$ 5,512,962	$ 7,335,400	$ 12,848,362
December 31, 2020			
Other liability	$ 1,534,514	$ 2,968,428	$ 4,502,942
Workers' compensation (1)	977,035	873,072	1,850,107
Professional liability	414,104	771,495	1,185,599
Commercial automobile	442,975	398,688	841,663
Short-tail lines (2)	295,313	359,345	654,658
Total Insurance	3,663,941	5,371,028	9,034,969
Reinsurance & Monoline Excess (1) (3)	1,442,099	1,143,325	2,585,424
Total	$ 5,106,040	$ 6,514,353	$ 11,620,393

(1) Reserves for excess and assumed workers' compensation business are net of an aggregate net discount of $452 million and $483 million as of December 31, 2021 and 2020, respectively.

(2) Short-tail lines include commercial multi-peril (non-liability), inland marine, accident and health, fidelity and surety, boiler and machinery and other lines.

(3) Reinsurance & Monoline Excess includes property and casualty reinsurance as well as operations that solely retain risk on an excess basis.

The Company evaluates reserves for losses and loss expenses on a quarterly basis. Changes in estimates of prior year losses are reported when such changes are made. The changes in prior year loss reserve estimates are generally the result of ongoing analysis of recent loss development trends. Original estimates are increased or decreased as additional information becomes known regarding individual claims and aggregate claim trends.

Certain of the Company's insurance and reinsurance contracts are retrospectively rated, whereby the Company collects more or less premiums based on the level of loss activity. For those contracts, changes in loss and loss expenses for prior years may be fully or partially offset by additional or return premiums.

Net prior year development (i.e, the sum of prior year reserve changes and prior year earned premiums changes) for each of the last three years ended December 31, are as follows:

(In thousands)	2021	2020	2019
Increase in prior year loss reserves	$ (863)	$ (627)	$ (34,079)
Increase in prior year earned premiums	7,510	16,807	53,511
Net favorable prior year development	$ 6,647	$ 16,180	$ 19,432

The COVID-19 global pandemic has impacted, and may further impact, the Company’s results through its effect on claim frequency and severity. Loss cost trends have been impacted and may be further impacted by COVID-19-related claims in certain lines of business. Losses incurred from COVID-19-related claims have been offset, to a certain extent, by lower claim frequency in certain lines of our businesses; however, as the economy and legal systems have reopened, the benefit of lower claim frequency has begun to abate. Although as populations have continued to be vaccinated against the virus and the effects of the pandemic have receded in many jurisdictions, most particularly the United States, it remains too early to determine the ultimate net impact of COVID-19 on the Company. New variants of the COVID-19 virus, including the “Omicron” variant, and the slowing of vaccination rates among certain populations continue to create risks with respect to loss costs and the potential for renewed impact of the other effects of COVID-19 associated with economic conditions, inflation, and social distancing and work from home rules.

Most of the COVID-19-related claims reported to the Company to date involve certain short-tailed lines of business, including contingency and event cancellation, business interruption, and film production delay. The Company has also received COVID-19-related claims for longer-tailed casualty lines of business such as workers’ compensation and other liability; however, the estimated incurred loss impact for these reported claims are not material at this time. Given the continuing uncertainty regarding the pandemic's pervasiveness, the future impact that the pandemic may have on claim frequency and severity remains uncertain at this time.

The Company has estimated the potential COVID-19 impact to its contingency and event cancellation, workers’ compensation, and other lines of business under a number of possible scenarios; however, due to COVID-19’s continued evolving impact, there remains a high degree of uncertainty around the Company’s COVID-19 reserves. In addition, should the pandemic continue or worsen as a result of new COVID-19 variants or otherwise, governments in the jurisdictions where we operate may renew their efforts to expand policy coverage terms beyond the policy’s intended coverage. Accordingly, losses arising from these actions, and the other factors described above, could exceed the Company’s reserves established for those related policies.

As of December 31, 2021, the Company had recognized losses for COVID-19-related claims activity, net of reinsurance, of approximately $274 million, of which $233 million relates to the Insurance segment and $41 million relates to the Reinsurance & Monoline Excess segment. Such $274 million of COVID-19-related losses included $239 million of reported losses and $35 million of IBNR. For the year ended December 31, 2021, the Company recognized current accident year losses for COVID-19-related claims activity, net of reinsurance, of approximately $58 million, of which $54 million relates to the Insurance segment and $4 million relates to the Reinsurance & Monoline Excess segment.

Favorable prior year development (net of additional and return premiums) was $7 million in 2021.

Insurance – Reserves for the Insurance segment developed favorably by $20 million in 2021 (net of additional and return premiums). The overall favorable development in 2021 was attributable to favorable development on the 2020 accident year, partially offset by adverse development on the 2016 through 2019 accident years.

The favorable development on the 2020 accident year was largely concentrated in the commercial auto liability and other liability lines of business, including commercial multi-peril liability. During 2020 the Company achieved larger rate increases in these lines of business than were contemplated in its budget and in its initial loss ratio selections. The Company also experienced significantly lower reported claim frequency in these lines in 2020 relative to historical averages, and lower reported incurred losses relative to its expectations. We believe that the lower claim frequency and lower reported incurred losses were caused by the impacts of the COVID-19 pandemic, for example, lockdowns, reduced driving and traffic, work from home, and court closures. However, due to the uncertainty regarding the ultimate impacts of the pandemic on accident year 2020 incurred losses, the Company elected not to react to these lower reported trends during 2020. As more information became available and the 2020 accident year continued to mature, during 2021 the Company started to recognize favorable accident year 2020 development in response to the continuing favorable reported loss experience relative to its expectations.

The adverse development on the 2016 through 2019 accident years is concentrated largely in the other liability line of business, including commercial multi-peril liability, but is also seen to a lesser extent in commercial auto liability. The adverse development for these accident years is driven by a higher than expected number of large losses reported, and particularly impacted the directors and officers liability, lawyers professional liability, and excess and surplus lines casualty classes of business. We also believe that increased social inflation is contributing to the increased number of large losses, for example, higher jury awards on cases which go to trial, and the corresponding higher demands from plaintiffs and higher values required to reach settlement on cases which do not go to trial.

Reinsurance & Monoline Excess – Reserves for the Reinsurance & Monoline Excess segment developed unfavorably by $13 million in 2021. The unfavorable development in the segment was driven by the non-proportional reinsurance assumed liability and other liability lines of business, related primarily to accident years 2017 through 2019, and was partially offset by favorable development in excess workers' compensation business which was spread across many prior accident years. The unfavorable non-proportional reinsurance assumed liability and other liability development was associated with our U.S. and U.K. assumed reinsurance business, and related primarily to accounts insuring construction projects and professional liability exposures.

Favorable prior year development (net of additional and return premiums) was $16 million in 2020.

Insurance - Reserves for the Insurance segment developed favorably by $24 million in 2020 (net of additional and return premiums). Continuing the pattern seen in recent years, the overall favorable development in 2020 resulted from more significant favorable development on workers' compensation business, which was partially offset by unfavorable development on professional liability, including excess professional liability

For workers' compensation, the favorable development was spread across almost all prior accident years, including prior to 2011, but was most significant in accident years 2016 through 2019. The favorable workers' compensation development reflects a continuation of the benign loss cost trends experienced during recent years, particularly the favorable claim frequency trends (i.e., number of reported claims per unit of exposure). The long term trend of declining workers' compensation frequency can be attributable to improved workplace safety. Loss severity trends were also aided by our continued investment in claims handling initiatives such as medical case management services and vendor savings through usage of preferred provider networks and pharmacy benefit managers. Reported workers' compensation losses in 2020 continued to be below our expectations at most of our businesses, and were below the assumptions underlying our initial loss ratio picks and our previous reserve estimates for most prior accident years.

For professional liability business, unfavorable development was driven mainly by large losses reported in the directors and officers ("D&O"), lawyers professional and excess hospital professional liability lines of business. For these lines of business, we continue to see an increase in the number of large losses reported and a lengthening of the reporting "tail" beyond historical levels. We believe a contributing cause is rising social inflation in the form of, for example, higher jury awards on cases that go to trial, and the corresponding higher demands from plaintiffs and higher values required to reach settlement on cases that do not go to trial. The unfavorable development for professional liability affected mainly accident years 2016 through 2018.

Reinsurance & Monoline Excess – Reserves for the Reinsurance & Monoline Excess segment developed unfavorably by $8 million in 2020. The unfavorable development in the segment was driven by non-proportional assumed liability business written in both the U.S. and U.K., and was partially offset by favorable development on excess workers' compensation business. The unfavorable non-proportional assumed liability development was concentrated in accident years 2014 through 2018, and related primarily to accounts insuring construction projects and professional liability exposures.

Favorable prior year development (net of additional and return premiums) was $19 million in 2019.

Insurance - Reserves for the Insurance segment developed favorably by $21 million in 2019 (net of additional and return premiums). This overall favorable development resulted from more significant favorable development on workers' compensation business, which was partially offset by unfavorable development on professional liability and general liability business.

For workers' compensation, the favorable development was spread across many accident years, including prior to 2010, but was most significant in accident years 2014 through 2018, and particularly 2017 and 2018. The favorable workers' compensation development reflects a continuation during 2019 of the benign loss cost trends experienced during recent years, particularly the favorable claim frequency trends (i.e., number of reported claims per unit of exposure). The long term trend of declining workers' compensation frequency can be attributable to improved workplace safety. Loss severity trends were also aided by our continued investment in claims handling initiatives such as medical case management services and vendor savings through usage of preferred provider networks and pharmacy benefit managers. Our initial loss ratio "picks" for this line of business over the past few accident years have contemplated an increase in loss cost trends and reflect decreasing premium rates in the marketplace; reported workers' compensation losses in 2019 continued to be below our expectations at most of our operating units, and were below the assumptions underlying our initial loss ratio picks and our previous reserve estimates.

For professional liability business, the unfavorable development was driven mainly by an increase in the number of large losses reported in the lawyers professional liability and directors and officers ("D&O") liability lines of business. Many of the lawyers large losses involved claims made against insured law firms relating to work performed on matters stemming from the 2008 financial crisis. These claims affected mainly accident years 2013 through 2016. In addition, for both of these lines of business, we have seen evidence of social inflation in the form of higher jury awards on cases that go to trial, and corresponding higher demands from plaintiffs and higher values required to reach settlement on cases that do not go to trial. The unfavorable development for D&O affected mainly accident years 2014 through 2017.

For general liability business, most of the unfavorable development emanated from our excess and surplus lines (E&S) businesses, and was driven by an increase in the number of large losses reported. Many of these large losses were from construction and contracting classes of business, which have also been impacted by social inflation. The general liability unfavorable development impacted mainly accident years 2015 through 2018.

Reinsurance & Monoline Excess - Reserves for the Reinsurance & Monoline Excess segment developed unfavorably by $2 million in 2019. The unfavorable development in the segment was driven by non-proportional assumed liability business in both the U.S. and U.K., and was largely offset by favorable development on excess workers' compensation business. The unfavorable non-proportional assumed liability development was concentrated in accident years 2015 through 2018, and included an adjustment for the Ogden discount rate in the U.K.

Reserve Discount. The Company discounts its liabilities for certain workers' compensation reserves. The amount of workers' compensation reserves that were discounted was $1,387 million and $1,655 million at December 31, 2021 and 2020, respectively. The aggregate net discount for those reserves, after reflecting the effects of ceded reinsurance, was $452 million and $483 million at December 31, 2021 and 2020, respectively. At December 31, 2021, discount rates by year ranged from 0.7% to 6.5%, with a weighted average discount rate of 3.4%.

Substantially all discounted workers' compensation reserves (97% of total discounted reserves at December 31, 2021) are excess workers' compensation reserves. In order to properly match loss expenses with income earned on investment securities supporting the liabilities, reserves for excess workers' compensation business are discounted using risk-free discount rates determined by reference to the U.S. Treasury yield curve. These rates are determined annually based on the weighted average rate for the period. Once established, no adjustments are made to the discount rate for that period, and any increases or decreases in loss reserves in subsequent years are discounted at the same rate, without regard to when any such adjustments are recognized. The expected loss and loss expense payout patterns subject to discounting are derived from the Company's loss payout experience.

The Company also discounts reserves for certain other long-duration workers' compensation reserves (representing approximately 3% of total discounted reserves at December 31, 2021), including reserves for quota share reinsurance and reserves related to losses regarding occupational lung disease. These reserves are discounted at statutory rates prescribed or permitted by the Department of Insurance of the State of Delaware.

Assumed Reinsurance Premiums. The Company estimates the amount of assumed reinsurance premiums that it will receive under treaty reinsurance agreements at the inception of the contracts. These premium estimates are revised as the actual amount of assumed premiums is reported to the Company by the ceding companies. As estimates of assumed premiums are made or revised, the related amount of earned premiums, commissions and incurred losses associated with those premiums are recorded. Estimated assumed premiums receivable were approximately $60 million and $44 million at December 31, 2021 and 2020, respectively. The assumed premium estimates are based upon terms set forth in reinsurance agreements, information received from ceding companies during the underwriting and negotiation of agreements, reports received from ceding companies and discussions and correspondence with reinsurance intermediaries. The Company also considers its own view of market conditions, economic trends and experience with similar lines of business. These premium estimates represent management's best estimate of the ultimate amount of premiums to be received under its assumed reinsurance agreements.

Allowance for Expected Credit Losses on Investments.

Fixed Maturity Securities – For fixed maturity securities in an unrealized loss position where the Company intends to sell, or it is more likely than not that it will be required to sell the security before recovery in value, the amortized cost basis is written down to fair value through net investment gains (losses). For fixed maturity securities in an unrealized loss position where the Company does not intend to sell, or it is more likely than not that it will not be required to sell the security before recovery in value, the Company evaluates whether the decline in fair value has resulted from credit losses or all other factors (non-credit factors). In making this assessment, the Company considers the extent to which fair value is less than amortized cost, changes to the rating of the security by a rating agency, and adverse conditions specifically related to the security, among other factors. If this assessment indicates that a credit loss exists, the present value of cash flows expected to be collected from the security are compared to the amortized cost basis of the security. If the present value of cash flows expected to be collected is less than the amortized cost basis, an allowance for expected credit losses is recorded for the credit loss through net investment gains (losses), limited by the amount that the fair value is less than the amortized cost basis. Effective January 1, 2020, the allowance is adjusted for any change in expected credit losses and subsequent recoveries through net investment gains (losses). The impairment related to non-credit factors is recognized in other comprehensive income (loss) .

The Company's credit assessment of allowance for expected credit losses uses a third party model for available for sale and held to maturity securities, as well as loans receivable. The allowance for expected credit losses is generally based on the performance of the underlying collateral under various economic and default scenarios that involve subjective judgments and estimates by management. Modeling these securities involves various factors, such as projected default rates, the nature and realizable value of the collateral, if any, the ability of the issuer to make scheduled payments, historical performance and other relevant economic and performance factors. A discounted cash flow analysis is used to ascertain the amount of the allowance for expected credit losses, if any. In general, the model reverts to the rating-level long-term average marginal default rates based on 10 years of historical data, beyond the forecast period. For other inputs, the model in most cases reverts to the baseline long-term assumptions linearly over 5 years beyond the forecast period. The long-term assumptions are based on the historical averages.

The Company classifies its fixed maturity securities by credit rating, primarily based on ratings assigned by credit rating agencies. For purposes of classifying securities with different ratings, the Company uses the average of the credit ratings assigned, unless in limited situations the Company's own analysis indicates an internal rating is more appropriate. Securities that are not rated by a rating agency are evaluated and classified by the Company on a case-by-case basis.

A summary of the Company's non-investment grade fixed maturity securities that were in an unrealized loss position at December 31, 2021 is presented in the table below.

($ in thousands)	Number of Securities	Aggregate Fair Value	Unrealized Loss
Foreign government	38	$ 130,621	$ 38,849
Corporate	8	26,903	1,644
Mortgage-backed securities	4	210	13
Asset-backed securities	2	154	14
State and municipal	1	14,594	411
Total	53	$ 172,482	$ 40,931

As of December 31, 2021, the Company has recorded an allowance for expected credit losses on fixed maturity securities of $23 million. The Company has evaluated the remaining fixed maturity securities in an unrealized loss position and believes the unrealized losses are due primarily to temporary market and sector-related factors rather than to issuer-specific factors. None of these securities are delinquent or in default under financial covenants. Based on its assessment of these issuers, the Company expects them to continue to meet their contractual payment obligations as they become due.

Loans Receivable – For loans receivable, the Company estimates an allowance for expected credit losses based on relevant information about past events, including historical loss experience, current conditions and forecasts that affect the expected collectability of the amortized cost of the financial asset. The allowance for expected credit losses is presented as a reduction to amortized cost of the financial asset in the consolidated balance sheet and changes to the estimate for expected credit losses are recognized through net investment gains (losses). Loans receivable are reported net of an allowance for expected credit losses of $2 million and $5 million as of December 31, 2021 and 2020, respectively.

Fair Value Measurements. The Company's fixed maturity available for sale securities, equity securities, and its trading account securities are carried at fair value. Fair value is defined as "the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date". The Company utilizes a fair value hierarchy that prioritizes the inputs to valuation techniques used to measure fair value into three broad levels. Level 1 inputs are quoted prices (unadjusted) in active markets for identical assets or liabilities that the reporting entity has the ability to access at the measurement date. Level 2 inputs are inputs other than quoted prices included within Level 1 that are observable for similar assets in active markets. Level 3 inputs are unobservable inputs for the asset or liability. Unobservable inputs may only be used to measure fair value to the extent that observable inputs are not available. The fair value of the vast majority of the Company's portfolio is based on observable data (other than quoted prices) and, accordingly, is classified as Level 2.

In classifying particular financial securities in the fair value hierarchy, the Company uses its judgment to determine whether the market for a security is active and whether significant pricing inputs are observable. The Company determines the existence of an active market by assessing whether transactions occur with sufficient frequency and volume to provide reliable pricing information. The Company determines whether inputs are observable based on the use of such information by pricing services and external investment managers, the uninterrupted availability of such inputs, the need to make significant adjustments to such inputs and the volatility of such inputs over time. If the market for a security is determined to be inactive or if significant inputs used to price a security are determined to be unobservable, the security is categorized in Level 3 of the fair value hierarchy.

Because many fixed maturity securities do not trade on a daily basis, the Company utilizes pricing models and processes which may include benchmark curves, benchmarking of like securities, sector groupings and matrix pricing. Market inputs used to evaluate securities include benchmark yields, reported trades, broker/dealer quotes, issuer spreads, two-sided markets, benchmark securities, bids, offers and reference data. Quoted prices are often unavailable for recently issued securities that are infrequently traded or securities that are only traded in private transactions. For publicly traded securities for which quoted prices are unavailable, the Company determines fair value based on independent broker quotations and other observable market data. For securities traded only in private negotiations, the Company determines fair value based primarily on the cost of such securities, which is adjusted to reflect prices of recent placements of securities of the same issuer, financial data, projections and business developments of the issuer and other relevant information.

The following is a summary of pricing sources for the Company's fixed maturity securities available for sale as of December 31, 2021:

(In thousands)	**Carrying Value**	**Percent of Total**
Pricing source:		
Independent pricing services	$ 16,261,437	98.4 %
Syndicate manager	54,508	0.3
Directly by the Company based on:		
Observable data	212,747	1.3
Total	$ 16,528,692	100.0 %

Independent pricing services - Substantially all of the Company's fixed maturity securities available for sale were priced by independent pricing services (generally one U.S. pricing service plus additional pricing services with respect to a limited number of foreign securities held by the Company). The prices provided by the independent pricing services are generally based on observable market data in active markets (e.g., broker quotes and prices observed for comparable securities). The determination of whether markets are active or inactive is based upon the volume and level of activity for a particular asset class. The Company reviews the prices provided by pricing services for reasonableness based upon current trading levels for similar securities. If the prices appear unusual to the Company, they are re-examined and the value is either confirmed or revised. In addition, the Company periodically performs independent price tests of a sample of securities to ensure proper valuation and to verify our understanding of how securities are priced. As of December 31, 2021, the Company did not make any adjustments to the prices provided by the pricing services. Based upon the Company's review of the methodologies used by the independent pricing services, these securities were classified as Level 2.

Syndicate manager – The Company has a 15% participation in a Lloyd's syndicate, and the Company's share of the securities owned by the syndicate is priced by the syndicate's manager. The majority of the securities are liquid, short duration fixed maturity securities. The Company reviews the syndicate manager's pricing methodology and audited financial statements and holds discussions with the syndicate manager as necessary to confirm its understanding and agreement with security prices. Based upon the Company's review of the methodologies used by the syndicate manager, these securities were classified as Level 2.

Observable data – If independent pricing is not available, the Company prices the securities directly. Prices are based on observable market data where available, including current trading levels for similar securities and non-binding quotations from brokers. The Company generally requests two or more quotes. If more than one quote is received, the Company sets a price within the range of quotes received based on its assessment of the credibility of the quote and its own evaluation of the security. The Company generally does not adjust quotes obtained from brokers. Since these securities were priced based on observable data, they were classified as Level 2.

Cash flow model – If the above methodologies are not available, the Company prices securities using a discounted cash flow model based upon assumptions as to prevailing credit spreads, interest rates and interest rate volatility, time to maturity and subordination levels. Discount rates are adjusted to reflect illiquidity where appropriate. These securities were classified as Level 3.

Results of Operations for the Years Ended December 31, 2021 and 2020

Business Segment Results

Following is a summary of gross and net premiums written, net premiums earned, loss ratios (losses and loss expenses incurred expressed as a percentage of net premiums earned), expense ratios (underwriting expenses expressed as a percentage of net premiums earned) and GAAP combined ratios (sum of loss ratio and expense ratio) for each of our business segments for the years ended December 31, 2021 and 2020. The GAAP combined ratio represents a measure of underwriting profitability, excluding investment income. A GAAP combined ratio in excess of 100 indicates an underwriting loss; a number below 100 indicates an underwriting profit.

(In thousands)	2021	2020
Insurance		
Gross premiums written	$ 9,471,667	$ 7,837,496
Net premiums written	7,743,814	6,347,101
Net premiums earned	7,077,708	6,067,669
Loss ratio	61.1 %	64.9 %
Expense ratio	28.3	30.3
GAAP combined ratio	89.4	95.2
Reinsurance & Monoline Excess		
Gross premiums written	$ 1,228,467	$ 1,010,151
Net premiums written	1,119,053	915,336
Net premiums earned	1,028,323	863,174
Loss ratio	61.0 %	61.3 %
Expense ratio	29.7	31.8
GAAP combined ratio	90.7	93.1
Consolidated		
Gross premiums written	$ 10,700,134	$ 8,847,647
Net premiums written	8,862,867	7,262,437
Net premiums earned	8,106,031	6,930,843
Loss ratio	61.1 %	64.5 %
Expense ratio	28.5	30.4
GAAP combined ratio	89.6	94.9

Net Income to Common Stockholders. The following table presents the Company’s net income to common stockholders and net income per diluted share for the years ended December 31, 2021 and 2020.

(In thousands, except per share data)	2021	2020
Net income to common stockholders	$ 1,022,490	$ 530,670
Weighted average diluted shares	186,499	188,763
Net income per diluted share	$ 5.48	$ 2.81

The Company reported net income of $1,022 million in 2021 compared to $531 million in 2020. The $491 million increase in net income was primarily due to an after-tax increase in underwriting income of $397 million mainly due to the growth in premium rates and exposure as well as reductions in loss ratio partly due to lower catastrophe losses and in expense ratio driven by net earned premium growth outpacing expense growth, an after-tax increase in net investment income of $71 million primarily due to investment funds, a reduction of $33 million in tax expense due to a change in the effective tax rate, an after-tax increase in foreign currency gains of $21 million, an after-tax increase in profits from non-insurance businesses of $9 million due to sales rebounding from the pandemic, an after-tax increase in profit from insurance service businesses of $4 million, and an after-tax reduction in interest expenses of $3 million due to early refinancings, partially offset by an after-tax increase in corporate expenses of $31 million mainly due to increased incentive compensation costs, an after-tax reduction in net investment gains of $10 million primarily due to the sale of real estate in 2020 and an after-tax increase of $6 million in minority interest. The number of weighted average diluted shares decreased by 2.3 million for 2021 compared to 2020 mainly reflecting shares repurchased in 2020 and 2021.

Premiums. Gross premiums written were $10,700 million in 2021, an increase of 21% from $8,848 million in 2020. The increase was due to the growth in the Insurance segment of $1,634 million and $218 million in the Reinsurance & Monoline Excess segment. Approximately 82% of premiums expiring in 2021 were renewed, and 79% of premiums expiring in

2020 were renewed.

Average renewal premium rates for insurance and facultative reinsurance increased 9.1% in 2021 and 11.3% in 2020, when adjusted for changes in exposures. Average renewal premium rates for insurance and facultative reinsurance excluding workers' compensation increased 10.4% in 2021 and 13.6% in 2020, when adjusted for changes in exposures.

A summary of gross premiums written in 2021 compared with 2020 by line of business within each business segment follows:

- Insurance gross premiums increased 21% to $9,472 million in 2021 from $7,837 million in 2020. Gross premiums increased $557 million (20%) for other liability, $497 million (42%) for professional liability, $272 million (15%) for short-tail lines, $261 million (28%) for commercial auto, and $48 million (4%) for workers' compensation.
- Reinsurance & Monoline Excess gross premiums increased 22% to $1,228 million in 2021 from $1,010 million in 2020. Gross premiums written increased $173 million (29%) for casualty lines, $33 million (17%) for monoline excess, and $12 million (5%) for property lines.

Net premiums written were $8,863 million in 2021, an increase of 22% from $7,262 million in 2020. Ceded reinsurance premiums as a percentage of gross written premiums were 17% in 2021 and 18% in 2020.

Premiums earned increased 17% to $8,106 million in 2021 from $6,931 million in 2020. Insurance premiums (including the impact of rate changes) are generally earned evenly over the policy term, and accordingly recent rate increases will be earned over the upcoming quarters. Premiums earned in 2021 are related to business written during both 2021 and 2020. Audit premiums were $195 million in 2021 compared with $128 million in 2020.

Net Investment Income. Following is a summary of net investment income for the years ended December 31, 2021 and 2020:

	Amount		Average Annualized Yield	
(In thousands)	**2021**	**2020**	**2021**	**2020**
Fixed maturity securities, including cash and cash equivalents and loans receivable	$ 382,001	$ 426,563	2.2 %	2.7 %
Investment funds	220,014	54,253	15.8	4.5
Arbitrage trading account	37,676	77,931	5.3	14.6
Real estate	7,703	24,027	0.4	1.2
Equity securities	32,020	10,172	5.0	2.7
Gross investment income	679,414	592,946	3.1	3.0
Investment expenses	(7,796)	(9,125)	—	—
Total	$ 671,618	$ 583,821	3.0 %	2.9 %

Net investment income increased 15% to $672 million in 2021 from $584 million in 2020 primarily due to a $166 million increase in income from investment funds, a $22 million increase in equity securities and an $1 million reduction in investment expenses, partially offset by a $45 million reduction in income from fixed maturity securities driven by lower investment yields, a $40 million reduction in arbitrage trading account and a $16 million reduction from real estate. Investment funds are reported on a one quarter lag. The average annualized yield for fixed maturity securities was 2.2% in 2021 and 2.7% in 2020. The effective duration of the fixed maturity portfolio was 2.4 years at both December 31, 2021 and 2020. The Company maintained the shortened duration of its fixed maturity security portfolio, thereby reducing the potential impact of mark-to-market on the portfolio and positioning the Company to react quickly to changes in the current interest rate environment. Average invested assets, at cost (including cash and cash equivalents), were $22.2 billion in 2021 and $20.0 billion in 2020.

Insurance Service Fees. The Company earns fees from an insurance distribution business, a third-party administrator, and as a servicing carrier of workers' compensation assigned risk plans for certain states. Insurance service fees increased to $94 million in 2021 from $89 million in 2020.

Net Realized and Unrealized Gains on Investments. The Company buys and sells securities and other investment assets on a regular basis in order to maximize its total return on investments. Decisions to sell securities and other investment assets are based on management’s view of the underlying fundamentals of specific investments as well as management’s expectations regarding interest rates, credit spreads, currency values and general economic conditions. Net realized and unrealized gains on investments were $107 million in 2021 compared with $74 million in 2020. In 2021, the gains reflected net realized gains on investments of $145 million were partially offset by a change in unrealized losses on equity securities of $38 million. In 2020, the gains reflected net realized gains on investments of $99 million, primarily including the sale of a building for a gain of $105 million, partially offset by an increase in unrealized losses on equity securities of $25 million.

Change in Allowance for Expected Credit Losses on Investments. Based on credit factors, the allowance for expected credit losses is increased or decreased depending on the percentage of unrealized loss relative to amortized cost by security, changes in rating of the security by a rating agency, and adverse conditions specifically related to the security, among other factors. For the year ended December 31, 2021, the pre-tax change in allowance for expected credit losses on investments increased by $16 million ($13 million after-tax), which is reflected in net investment gains, primarily related to foreign government securities which did not previously have an allowance. For the year ended December 31, 2020, the pre-tax change in allowance for expected credit losses on investments decreased by $29 million ($23 million after-tax), which is reflected in net investment gains.

Revenues from Non-Insurance Businesses. Revenues from non-insurance businesses were derived from businesses engaged in the distribution of promotional merchandise, world-wide textile solutions, and aviation-related businesses that provide services to aviation markets, including (i) the distribution, manufacturing, repair and overhaul of aircraft parts and components, (ii) the sale of new and used aircraft, and (iii) avionics, fuel, maintenance, storage and charter services. Revenues from non-insurance businesses were $489 million in 2021 and $390 million in 2020. The increase mainly relates to the business recovery from COVID-19 on aviation-related and textile businesses.

Losses and Loss Expenses. Losses and loss expenses increased to $4,954 million in 2021 from $4,469 million in 2020. The consolidated loss ratio was 61.1% in 2021 and 64.5% in 2020. Catastrophe losses, net of reinsurance recoveries, were $202 million (including current accident year losses of approximately $58 million related to COVID-19) in 2021 compared with $340 million in 2020 (including losses of approximately $171 million related to COVID-19). Favorable prior year reserve development (net of premium offsets) was $7 million in 2021 compared with $16 million in 2020. The loss ratio excluding catastrophe losses and prior year reserve development decreased 1.1 points to 58.7% in 2021 from 59.8% in 2020.

A summary of loss ratios in 2021 compared with 2020 by business segment follows:

- Insurance - The loss ratio of 61.1% in 2021 was 3.8 points lower than the loss ratio of 64.9% in 2020. Catastrophe losses were $150 million in 2021 compared with $307 million in 2020. The Company reflected a best estimate (net of reinsurance) based upon available information for current accident year COVID-19-related losses of approximately $54 million, primarily related to contingency and event cancellation coverage. Favorable prior year reserve development was $20 million in 2021 compared with $24 million in 2020. The loss ratio excluding catastrophe losses and prior year reserve development decreased 0.9 points to 59.3% in 2021 from 60.2% in 2020.

- Reinsurance & Monoline Excess - The loss ratio of 61.0% in 2021 was 0.3 points lower than the loss ratio of 61.3% in 2020. Catastrophe losses were $52 million in 2021 compared with $33 million in 2020. The Company reflected a best estimate (net of reinsurance) based upon available information for current accident year COVID-19-related losses of approximately $4 million, primarily related to excess workers' compensation. Adverse prior year reserve development was $13 million in 2021 compared with $8 million in 2020. The loss ratio excluding catastrophe losses and prior year reserve development decreased 1.9 points to 54.7% in 2021 from 56.6% in 2020.

Other Operating Costs and Expenses. Following is a summary of other operating costs and expenses:

(In thousands)	2021	2020
Policy acquisition and insurance operating expenses	$ 2,306,727	$ 2,111,013
Insurance service expenses	86,003	85,724
Net foreign currency (gains) losses	(25,725)	363
Debt extinguishment costs	11,521	8,440
Other costs and expenses	220,744	184,852
Total	$ 2,599,270	$ 2,390,392

Policy acquisition and insurance operating expenses are comprised of commissions paid to agents and brokers, premium taxes and other assessments and internal underwriting costs. Policy acquisition and insurance operating expenses increased 9% from 2020, while net premiums earned increased 17% over that period. The expense ratio (policy acquisition and insurance operating expenses expressed as a percentage of premiums earned) was 28.5% in 2021 and 30.4% in 2020. The improvement is primarily attributable to higher net premiums earned outpacing compensation expense growth. However, to the extent our net premiums earned decrease or travel and entertainment expenses increase, due to the impact of the COVID-19 pandemic or otherwise, our expense ratio would be expected to increase.

Service expenses, which represent the costs associated with the fee-based businesses, was $86 million in both 2021 and 2020.

Net foreign currency (gains) losses result from transactions denominated in a currency other than a businesses' functional currency. Net foreign currency gains was $26 million in 2021 compared to losses of $0.4 million in 2020, mainly due to U.S. dollar strengthening in relation to a wide spectrum of currencies in 2021.

Debt extinguishment costs of $12 million in 2021 related to the redemption of $400 million of subordinated debentures in March and June 2021 that were due in 2056. Debt extinguishment costs of $8 million in 2020 related to the redemption of subordinated debentures that were due in 2053.

Other costs and expenses represent general and administrative expenses of the parent company and other expenses not allocated to business segments, including the cost of certain long-term incentive plans and new business ventures. Other costs and expenses increased to $221 million in 2021 from $185 million in 2020, primarily due to the increase in performance-based compensation costs in 2021.

Expenses from Non-Insurance Businesses. Expenses from non-insurance businesses represent costs associated with businesses engaged in the distribution of promotional merchandise, world-wide textile solutions, and aviation-related businesses that include (i) cost of goods sold related to aircraft and products sold and services provided and (ii) general and administrative expenses. Expenses from non-insurance businesses were $472 million in 2021 compared to $384 million in 2020. The increase mainly relates to the business recovery from COVID-19 on aviation-related and textile businesses.

Interest Expense. Interest expense was $147 million in 2021 and $151 million in 2020. In May 2020, the Company issued $300 million aggregate principal amount of 4.00% senior notes due 2050. In September 2020, the Company issued an additional $170 million aggregate principal amount of 4.00% senior notes due 2050 and $250 million aggregate principal amount of 4.25% subordinated debentures due 2060 and repaid $300 million aggregate principal amount of 5.375% senior notes at maturity. In October 2020, the Company redeemed $350 million aggregate principal amount of 5.625% subordinated debentures due 2053. In February 2021, the Company issued $300 million aggregate principal amount of 4.125% subordinated debentures due 2061. In March 2021, the Company issued $400 million aggregate principal amount of 3.55% senior notes due 2052 and redeemed its $110 million aggregate principal amount of 5.90% subordinated debentures due 2056. In June 2021, the Company redeemed the $290 million aggregate principal amount of its 5.75% subordinated debentures due 2056. In September 2021, the Company issued $350 million aggregate principal amount of 3.15% senior notes due 2061. The redemptions resulted in debt extinguishment costs of $12 million in 2021. Additionally, in the second quarter of 2021, the Company sold a real estate asset which, resulted in a $102 million reduction of the Company's non-recourse debt that was supporting the property.

The redemption of debentures and issuance of additional debentures in 2021 combined with maturities in 2022, as described below in "Liquidity and Capital Resources -- Debt," are expected to decrease interest expense in 2022 and forward.

Income Taxes. The effective income tax rate was 19.6% in 2021 and 24.4% in 2020. The effective income tax rate differs from the federal income tax rate of 21% principally driven by tax benefits attributable to tax-exempt investment income and equity-based compensation. See Note 16 of the Consolidated Financial Statements for a reconciliation of the income tax expense and the amounts computed by applying the Federal and foreign income tax rate of 21%.

The Company has not provided U.S. deferred income taxes on the undistributed earnings of approximately $126.7 million of its non-U.S. subsidiaries since these earnings are intended to be permanently reinvested in the non-U.S. subsidiaries. In the future, if such earnings were distributed the Company projects that the incremental tax, if any, will be immaterial.

Results of Operations for the Years Ended December 31, 2020 and 2019

For a comparison of the Company's results of operations for the year ended December 31, 2020 to the year ended December 31, 2019, see Item 7, Management's Discussion and Analysis of Financial Condition and Results of Operations in the Company's Annual Report on Form 10-K for the year ended December 31, 2020, which was filed with the Securities and Exchange Commission on February 18, 2021.

Investments

As part of its investment strategy, the Company establishes a level of cash and highly liquid short-term and intermediate-term securities that, combined with expected cash flow, it believes is adequate to meet its payment obligations. Due to the low fixed maturity investment returns, the Company invests in equity securities, merger arbitrage securities, investment funds, private equity, loans and real estate related assets. The Company's investments in investment funds and its other alternative investments have experienced, and the Company expects to continue to experience, greater fluctuations in investment income.

The Company also attempts to maintain an appropriate relationship between the effective duration of the investment portfolio and the approximate duration of its liabilities (i.e., policy claims and debt obligations). The effective duration of the investment portfolio was 2.4 years at both December 31, 2021 and 2020. The Company’s investment portfolio and investment-related assets as of December 31, 2021 were as follows:

($ in thousands)	**Carrying Value**	**Percent of Total**
Fixed maturity securities:		
U.S. government and government agencies	$ 855,343	3.6 %
State and municipal:		
Special revenue	2,092,438	8.8
State general obligation	455,323	1.9
Local general obligation	430,697	1.8
Pre-refunded (1)	222,225	1.0
Corporate backed	172,602	0.7
Total state and municipal	3,373,285	14.2
Mortgage-backed securities:		
Agency	752,318	3.2
Residential-Prime	186,260	0.8
Commercial	128,756	0.5
Residential-Alt A	5,570	—
Total mortgage-backed securities	1,072,904	4.5
Asset-backed securities	4,490,565	18.9
Corporate:		
Industrial	3,273,163	13.8
Financial	1,763,400	7.4
Utilities	406,302	1.7
Other	152,810	0.7
Total corporate	5,595,675	23.6
Foreign government	1,214,901	5.1
Total fixed maturity securities	16,602,673	69.9
Equity securities available for sale:		
Common stocks	695,403	2.9
Preferred stocks	245,840	1.1
Total equity securities available for sale	941,243	4.0
Cash and cash equivalents	1,568,843	6.6
Real estate	1,852,508	7.8
Investment funds	1,480,612	6.2
Arbitrage trading account	1,179,606	5.0
Loans receivable	115,172	0.5
Total investments	$ 23,740,657	100.0 %

(1) Pre-refunded securities are securities for which an escrow account has been established to fund the remaining payments of principal and interest through maturity. Such escrow accounts are funded almost exclusively with U.S. Treasury and U.S. government agency securities.

Fixed Maturity Securities. The Company’s investment policy with respect to fixed maturity securities is generally to purchase instruments with the expectation of holding them to their maturity. However, management of the available for sale portfolio is considered necessary to maintain an approximate matching of assets and liabilities as well as to adjust the portfolio as a result of changes in financial market conditions and tax considerations.

The Company's philosophy related to holding or selling fixed maturity securities is based on its objective of maximizing total return. The key factors that management considers in its investment decisions as to whether to hold or sell fixed maturity securities are its view of the underlying fundamentals of specific securities as well as its expectations regarding interest rates, credit spreads and currency values. In a period in which management expects interest rates to rise, the Company may sell longer duration securities in order to mitigate the impact of an interest rate rise on the fair value of the portfolio. Similarly, in a period in which management expects credit spreads to widen, the Company may sell lower quality securities, and in a period in which management expects certain foreign currencies to decline in value, the Company may sell securities denominated in those foreign currencies. The sale of fixed maturity securities in order to achieve the objective of maximizing total return may result in realized gains; however, there is no reason to expect these gains to continue in future periods.

Equity Securities. Equity securities primarily represent investments in common and preferred stocks in companies with potential growth opportunities in different sectors, mainly in the financial institutions and energy sectors.

Investment Funds. At December 31, 2021, the carrying value of investment funds was $1,481 million, including investments in financial services funds of $432 million, transportation funds of $337 million, other funds of $288 million (which includes a deferred compensation trust asset of $34 million), real estate funds of $274 million, and energy funds of $150 million. Investment funds are primarily reported on a one-quarter lag.

Real Estate. Real estate is directly owned property held for investment. At December 31, 2021, real estate properties in operation included a long-term ground lease in Washington D.C., an office complex in New York City, an office building in London, and the completed portion of a mixed-use project in Washington D.C. In addition, part of the previously mentioned mixed-use project in Washington D.C. is under development. The Company expects to fund further development costs for the project with a combination of its own funds and external financing.

Arbitrage Trading Account. The arbitrage trading account is comprised of direct investments in arbitrage securities. Merger arbitrage is the business of investing in the securities of publicly held companies that are the targets in announced tender offers and mergers.

Loans Receivable. Loans receivable, which are carried at amortized cost (net of allowance for expected credit losses), had an amortized cost of $115 million and an aggregate fair value of $117 million at December 31, 2021. The amortized cost of loans receivable is net of an allowance for expected credit losses of $2 million as of December 31, 2021. Loans receivable include real estate loans of $89 million that are secured by commercial and residential real estate located primarily in New York. Real estate loans generally earn interest at fixed or stepped interest rates and have maturities through 2026. Loans receivable include commercial loans of $26 million that are secured by business assets and have fixed interest rates with varying maturities not exceeding 10 years.

Liquidity and Capital Resources

Cash Flow. Cash flow provided from operating activities increased to $2,184 million in 2021 from $1,617 million in 2020, primarily due to an increase in premium receipts, net of reinsurance and commissions settled, partially offset by loss and loss expense payments as well as payments to tax authorities.

The Company's insurance subsidiaries' principal sources of cash are premiums, investment income, service fees and proceeds from sales and maturities of portfolio investments. The principal uses of cash are payments for claims, taxes, operating expenses and dividends. The Company expects its insurance subsidiaries to fund the payment of losses with cash received from premiums, investment income and fees. The Company generally targets an average duration for its investment portfolio that is within 1.5 years of the average duration of its liabilities so that portions of its investment portfolio mature throughout the claim cycle and are available for the payment of claims if necessary. In the event operating cash flow and proceeds from maturities and prepayments of fixed maturity securities are not sufficient to fund claim payments and other cash requirements, the remainder of the Company's cash and investments is available to pay claims and other obligations as they become due. The Company's investment portfolio is highly liquid, with approximately 76.6% invested in cash, cash equivalents and marketable fixed maturity securities as of December 31, 2021. If the sale of fixed maturity securities were to become necessary, a realized gain or loss equal to the difference between the cost and sales price of securities sold would be recognized.

Debt. At December 31, 2021, the Company had senior notes, subordinated debentures and other debt outstanding with a carrying value of $3,267 million and a face amount of $3,292 million, including $300 million aggregate principal amount of its 4.125% subordinated debentures due 2061 issued in February 2021, $400 million aggregate principal amount of its 3.55% senior notes due 2052 issued in March 2021 and $350 million aggregate principal amount of its 3.15% senior notes due 2061 issued in September 2021. The Company redeemed its $110 million aggregate principal amount of 5.90% subordinated debentures due 2056 on March 1, 2021 and its $290 million aggregate principal amount of 5.75% subordinated debentures due 2056 on June 1, 2021. Additionally, in the second quarter of 2021, the Company sold a real estate asset which resulted in a $102 million reduction of the Company's non-recourse debt that was supporting the property. The maturities of the outstanding debt are $427 million in 2022, $6 million in 2024, $4 million in 2025, $250 million in 2037, $350 million in 2044, $470 million in 2050, $400 million in 2052, $185 million in 2058, $300 million in 2059, $250 million in 2060, and $650 million in 2061.

Equity. At December 31, 2021, total common stockholders’ equity was $6.7 billion, common shares outstanding were 176,780,588 and stockholders’ equity per outstanding share was $37.63. The Company repurchased 1,752,619 and 6,363,301 shares of its common stock in 2021 and 2020, respectively. The aggregate cost of the repurchases was $122 million in 2021 and $346 million in 2020. In 2021, the Board declared regular quarterly cash dividends of $0.12 per share in the first quarter, and $0.13 per share in each of the remaining three quarters, as well as special dividends of $0.50 per share in the second quarter and $1.00 per share in the fourth quarter for a total of $356 million in aggregate dividends in 2021.

Total Capital. Total capitalization (equity, debt and subordinated debentures) was $9.9 billion at December 31, 2021. The percentage of the Company’s capital attributable to senior notes, subordinated debentures and other debt was 33% and 30% at December 31, 2021 and 2020, respectively.

Federal and Foreign Income Taxes

The Company files a consolidated income tax return in the U.S. and foreign tax returns in each of the countries in which it has overseas operations. At December 31, 2021, the Company had a gross deferred tax asset of $535 million (which primarily relates to loss and loss expense reserves and unearned premium reserves). The Company also has a $75 million valuation allowance against the gross deferred tax asset and a gross deferred tax liability of $420 million (which primarily relates to deferred policy acquisition costs, and various investment funds) resulting in a net deferred tax asset of $40 million. The realization of this asset is dependent upon the Company's ability to generate sufficient taxable income in future periods. Based on historical results and the prospects for future operations, management anticipates that it is more likely than not that future taxable income will be sufficient for the realization of this asset.

Reinsurance

The Company follows customary industry practice of reinsuring a portion of its exposures in exchange for paying reinsurers a part of the premiums received on the policies it writes. Reinsurance is purchased by the Company principally to reduce its net liability on individual risks and to protect against catastrophic losses. Although reinsurance does not legally discharge an insurer from its primary liability for the full amount of the policies, it does make the assuming reinsurer liable to the insurer to the extent of the reinsurance coverage. The Company monitors the financial condition of its reinsurers and attempts to place its coverages only with financially sound carriers. Reinsurance coverage and retentions vary depending on the line of business, location of the risk and nature of loss. The Company’s reinsurance purchases include the following:

- Property reinsurance treaties - The Company purchases property reinsurance to reduce its exposure to large individual property losses and catastrophe events. Following is a summary of significant property reinsurance treaties in effect as of January 1, 2022: The Company’s property per risk reinsurance generally covers losses between $2.5 million and $65 million. The Company’s catastrophe excess of loss reinsurance program provides protection for net losses in excess of between $23.4 million and $40.2 million up to $500 million for the majority of U.S. business written by its Insurance segment businesses and U.S. and non-U.S. business written by Lloyd's Syndicate, excluding offshore energy; this includes some co-participation in lower layers. The Company’s catastrophe reinsurance agreements are subject to certain limits, exclusions and reinstatement premiums.
- Casualty reinsurance treaties - The Company purchases casualty reinsurance to reduce its exposure to large individual casualty losses, workers’ compensation catastrophe losses and casualty losses involving multiple claimants or insureds for the majority of business written by its U.S. companies. A significant casualty treaty (casualty catastrophe) in effect as of January 1, 2022 provides significant protection for losses between $10 million and $75 million from single events with claims involving two or more insurable interests or for systemic events involving multiple insureds and/or policy years. The treaty also covers casualty contingency losses in excess of $5 million and up to $100 million. For losses involving two or more claimants for primary workers’ compensation business, coverage is generally in place for losses between $10 million and $550 million. For excess workers’ compensation business, such coverage is generally in place for losses between $25 million and $550 million. Our workers’ compensation catastrophe reinsurance program is a shared cover for both excess and primary workers’ compensation business.
- Facultative reinsurance - The Company also purchases facultative reinsurance on certain individual policies or risks that are in excess of treaty reinsurance capacity.
- Other reinsurance - Depending on the business, the Company purchases specific additional reinsurance to supplement the above programs.
- Effective January 1, 2022, Lifson Re will continue to be a participant on the majority of the Company’s reinsurance placements for a 22.5% share of the placed amounts. This pertains to all traditional treaty reinsurance/retrocessional placements for both property and casualty business where there is more than one open market reinsurer participating. Lifson Re has been capitalized with more than $250 million of equity from a small group of sophisticated global investors with long-term investment horizons, including a minority participation by the Company. Lifson Re will participate on a fully collateralized basis.

The Company places a number of its casualty treaties on a “risk attaching” basis. Under risk attaching treaties, all claims from policies incepting during the period of the reinsurance contract are covered even if they occur after the expiration date of the reinsurance contract. If the Company is unable to renew or replace its existing reinsurance coverage, protection for unexpired policies would remain in place until their expiration. In such case, the Company could revise its underwriting strategy for new business to reflect the absence of reinsurance protection. The casualty catastrophe treaty highlighted above was purchased on a losses discovered basis. Property catastrophe and workers’ compensation catastrophe reinsurance is generally placed on a “losses occurring basis,” whereby only claims occurring during the period are covered. If the Company is unable to renew or replace these reinsurance coverages, unexpired policies would not be protected, though we frequently have the option to purchase run-off coverage in our treaties.

Following is a summary of earned premiums and loss and loss expenses ceded to reinsurers for each of the three years ended December 31, 2021:

	Year Ended December 31,		
(In thousands)	**2021**	**2020**	**2019**
Earned premiums	$ 1,805,341	$ 1,499,948	$ 1,328,843
Losses and loss expenses	1,236,960	955,630	836,831

Ceded earned premiums increased 20.4% in 2021 to $1,805 million. The ceded losses and loss expenses ratio increased 5 points to 69% in 2021 from 64% in 2020.

The following table presents the credit quality of amounts due from reinsurers as of December 31, 2021. Amounts due from reinsurers are net of reserves for uncollectible reinsurance of $1 million in the aggregate.

(In thousands)

Reinsurer	**Rating (1)**		**Amount**
Amounts due in excess of $20 million:			
Munich Re	AA-	$	313,150
Lloyd's of London	A+		308,119
Partner Re	A+		231,251
Alleghany Group	A+		204,699
Swiss Re	AA-		203,165
Hannover Re Group	AA-		167,906
Everest Re	A+		162,432
Renaissance Re	A+		138,408
Berkshire Hathaway	AA+		126,806
Axis Capital	A+		88,938
Liberty Mutual	A		85,367
Arch Capital Group	A+		58,156
Korean Re	A		55,643
Fairfax Financial	A-		43,975
Axa Insurance	AA-		40,014
Markel Corp Group	A		26,737
Sompo Holdings Group	A+		24,220
Helvetia Holdings Group	A+		23,986
Other reinsurers:			
Rated A- or better			188,195
Secured (2)			200,969
All Others			25,365
Subtotal		$	2,717,501
Residual market pools (3)			213,238
Allowance for expected credit losses			(7,713)
Total		$	2,923,026

(1) S&P rating, or if not rated by S&P, A.M. Best rating.

(2) Secured by letters of credit or other forms of collateral.

(3) Many states require licensed insurers that provide workers' compensation insurance to participate in programs that provide workers' compensation to employers that cannot procure coverage from an insurer on a voluntary basis. Insurers can fulfill this residual market obligation by participating in pools where results are shared by the participating companies. The Company acts as a servicing carrier for workers' compensation pools in certain states. As a servicing carrier, the Company writes residual market business directly and then cedes 100% of this business to the respective pool. As a servicing carrier, the Company receives fee income for its services. The Company does not retain underwriting risk, and credit risk is limited as ceded balances are jointly shared by all the pool members.

Contractual Obligations

Following is a summary of the Company's contractual obligations as of December 31, 2021:

(In thousands) Estimated Payments By Periods	2022	2023	2024	2025	2026	Thereafter
Gross reserves for losses	$ 4,077,441	$ 2,861,773	$ 2,149,219	$ 1,576,905	$ 1,113,635	$ 4,079,739
Operating lease obligations	44,962	43,674	37,663	28,109	21,486	68,019
Purchase obligations	137,509	75,875	46,803	46,117	46,538	729
Subordinated debentures	—	—	—	—	—	1,035,000
Senior notes and other debt	426,503	—	6,078	4,485	—	1,820,000
Interest payments	128,569	123,293	123,293	123,293	123,293	3,212,406
Other long-term liabilities	2,719	2,446	2,188	1,999	1,826	21,421
Total	$ 4,817,703	$ 3,107,061	$ 2,365,244	$ 1,780,908	$ 1,306,778	$ 10,237,314

The estimated payments for reserves for losses and loss expenses in the above table represent the projected (undiscounted) payments for gross loss and loss expense reserves related to losses incurred as of December 31, 2021. The estimated payments in the above table do not consider payments for losses to be incurred in future periods. These amounts include reserves for reported losses and reserves for incurred but not reported losses. Estimated amounts recoverable from reinsurers are not reflected. The estimated payments by year are based on historical loss payment patterns.The actual payments may differ from the estimated amounts due to changes in ultimate loss reserves and in the timing of the settlement of those reserves. In addition, at December 31, 2021, the Company had commitments to invest up to $621 million and $139 million in certain investment funds and real estate construction projects, respectively. These amounts are not included in the above table.

The Company utilizes letters of credit to back certain reinsurance payments and obligations. Outstanding letters of credit were $5 million as of December 31, 2021. The Company has made certain guarantees to state regulators that the statutory capital of certain subsidiaries will be maintained above certain minimum levels.

Off-Balance Sheet Arrangements

An off-balance sheet arrangement is any transaction, agreement or other contractual arrangement involving an unconsolidated entity under which a company has (1) made guarantees, (2) a retained or contingent interest in transferred assets, (3) an obligation under derivative instruments classified as equity or (4) any obligation arising out of a material variable interest in an unconsolidated entity that provides financing, liquidity, market risk or credit risk support to the Company, or that engages in leasing, hedging or research and development arrangements with the Company. The Company has no arrangements of these types that management believes may have a material current or future effect on our financial condition, liquidity or results of operations.

ITEM 7A. QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK

Market Risk. The fair value of the Company’s investments is subject to risks of fluctuations in credit quality and interest rates. The Company uses various models and stress test scenarios to monitor and manage interest rate risk. The Company attempts to manage its interest rate risk by maintaining an appropriate relationship between the effective duration of the investment portfolio and the approximate duration of its liabilities (i.e., policy claims and debt obligations). The effective duration for the fixed maturity portfolio (including cash and cash equivalents) was 2.4 years at both December 31, 2021 and 2020.

In addition, the fair value of the Company’s international investments is subject to currency risk. The Company attempts to manage its currency risk by matching its foreign currency assets and liabilities where considered appropriate.

The following table outlines the groups of fixed maturity securities and their effective duration at December 31, 2021:

($ in thousands)	Effective Duration (Years)		Fair Value
Mortgage-backed securities	4.2	$	1,073,536
State and municipal	3.6		3,384,098
Corporate	3.1		5,595,675
Foreign government	2.6		1,214,901
U.S. government and government agencies	1.8		855,343
Loans receivable	1.6		116,534
Asset-backed securities	0.9		4,490,565
Cash and cash equivalents	0.0		1,568,843
Total	2.4	$	18,299,495

Duration is a common measure of the price sensitivity of fixed maturity securities to changes in interest rates. The Company determines the estimated change in fair value of the fixed maturity securities, assuming parallel shifts in the yield curve for treasury securities while keeping spreads between individual securities and treasury securities static. The estimated fair value at specified levels at December 31, 2021 would be as follows:

(In thousands)

Change in interest rates:		Estimated Fair Value		Change in Fair Value
300 basis point rise	$	16,979,390	$	(1,320,105)
200 basis point rise		17,405,419		(894,076)
100 basis point rise		17,850,047		(449,448)
Base scenario		18,299,495		—
100 basis point decline		18,746,633		447,138
200 basis point decline		19,236,343		936,848
300 basis point decline		19,792,462		1,492,967

Arbitrage investing differs from other types of investments in that its focus is on transactions and events believed likely to bring about a change in value over a relatively short time period (usually four months or less). The Company believes that this makes arbitrage investments less vulnerable to changes in general stock market conditions. Potential changes in market conditions are also mitigated by the implementation of hedging strategies, including short sales.

Additionally, the arbitrage positions are generally hedged against market declines by purchasing put options, selling call options or entering into swap contracts. The Company's merger arbitrage securities are primarily exposed to the risk of completion of announced deals, which are subject to regulatory as well as transactional and other risks.

ITEM 8. FINANCIAL STATEMENTS AND SUPPLEMENTARY DATA

Report of Independent Registered Public Accounting Firm

To the Stockholders and Board of Directors
W. R. Berkley Corporation:

Opinion on the Consolidated Financial Statements

We have audited the accompanying consolidated balance sheets of W. R. Berkley Corporation and subsidiaries (the Company) as of December 31, 2021 and 2020, the related consolidated statements of income, comprehensive income, stockholders' equity, and cash flows for each of the years in the three-year period ended December 31, 2021, and the related notes and financial statement schedules II to VI (collectively, the consolidated financial statements). In our opinion, the consolidated financial statements present fairly, in all material respects, the financial position of the Company as of December 31, 2021 and 2020, and the results of its operations and its cash flows for each of the years in the three-year period ended December 31, 2021, in conformity with U.S. generally accepted accounting principles.

We also have audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States) (PCAOB), the Company's internal control over financial reporting as of December 31, 2021, based on criteria established in *Internal Control - Integrated Framework (2013)* issued by the Committee of Sponsoring Organizations of the Treadway Commission, and our report dated February 24, 2022 expressed an unqualified opinion on the effectiveness of the Company's internal control over financial reporting.

Basis for Opinion

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

We conducted our audits in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the consolidated financial statements are free of material misstatement, whether due to error or fraud. Our audits included performing procedures to assess the risks of material misstatement of the 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. We believe that our audits provide a reasonable basis for our opinion.

Critical Audit Matter

The critical audit matter communicated below is a matter arising from the current period audit of the consolidated financial statements that was communicated or required to be communicated to the audit committee and that: (1) relates to accounts or disclosures that are material to the consolidated financial statements and (2) involved our especially challenging, subjective, or complex judgments. The communication of a critical audit matter 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.

Reserves for losses and loss expenses

As discussed in Notes 1 and 13 to the consolidated financial statements, the Company estimates the reserves for losses and loss expenses (reserves) using a variety of actuarial techniques and methods. The key assumptions used to arrive at the best estimate of recorded reserves are expected loss ratios, rate of loss cost inflation, reported and paid loss emergence patterns, loss frequency and severity, and the loss reporting lag. Such amounts are adjusted for certain qualitative factors. The reserves as of December 31, 2021 were $15,391 million.

We identified the assessment of the estimate of reserves as a critical audit matter because it involved significant measurement uncertainty, which required complex auditor judgement. Specialized actuarial skills and knowledge were required to evaluate the actuarial method or methods and assumptions used. Assumptions included loss development factors; the weighting of actuarial methods when more than one was used; the impact of qualitative factors; and whether payments are fixed and reliably determinable for certain reserves subject to discounting.

The following are the primary procedures we performed to address the critical audit matter. We evaluated the design and tested the operating effectiveness of certain internal controls over the Company's reserving process. This included controls over the Company's process to develop the Company's best estimate of reserves based on actuarial methodologies and assumptions employed by the Company's actuaries. We involved actuarial professionals with specialized skills and knowledge, who assisted in:

- examining the Company's actuarial methodologies for compliance with Actuarial Standards of Practice;
- evaluating the Company's ability to discount certain reserves by comparing the expected payout pattern of claims paid to actual claims paid;
- evaluating the Company's actuarial point estimate by performing independent actuarial analyses for certain of the larger, more complex businesses;
- evaluating the Company's actuarial point estimate by examining the Company actuaries' process, and certain key assumptions for the remaining businesses;
- developing an independent range of reserves based on actuarial methodologies and assumptions and comparing to the Company's recorded reserves;
- evaluating the Company's recorded reserves and year-over-year movements of the Company's reserves relative to, and within, the independently developed range of reserves.

/S/ KPMG LLP

We have served as the Company's auditor since 1972.

New York, New York
February 24, 2022

W. R. BERKLEY CORPORATION AND SUBSIDIARIES
CONSOLIDATED STATEMENTS OF INCOME

(In thousands, except per share data)	Year Ended December 31, 2021	2020	2019
REVENUES:			
Net premiums written	$ 8,862,867	$ 7,262,437	$ 6,863,499
Change in net unearned premiums	(756,836)	(331,594)	(230,211)
Net premiums earned	8,106,031	6,930,843	6,633,288
Net investment income	671,618	583,821	645,614
Net investment gains:			
Net realized and unrealized gains on investments	106,958	73,514	120,703
Change in allowance for expected credit losses on investments	(16,326)	29,486	—
Net investment gains	90,632	103,000	120,703
Revenues from non-insurance businesses	489,151	389,888	406,541
Insurance service fees	93,857	88,777	92,680
Other income	4,177	2,596	3,370
Total revenues	9,455,466	8,098,925	7,902,196
OPERATING COSTS AND EXPENSES:			
Losses and loss expenses	4,953,960	4,468,706	4,131,116
Other operating costs and expenses	2,599,270	2,390,392	2,362,082
Expenses from non-insurance businesses	472,151	384,488	402,669
Interest expense	147,180	150,537	153,409
Total operating costs and expenses	8,172,561	7,394,123	7,049,276
Income before income taxes	1,282,905	704,802	852,920
Income tax expense	(251,890)	(171,817)	(168,935)
Net income before noncontrolling interests	1,031,015	532,985	683,985
Noncontrolling interests	(8,525)	(2,315)	(2,041)
Net income to common stockholders	$ 1,022,490	$ 530,670	$ 681,944
NET INCOME PER SHARE:			
Basic	$ 5.53	$ 2.84	$ 3.58
Diluted	$ 5.48	$ 2.81	$ 3.52

See accompanying notes to consolidated financial statements.

W. R. BERKLEY CORPORATION AND SUBSIDIARIES
CONSOLIDATED STATEMENTS OF COMPREHENSIVE INCOME

	Year Ended December 31,		
(In thousands)	**2021**	**2020**	**2019**
Net income before noncontrolling interests	$ 1,031,015	$ 532,985	$ 683,985
Other comprehensive (loss) gain.:			
Change in unrealized translation adjustments	(20,969)	29,927	37,166
Change in unrealized investment (losses) gains, net of taxes	(198,812)	140,250	215,902
Other comprehensive (loss) gain	(219,781)	170,177	253,068
Comprehensive income	811,234	703,162	937,053
Comprehensive income to the noncontrolling interest	(8,523)	(2,313)	(2,144)
Comprehensive income to common stockholders	$ 802,711	$ 700,849	$ 934,909

See accompanying notes to consolidated financial statements.

W. R. BERKLEY CORPORATION AND SUBSIDIARIES
CONSOLIDATED BALANCE SHEETS

(In thousands, except share data)	December 31, 2021	2020
Assets		
Investments:		
Fixed maturity securities (amortized cost of $16,471,304 and $13,755,858; allowance for expected credit losses of $22,625 and $2,580 at December 31, 2021 and 2020)	$ 16,602,673	$ 14,159,369
Investment funds	1,480,612	1,309,430
Real estate	1,852,508	1,960,914
Arbitrage trading account	1,179,606	341,473
Equity securities	941,243	625,667
Loans receivable (net of allowance for expected credit losses of $1,718 and $5,437 at December 31, 2021 and 2020)	115,172	84,913
Total investments	22,171,814	18,481,766
Cash and cash equivalents	1,568,843	2,372,366
Premiums and fees receivable (net of allowance for expected credit losses of $25,218 and $22,883 at December 31, 2021 and 2020)	2,522,972	2,167,799
Due from reinsurers (net of allowance for expected credit losses of $7,713 and $7,801 at December 31, 2021 and 2020)	2,923,026	2,424,502
Deferred policy acquisition costs	676,145	556,168
Prepaid reinsurance premiums	676,915	648,376
Trading account receivable from brokers and clearing organizations	—	524,727
Property, furniture and equipment	419,883	405,930
Goodwill	169,652	169,652
Accrued investment income	122,938	120,464
Current federal and foreign income taxes	23,570	5,893
Deferred federal and foreign income taxes	57,425	29,055
Other assets	753,231	700,215
Total assets	$ 32,086,414	$ 28,606,913
Liabilities and Equity		
Liabilities:		
Reserves for losses and loss expenses	$ 15,390,888	$ 13,784,430
Unearned premiums	4,847,160	4,073,191
Due to reinsurers	514,980	426,124
Trading account securities sold but not yet purchased	1,169	10,048
Trading account payable to brokers and clearing organizations	53,636	—
Current federal and foreign income taxes	21,068	41,282
Deferred federal and foreign income taxes	17,470	42,161
Senior notes and other debt	2,259,416	1,623,025
Subordinated debentures	1,007,652	1,102,309
Other liabilities	1,305,245	1,178,546
Total liabilities	25,418,684	22,281,116
Equity:		
Preferred stock, par value $.10 per share:		
Authorized 5,000,000 shares; issued and outstanding — none	—	—
Common stock, par value $.20 per share:		
Authorized 750,000,000 shares, issued and outstanding, net of treasury shares, 176,780,588 and 177,825,150 shares, respectively	70,535	70,535
Additional paid-in capital	1,016,372	1,012,483
Retained earnings	9,015,135	8,348,381
Accumulated other comprehensive loss	(281,955)	(62,172)
Treasury stock, at cost, 175,895,912 and 174,851,350 shares, respectively	(3,167,076)	(3,058,425)
Total common stockholders' equity	6,653,011	6,310,802
Noncontrolling interests	14,719	14,995
Total equity	6,667,730	6,325,797
Total liabilities and equity	$ 32,086,414	$ 28,606,913

See accompanying notes to consolidated financial statements.

W. R. BERKLEY CORPORATION AND SUBSIDIARIES
CONSOLIDATED STATEMENTS OF STOCKHOLDERS' EQUITY

(In thousands, except per share data)	Year Ended December 31, 2021	2020	2019
COMMON STOCK:			
Beginning and end of period	$ 70,535	$ 70,535	$ 70,535
ADDITIONAL PAID IN CAPITAL:			
Beginning of period	$ 1,012,483	$ 1,056,042	$ 1,039,633
Restricted stock units issued	(44,041)	(38,491)	(32,370)
Restricted stock units expensed	47,930	48,567	48,779
Change in controlling financial interest of a subsidiary	—	(53,635)	—
End of period	$ 1,016,372	$ 1,012,483	$ 1,056,042
RETAINED EARNINGS:			
Beginning of period	$ 8,348,381	$ 7,932,372	$ 7,558,619
Cumulative effect adjustment resulting from changes in accounting principles	—	(30,514)	—
Net income to common stockholders	1,022,490	530,670	681,944
Dividends ($2.01, $0.47, and $1.68 per share, respectively)	(355,736)	(84,147)	(308,191)
End of period	$ 9,015,135	$ 8,348,381	$ 7,932,372
ACCUMULATED OTHER COMPREHENSIVE LOSS:			
Unrealized investment gains (losses):			
Beginning of period	$ 289,714	$ 124,514	$ (91,491)
Cumulative effect adjustment resulting from changes in accounting principles	—	24,952	—
Change in unrealized (losses) gains on securities without an allowance for expected credit losses	(208,938)	108,244	215,636
Change in unrealized gains on securities with an allowance for expected credit losses	10,124	32,004	369
End of period	90,900	289,714	124,514
Currency translation adjustments:			
Beginning of period	(351,886)	(381,813)	(418,979)
Net change in period	(20,969)	29,927	37,166
End of period	(372,855)	(351,886)	(381,813)
Total accumulated other comprehensive loss	$ (281,955)	$ (62,172)	$ (257,299)
TREASURY STOCK:			
Beginning of period	$ (3,058,425)	$ (2,726,711)	$ (2,720,466)
Stock exercised/vested	13,264	13,917	11,431
Stock issued	511	726	549
Stock repurchased	(122,426)	(346,357)	(18,225)
End of period	$ (3,167,076)	$ (3,058,425)	$ (2,726,711)
NONCONTROLLING INTERESTS:			
Beginning of period	$ 14,995	$ 43,403	$ 41,947
Distributions	(8,799)	(30,721)	(688)
Net income	8,525	2,315	2,041
Other comprehensive (loss) income, net of tax	(2)	(2)	103
End of period	$ 14,719	$ 14,995	$ 43,403

See accompanying notes to consolidated financial statements.

W. R. BERKLEY CORPORATION AND SUBSIDIARIES
CONSOLIDATED STATEMENTS OF CASH FLOWS

(In thousands)	Year Ended December 31, 2021	2020	2019
CASH FROM OPERATING ACTIVITIES:			
Net income to common stockholders	$ 1,022,490	$ 530,670	$ 681,944
Adjustments to reconcile net income to net cash from operating activities:			
Net investment gains	(90,632)	(103,000)	(120,703)
Depreciation and amortization	129,682	135,065	113,387
Noncontrolling interests	8,525	2,315	2,041
Investment funds	(220,015)	(54,253)	(69,194)
Stock incentive plans	46,680	49,658	49,274
Change in:			
Arbitrage trading account	(268,649)	(67,943)	(26,553)
Premiums and fees receivable	(364,395)	(173,618)	(189,151)
Reinsurance accounts	(433,644)	(313,525)	(165,898)
Deferred policy acquisition costs	(121,663)	(38,691)	(20,057)
Current income taxes	(43,890)	49,021	(12,530)
Deferred income taxes	7,630	(34,057)	7,130
Reserves for losses and loss expenses	1,635,774	1,176,049	612,254
Unearned premiums	786,627	415,956	301,355
Other	89,467	43,039	(19,506)
Net cash from operating activities	2,183,987	1,616,686	1,143,793
CASH FLOWS (USED IN) FROM INVESTING ACTIVITIES:			
Proceeds from sale of fixed maturity securities	1,842,139	3,832,555	2,093,271
Proceeds from sale of equity securities	126,980	114,763	79,963
Distributions from (contributions to) investment funds	101,050	(3,042)	194,663
Proceeds from maturities and prepayments of fixed maturity securities	6,067,230	3,864,327	2,933,980
Purchase of fixed maturity securities	(10,716,748)	(7,551,591)	(5,352,886)
Purchase of equity securities	(464,645)	(253,031)	(172,978)
Real estate sold (purchased)	166,886	178,934	(146,752)
Change in loans receivable	(27,421)	1,467	3,481
Net additions to property, furniture and equipment	(66,634)	(38,171)	(60,457)
Change in balances due from security brokers	(17,983)	(26,515)	2,844
Net cash (used in) from investing activities	(2,989,146)	119,696	(424,871)
CASH FLOWS FROM (USED IN) FINANCING ACTIVITIES:			
Net proceeds from issuance of debt	1,034,107	741,637	290,974
Repayment and redemption of debt	(504,952)	(652,751)	(456,360)
Cash dividends to common stockholders	(355,736)	(84,147)	(308,191)
Purchase of common treasury shares	(122,426)	(346,357)	(18,225)
Other, net	(45,162)	(56,225)	(21,391)
Net cash from (used in) financing activities	5,831	(397,843)	(513,193)
Net impact on cash due to change in foreign exchange rates	(4,195)	10,117	379
Net (decrease) increase in cash and cash equivalents	(803,523)	1,348,656	206,108
Cash and cash equivalents at beginning of year	2,372,366	1,023,710	817,602
Cash and cash equivalents at end of year	$ 1,568,843	$ 2,372,366	$ 1,023,710

See accompanying notes to consolidated financial statements.

W. R. BERKLEY CORPORATION AND SUBSIDIARIES
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

For the years ended December 31, 2021, 2020 and 2019

(1) Summary of Significant Accounting Policies

(A) Principles of consolidation and basis of presentation

The consolidated financial statements, which include the accounts of W. R. Berkley Corporation and its subsidiaries (the "Company"), have been prepared on the basis of U.S. generally accepted accounting principles ("GAAP"). All significant intercompany transactions and balances have been eliminated. Reclassifications have been made in the 2020 and 2019 financial statements as originally reported to conform to the presentation of the 2021 financial statements.

The preparation of financial statements in conformity with GAAP requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosures of contingent assets and liabilities at the date of the financial statements and the revenues and expenses reflected during the reporting period. The most significant items on our balance sheet that involve a greater degree of accounting estimates that are subject to change in the future are the valuation of investments, allowance for expected credit losses on investments, reserves for losses and loss expenses and premium estimates. Actual results could differ from those estimates.

(B) Revenue recognition

Insurance premiums are recognized as written at the inception of the policy. Reinsurance premiums are estimated based upon information received from ceding companies, and subsequent differences from such estimates are recorded in the period they are determined. Insurance and reinsurance premiums are primarily earned on a pro rata basis over the policy term. Fees for services are earned over the period that the services are provided. Premiums and fees receivable are reported net of an allowance for expected credit losses, with the allowance being estimated based on current and future expected conditions, historical loss data and specific identification of collectability concerns where applicable. Changes in the allowance are reported within other operating costs and expenses.

Audit premiums are recognized when they are reliably determinable. The change in accruals for earned but unbilled audit premiums increased (decreased) net premiums written and premiums earned by $10 million, $(27) million and $4 million in 2021, 2020 and 2019, respectively.

Revenues from non-insurance businesses are derived from businesses engaged in the distribution of promotional merchandise, world-wide textile solutions, and aircraft services provided to the general, commercial and military aviation markets. These aircraft services include (i) the distribution, manufacturing, repair and overhaul of aircraft parts and components, (ii) the sale of new and used aircraft, and (iii) avionics, fuel, maintenance, storage and charter services. Revenue is recognized upon the shipment of products and parts, the delivery of aircraft, the delivery of fuel, and over the completion period of services.

Insurance service fee revenue represents servicing fees for program administration and claims management services provided by the Company, including workers' compensation assigned risk plans, as well as insurance brokerage and risk management services. Fees for program administration, claims management and risk management services are primarily recognized ratably over the related contract period for which the underlying services are rendered. Commissions for insurance brokerage are generally recognized when the underlying insurance policy is effective.

(C) Cash and cash equivalents

Cash equivalents consist of funds invested in money market accounts and investments with an effective maturity of three months or less when purchased.

(D) Investments

Fixed maturity securities classified as available for sale are carried at estimated fair value, with unrealized gains and losses, net of applicable income taxes, excluded from earnings and reported as a component of comprehensive income and a separate component of stockholders' equity. Fixed maturity securities that the Company has the positive intent and ability to hold to maturity are classified as held to maturity and reported at amortized cost. Investment income from fixed maturity securities is recognized based on the constant effective yield method. Premiums and discounts on mortgage-backed securities are adjusted for the effects of actual and anticipated prepayments on a retrospective basis.

Equity securities with readily determinable fair values are measured at fair value, with changes in the fair value recognized in net income within net realized and unrealized gains on investments.

Fixed maturity securities that the Company purchased with the intent to sell in the near-term are classified as trading account securities and are reported at estimated fair value. Realized and unrealized gains and losses from trading activity are reported as net investment income and are recorded at the trade date. Short sales and short call options are presented as trading securities sold but not yet purchased. Unsettled trades and the net margin balances held by the clearing broker are presented as a trading account receivable from brokers and clearing organizations.

Investment funds are carried under the equity method of accounting. The Company's share of the earnings or losses of investment funds is primarily reported on a one-quarter lag in order to facilitate the timely completion of the Company's consolidated financial statements.

Loans receivable primarily represent commercial real estate mortgage loans and bank loans and are carried at amortized cost. The accrual of interest on loans receivable is discontinued if the loan is 90 days past due based on the contractual terms of the loan unless the loan is adequately secured and in process of collection. In general, loans are placed on non-accrual status or charged off at an earlier date if collection of principal or interest is considered doubtful. Interest on these loans is accounted for on a cash basis until qualifying for return to accrual status. Loans are returned to accrual status when all principal and interest amounts contractually due are brought current and future payments are reasonably assured.

Fair value is defined as “the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date.” Fair value of investments is determined based on a fair value hierarchy that prioritizes the use of observable inputs over the use of unobservable inputs and requires the use of observable inputs when available. (See Note 12 of the Notes to Consolidated Financial Statements.)

Realized gains or losses represent the difference between the cost of securities sold and the proceeds realized upon sale and are recorded at the trade date. The Company uses primarily the first-in, first-out method to determine the cost of securities sold.

For available for sale securities in an unrealized loss position where the Company intends to sell, or it is more likely than not that it will be required to sell the security before recovery in value, the amortized cost basis is written down to fair value through net investment gains. For available for sale securities in an unrealized loss position where the Company does not intend to sell, or it is more likely than not that it will not be required to sell the security before recovery in value, the Company evaluates whether the decline in fair value has resulted from credit losses or all other factors (non-credit factors). In making this assessment, the Company considers the extent to which fair value is less than amortized cost, changes to the rating of the security by a rating agency, and adverse conditions specifically related to the security, among other factors. If this assessment indicates that a credit loss exists, the present value of cash flows expected to be collected from the security are compared to the amortized cost basis of the security. If the present value of cash flows expected to be collected is less than the amortized cost basis, an allowance for expected credit losses is recorded for the credit loss through net investment gains, limited by the amount that the fair value is less than the amortized cost basis. The allowance is adjusted for any change in expected credit losses and subsequent recoveries through net investment gains. The impairment related to non-credit factors is recognized in comprehensive income (loss).

For financial assets carried at amortized cost, which includes held to maturity securities and loans receivable, the Company estimates an allowance for expected credit losses based on relevant information about past events, including historical loss experience, current conditions and forecasts that affect the expected collectability of the amortized cost of the financial asset. The allowance for expected credit losses is presented as a reduction to amortized cost of the financial asset in the consolidated balance sheet and changes to the estimate for expected credit losses are recognized through net investment gains.

The Company’s credit assessment of allowance for expected credit losses uses a third party model for available for sale and held to maturity securities, as well as loans receivable. The allowance for expected credit losses is generally based on the performance of the underlying collateral under various economic and default scenarios that involve subjective judgments and estimates by management. Modeling these securities involves various factors, such as projected default rates, the nature and realizable value of the collateral, if any, the ability of the issuer to make scheduled payments, historical performance and other relevant economic and performance factors. A discounted cash flow analysis is used to ascertain the amount of the allowance for expected credit losses, if any. In general, the model reverts to the rating-level long-term average marginal default rates based on 10 years of historical data, beyond the forecast period. For other inputs, the model in most cases reverts to the baseline long-term assumptions linearly over 5 years beyond the forecast period. The long-term assumptions are based on the historical averages.

The Company reports accrued investment income separately from fixed maturity securities, and has elected not to measure an allowance for expected credit losses for accrued investment income. Accrued investment income is written off through net investment income at the time the issuer of the bond defaults or is expected to default on payments.

Real estate held for investment purposes is initially recorded at the purchase price, which is generally fair value, and is subsequently reported at cost less accumulated depreciation. Real estate taxes, interest and other costs incurred during development and construction are capitalized. Buildings are depreciated on a straight-line basis over the estimated useful lives of the building. Minimum rental income is recognized on a straight-line basis over the lease term. Income and expenses from real estate are reported as net investment income. The carrying value of real estate is reviewed for impairment and an impairment loss is recognized if the estimated undiscounted cash flows from the use and disposition of the property are less than the carrying value of the property.

(E) Per share data

The Company presents both basic and diluted net income per share ("EPS") amounts. Basic EPS is calculated by dividing net income by weighted average number of common shares outstanding during the year (including 7,728,466 common shares held in a grantor trust). The common shares held in the grantor trust are for delivery upon settlement of vested but mandatorily deferred restricted stock units ("RSUs"). Shares held by the grantor trust do not affect diluted shares outstanding since the shares deliverable under vested RSUs were already included in diluted shares outstanding. Diluted EPS is based upon the weighted average number of basic and common equivalent shares outstanding during the year and is calculated using the treasury stock method for stock incentive plans. Common equivalent shares are excluded from the computation in periods in which they have an anti-dilutive effect.

(F) Deferred policy acquisition costs

Acquisition costs associated with the successful acquisition of new and renewed insurance and reinsurance contracts are deferred and amortized ratably over the terms of the related contracts. Ceding commissions received on reinsurance contracts are netted against acquisition costs and are recognized ratably over the life of the contract. Deferred policy acquisition costs are presented net of unearned ceding commissions. Deferred policy acquisition costs are comprised primarily of commissions, as well as employment-related underwriting costs and premium taxes. Deferred policy acquisition costs are reviewed to determine if they are recoverable from future income and, if not, are charged to expense. The recoverability of deferred policy acquisition costs is evaluated separately by each of our operating companies. Future investment income is taken into account in measuring the recoverability of deferred policy acquisition costs.

(G) Reserves for losses and loss expenses

Reserves for losses and loss expenses are an accumulation of amounts determined on the basis of (1) evaluation of claims for business written directly by the Company; (2) estimates received from other companies for reinsurance assumed by the Company; and (3) estimates for losses incurred but not reported (based on Company and industry experience). These estimates are periodically reviewed and, as experience develops and new information becomes known, the reserves are adjusted as necessary. Such adjustments are reflected in the statements of income in the period in which they are determined. The Company discounts its reserves for excess and assumed workers' compensation claims using a risk-free or statutory rate. (See Note 13 of Notes to Consolidated Financial Statements.)

(H) Reinsurance ceded

The unearned portion of premiums ceded to reinsurers is reported as prepaid reinsurance premiums and earned ratably over the policy term. The estimated amounts of reinsurance recoverable on unpaid losses are reported as due from reinsurers. To the extent any reinsurer does not meet its obligations under reinsurance agreements, the Company must discharge its liability. Amounts due from reinsurers are reflected net of funds held where the right of offset is present. The Company has provided an allowance for expected credit losses for estimated uncollectible reinsurance. The allowance is estimated based on the composition of the recoverable balance, considering reinsurer credit ratings, collateral received from financial institutions and funds withheld arrangements, length of collection periods, probability of default methodology, and specific identification of collectability concerns. Changes in the allowance are reported within losses and loss expenses.

(I) Deposit accounting

Contracts that do not meet the risk transfer requirements of GAAP are accounted for using the deposit accounting method. Under this method, an asset or liability is recognized at the inception of the contract based on consideration paid or received. The amount of the deposit asset or liability is adjusted at subsequent reporting dates using the interest method with a corresponding credit or charge to interest income or expense. Deposit liabilities for assumed reinsurance contracts were $35 million and $38 million at December 31, 2021 and 2020, respectively.

(J) Federal and foreign income taxes

The Company files a consolidated income tax return in the U.S. and foreign tax returns in countries where it has overseas operations. The Company's method of accounting for income taxes is the asset and liability method. Under this method, deferred tax assets and liabilities are measured using tax rates currently in effect or expected to apply in the years in which those temporary differences are expected to reverse. Interest and penalties, if any, are reported as income tax expense. The Company believes there are no tax positions that would require disclosure under GAAP. Deferred tax assets are reduced by a valuation allowance if it is more likely than not that all or a portion of the deferred tax assets will not be realized.

(K) Foreign currency

Gains and losses resulting from foreign currency transactions (transactions denominated in a currency other than the entity's functional currency) are reported on the statements of income as other operating costs and expenses. Unrealized gains or losses resulting from translating the results of non-U.S. dollar denominated operations are reported in accumulated other comprehensive income. Revenues and expenses denominated in currencies other than U.S. dollars are generally translated at the weighted average exchange rate during the year. Assets and liabilities are translated at the rate of exchange in effect at the balance sheet date.

(L) Property, furniture and equipment

Property, furniture and equipment are carried at cost less accumulated depreciation. Depreciation is calculated using the estimated useful lives of the respective assets. Depreciation expense was $52 million, $53 million and $54 million for 2021, 2020 and 2019, respectively.

(M) Comprehensive income

Comprehensive income encompasses all changes in stockholders' equity (except those arising from transactions with stockholders) and includes net income, net unrealized holding gains or losses on available for sale securities and unrealized foreign currency translation adjustments.

(N) Goodwill and other intangible assets

Goodwill and other intangible assets are tested for impairment on an annual basis and at interim periods where circumstances require. The Company's impairment test as of December 31, 2021 indicated that there were no material impairment losses related to goodwill and other intangible assets. Intangible assets of $85 million and $93 million are included in other assets as of December 31, 2021 and 2020, respectively.

(O) Restricted stock units

The costs resulting from all share-based payment transactions with employees are recognized in the consolidated financial statements using a fair-value-based measurement method. Compensation cost is recognized for financial reporting purposes over the period in which the employee is required to provide service in exchange for the award (generally the vesting period).

(P) Statements of cash flows

Interest payments were $141 million, $155 million and $160 million in 2021, 2020 and 2019, respectively. Income taxes paid were $244 million, $103 million and $125 million in 2021, 2020 and 2019, respectively. Other non-cash items include unrealized investment gains and losses. (See Note 10 of Notes to Consolidated Financial Statements.)

(Q) Recent accounting pronouncements

Recently adopted accounting pronouncements:

All accounting and reporting standards that became effective in 2021 were either not applicable to the Company or their adoption did not have a material impact on the Company.

Accounting and reporting standards that are not yet effective:

All recently issued but not yet effective accounting and reporting standards are either not applicable to the Company or are not expected to have a material impact on the Company.

(2) Consolidated Statements of Comprehensive (Loss) Income

The following tables present the components of the changes in accumulated other comprehensive (loss) income as of and for the years ended December 31, 2021 and 2020:

(In thousands) December 31, 2021	Unrealized Investment Gains (Losses)		Currency Translation Adjustments	Accumulated Other Comprehensive Loss
Changes in AOCI				
Beginning of period	$ 289,714		$ (351,886)	$ (62,172)
Other comprehensive loss before reclassifications	(222,359)		(20,969)	(243,328)
Amounts reclassified from AOCI	23,547		—	23,547
Other comprehensive loss	(198,812)		(20,969)	(219,781)
Unrealized investment loss related to noncontrolling interest	(2)		—	(2)
Ending balance	$ 90,900		$ (372,855)	$ (281,955)
Amounts reclassified from AOCI				
Pre-tax	$ 29,806	(1)	$ —	$ 29,806
Tax effect	(6,259)	(2)	—	(6,259)
After-tax amounts reclassified	$ 23,547		$ —	$ 23,547
Other comprehensive loss				
Pre-tax	$ (254,939)		$ (20,969)	$ (275,908)
Tax effect	56,127		—	56,127
Other comprehensive loss	$ (198,812)		$ (20,969)	$ (219,781)

(In thousands) December 31, 2020	Unrealized Investment Gains (Losses)		Currency Translation Adjustments	Accumulated Other Comprehensive Loss
Changes in AOCI				
Beginning of period	$ 124,514		$ (381,813)	$ (257,299)
Cumulative effect adjustment resulting from changes in accounting principles	24,952		—	24,952
Restated beginning of period	149,466		(381,813)	(232,347)
Other comprehensive income before reclassifications	114,049		29,927	143,976
Amounts reclassified from AOCI	26,201		—	26,201
Other comprehensive income	140,250		29,927	170,177
Unrealized investment loss related to non-controlling interest	(2)		—	(2)
Ending balance	$ 289,714		$ (351,886)	$ (62,172)
Amounts reclassified from AOCI				
Pre-tax	$ 33,166	(1)	$ —	$ 33,166
Tax effect	(6,965)	(2)	—	(6,965)
After-tax amounts reclassified	$ 26,201		$ —	$ 26,201
Other comprehensive income				
Pre-tax	$ 164,645		$ 29,927	$ 194,572
Tax effect	(24,395)		—	(24,395)
Other comprehensive income	$ 140,250		$ 29,927	$ 170,177

(1) Net investment gains in the consolidated statements of income.
(2) Income tax expense in the consolidated statements of income.

(3) Investments in Fixed Maturity Securities

At December 31, 2021 and 2020, investments in fixed maturity securities were as follows:

(In thousands)	Amortized Cost	Allowance for Expected Credit Losses (1)	Gross Unrealized Gains	Gross Unrealized Losses	Fair Value	Carrying Value
December 31, 2021						
Held to maturity:						
State and municipal	$ 69,539	$ (387)	$ 10,813	$ —	$ 79,965	$ 69,152
Residential mortgage-backed	4,829	—	632	—	5,461	4,829
Total held to maturity	74,368	(387)	11,445	—	85,426	73,981
Available for sale:						
U.S. government and government agency	851,128	—	8,509	(4,294)	855,343	855,343
State and municipal:						
Special revenue	2,016,382	—	62,961	(5,706)	2,073,637	2,073,637
State general obligation	388,110	—	23,152	(1,015)	410,247	410,247
Pre-refunded	202,633	—	14,891	(574)	216,950	216,950
Corporate backed	166,943	—	7,191	(1,532)	172,602	172,602
Local general obligation	401,974	—	29,455	(732)	430,697	430,697
Total state and municipal	3,176,042	—	137,650	(9,559)	3,304,133	3,304,133
Mortgage-backed securities:						
Residential	940,744	—	9,896	(11,321)	939,319	939,319
Commercial	125,709	—	3,388	(341)	128,756	128,756
Total mortgage-backed securities	1,066,453	—	13,284	(11,662)	1,068,075	1,068,075
Asset-backed securities	4,504,950	—	4,409	(18,794)	4,490,565	4,490,565
Corporate:						
Industrial	3,231,520	(16)	62,751	(21,092)	3,273,163	3,273,163
Financial	1,739,282	—	30,709	(6,591)	1,763,400	1,763,400
Utilities	396,242	—	13,262	(3,202)	406,302	406,302
Other	154,210	—	125	(1,525)	152,810	152,810
Total corporate	5,521,254	(16)	106,847	(32,410)	5,595,675	5,595,675
Foreign government	1,277,109	(22,222)	7,508	(47,494)	1,214,901	1,214,901
Total available for sale	16,396,936	(22,238)	278,207	(124,213)	16,528,692	16,528,692
Total investments in fixed maturity securities	$ 16,471,304	$ (22,625)	$ 289,652	$ (124,213)	$ 16,614,118	$ 16,602,673

(In thousands)	Amortized Cost	Allowance for Expected Credit Losses (1)	Gross Unrealized Gains	Gross Unrealized Losses	Fair Value	Carrying Value
December 31, 2020						
Held to maturity:						
State and municipal	$ 67,117	$ (798)	$ 13,217	$ —	79,536	$ 66,319
Residential mortgage-backed	6,455	—	1,043	—	7,498	6,455
Total held to maturity	73,572	(798)	14,260	—	87,034	72,774
Available for sale:						
U.S. government and government agency	586,020	—	18,198	(347)	603,871	603,871
State and municipal:						
Special revenue	2,137,162	—	96,924	(714)	2,233,372	2,233,372
State general obligation	417,397	—	33,407	—	450,804	450,804
Pre-refunded	250,081	—	21,472	(162)	271,391	271,391
Corporate backed	206,356	—	8,755	(638)	214,473	214,473
Local general obligation	410,583	—	40,596	(555)	450,624	450,624
Total state and municipal	3,421,579	—	201,154	(2,069)	3,620,664	3,620,664
Mortgage-backed securities:						
Residential	813,187	—	24,664	(5,238)	832,613	832,613
Commercial	181,105	—	6,725	(113)	187,717	187,717
Total mortgage-backed securities	994,292	—	31,389	(5,351)	1,020,330	1,020,330
Asset-backed securities	3,218,048	—	10,035	(33,497)	3,194,586	3,194,586
Corporate:						
Industrial	2,456,516	(518)	115,926	(7,449)	2,564,475	2,564,475
Financial	1,513,943	—	62,947	(987)	1,575,903	1,575,903
Utilities	389,267	—	31,931	(33)	421,165	421,165
Other	109,353	—	696	(11)	110,038	110,038
Total corporate	4,469,079	(518)	211,500	(8,480)	4,671,581	4,671,581
Foreign government	993,268	(1,264)	28,007	(44,448)	975,563	975,563
Total available for sale	13,682,286	(1,782)	500,283	(94,192)	14,086,595	14,086,595
Total investments in fixed maturity securities	$ 13,755,858	$ (2,580)	$ 514,543	$ (94,192)	$ 14,173,629	$ 14,159,369

(1) Represents the amount of impairment that has resulted from credit-related factors. The change in the allowance for expected credit losses, excluding the cumulative effect adjustment resulting from changes in accounting principles, is recognized in the consolidated statements of income. Amount excludes unrealized losses relating to non-credit factors.

The following table presents the rollforward of the allowance for expected credit losses for held to maturity securities for the year ended December 31, 2021 and 2020:

(In thousands)	State and Municipal 2021	State and Municipal 2020
Allowance for expected credit losses, beginning of the period	$ 798	$ —
Cumulative effect adjustment resulting from changes in accounting principles	—	69
Provision for expected credit losses	(411)	729
Allowance for expected credit losses, end of period	$ 387	$ 798

The following table presents the rollforward of the allowance for expected credit losses for available for sale securities for the year ended December 31, 2021 and 2020:

(In thousands)	2021 Foreign Government	2021 Corporate	2021 Total	2020 Foreign Government	2020 Corporate	2020 Total
Allowance for expected credit losses, beginning of period	$ 1,264	$ 518	$ 1,782	$ —	$ —	$ —
Cumulative effect adjustment resulting from changes in accounting principles	—	—	—	35,645	—	35,645
Expected credit losses on securities for which credit losses were not previously recorded	19,072	16	19,088	12,590	7,058	19,648
Expected credit losses (gains) on securities for which credit losses were previously recorded	2,438	(513)	1,925	373	(3,841)	(3,468)
Reduction due to disposals	(552)	(5)	(557)	(47,344)	(2,699)	(50,043)
Allowance for expected credit losses, end of period	$ 22,222	$ 16	$ 22,238	$ 1,264	$ 518	$ 1,782

During the year ended December 31, 2021, the Company increased the allowance for expected credit losses utilizing its credit loss assessment process and inputs used in its credit loss model, primarily due to foreign government securities that had no reserve in prior periods. During the year ended December 31, 2020, the Company decreased the allowance for expected credit losses primarily due to the disposition of securities which previously had an allowance recorded.

The amortized cost and fair value of fixed maturity securities at December 31, 2021, by contractual maturity, are shown below. Actual maturities may differ from contractual maturities because certain issuers may have the right to call or prepay obligations.

(In thousands)	Amortized Cost (1)	Fair Value
Due in one year or less	$ 1,589,823	$ 1,586,470
Due after one year through five years	7,574,884	7,659,231
Due after five years through ten years	4,148,118	4,184,007
Due after ten years	2,086,810	2,110,874
Mortgage-backed securities	1,071,282	1,073,536
Total	$ 16,470,917	$ 16,614,118

(1) Amortized cost is reduced by the allowance for expected credit losses of $387 thousand related to held to maturity securities.

At December 31, 2021 and 2020, there were no investments, other than investments in United States government and government agency securities, which exceeded 10% of common stockholders' equity. At December 31, 2021, investments with a carrying value of $1,853 million were on deposit in custodial or trust accounts, of which $1,213 million was on deposit with insurance regulators, $602 million was on deposit in support of the Company's underwriting activities at Lloyd's, $33 million was on deposit as security for reinsurance clients and $5 million was on deposit as security for letters of credit issued in support of the Company's reinsurance operations.

(4) Investments in Equity Securities

At December 31, 2021 and 2020, investments in equity securities were as follows:

(In thousands)	Cost	Gross Unrealized Gains	Gross Unrealized Losses	Fair Value	Carrying Value
December 31, 2021					
Common stocks	$ 619,896	$ 92,401	$ (16,894)	$ 695,403	$ 695,403
Preferred stocks	250,149	7,874	(12,183)	245,840	245,840
Total	$ 870,045	$ 100,275	$ (29,077)	$ 941,243	$ 941,243
December 31, 2020					
Common stocks	$ 335,617	$ 28,742	$ (14,178)	$ 350,181	$ 350,181
Preferred stocks	180,397	95,581	(492)	275,486	275,486
Total	$ 516,014	$ 124,323	$ (14,670)	$ 625,667	$ 625,667

(5) Arbitrage Trading Account

At December 31, 2021 and 2020, the fair value and carrying value of the arbitrage trading account were $1,180 million and $341 million, respectively. The primary focus of the trading account is merger arbitrage. Merger arbitrage is the business of investing in the securities of publicly held companies which are the targets in announced tender offers and mergers. Arbitrage investing differs from other types of investing in its focus on transactions and events believed likely to bring about a change in value over a relatively short time period (usually four months or less).

The Company uses put options and call options in order to mitigate the impact of potential changes in market conditions on the merger arbitrage trading account. These options are reported at fair value. As of December 31, 2021, the fair value of short option contracts outstanding was $574 thousand (notional amount of $30.3 million). Other than with respect to the use of these trading account securities, the Company does not make use of derivatives.

(6) Net Investment Income

Net investment income consists of the following:

(In thousands)	2021	2020	2019
Investment income earned on:			
Fixed maturity securities, including cash and cash equivalents and loans receivable	$ 382,001	$ 426,563	$ 517,925
Investment funds	220,014	54,253	69,194
Arbitrage trading account	37,676	77,931	34,585
Real estate	7,703	24,027	24,218
Equity securities	32,020	10,172	5,439
Gross investment income	679,414	592,946	651,361
Investment expense	(7,796)	(9,125)	(5,747)
Net investment income	$ 671,618	$ 583,821	$ 645,614

(7) Investment Funds

The Company evaluates whether it is an investor in a variable interest entity ("VIE"). Such entities do not have sufficient equity at risk to finance their activities without additional subordinated financial support, or the equity investors, as a group, do not have the characteristics of a controlling financial interest (primary beneficiary). The Company determines whether it is the primary beneficiary of an entity subject to consolidation based on a qualitative assessment of the VIE's capital structure, contractual terms, nature of the VIE's operations and purpose, and the Company's relative exposure to the related risks of the VIE on the date it becomes initially involved in the VIE and on an ongoing basis. The Company is not the primary beneficiary in any of its investment funds, and accordingly, carries its interests in investments funds under the equity method of accounting.

The Company’s maximum exposure to loss with respect to these investments is limited to the carrying amount reported on the Company’s consolidated balance sheet and its unfunded commitments of $621 million as of December 31, 2021.

Investment funds consist of the following:

	Carrying Value as of December 31,		Income (Losses)		
(In thousands)	**2021**	**2020**	**2021**	**2020**	**2019**
Financial services	$ 431,818	$ 434,437	$ 98,893	$ 34,763	$ 29,005
Real estate	273,690	310,783	29,484	7,543	19,154
Energy	150,224	140,935	22,118	(11,039)	(18,136)
Transportation	336,688	190,125	42,424	(616)	14,193
Other funds	288,192	233,150	27,095	23,602	24,978
Total	$ 1,480,612	$ 1,309,430	$ 220,014	$ 54,253	$ 69,194

The Company's share of the earnings or losses of investment funds is primarily reported on a one-quarter lag in order to facilitate the timely completion of the Company's consolidated financial statements.

Financial services investment funds include the Company’s minority investment in Lifson Re, a Bermuda reinsurance company. Effective January 1, 2021, Lifson Re participates on a fully collateralized basis in a majority of the Company’s reinsurance placements for a 22.5% share of placed amounts. This pertains to all traditional reinsurance/retrocessional placements for both property and casualty business where there is more than one open market reinsurer participating. For the year ended December 31, 2021, the Company ceded approximately $245 million of written premiums to Lifson Re.

Other funds include deferred compensation trust assets of $34 million and $0 in 2021 and 2020, respectively. These assets support other liabilities reflected in the balance sheet of an equal amount for employees who have elected to defer a portion of their compensation.

(8) Real Estate

Investment in real estate represents directly owned property held for investment, as follows:

	As of December 31,	
(In thousands)	**2021**	**2020**
Properties in operation	$ 1,626,826	$ 1,738,144
Properties under development	225,682	222,770
Total	$ 1,852,508	$ 1,960,914

In 2021, properties in operation included a long-term ground lease in Washington, D.C., an office complex in New York City, an office building in London, U.K., and the completed portion of a mixed-use project in Washington D.C. Properties in operation are net of accumulated depreciation and amortization of $57,391,000 and $86,970,000 as of December 31, 2021 and 2020, respectively. Related depreciation expense was $19,688,000 and $27,090,000 for the years ended December 31, 2021 and 2020, respectively. Future minimum rental income expected on operating leases relating to properties in operation is $58,772,835 in 2022, $55,749,048 in 2023, $54,826,385 in 2024, $52,251,635 in 2025, $50,176,066 in 2026 and $630,260,741 thereafter.

During the second quarter of 2021, the Company sold two office buildings in Palm Beach and West Palm Beach, Florida. One of these sales also resulted in a $102 million reduction of the Company's non-recourse debt that was supporting the property.

A mixed-use project in Washington, D.C. has been under development in 2021 and 2020, with the completed portion as noted above reported in properties in operation as of December 31, 2021.

(9) Loans Receivable

At December 31, 2021 and 2020, loans receivable were as follows:

(In thousands)	As of December 31, 2021	As of December 31, 2020
Amortized cost (net of allowance for expected credit losses):		
Real estate loans	$ 89,431	$ 51,910
Commercial loans	25,741	33,003
Total	$ 115,172	$ 84,913
Fair value:		
Real estate loans	$ 90,793	$ 53,593
Commercial loans	25,741	33,003
Total	$ 116,534	$ 86,596

The real estate loans are secured by commercial and residential real estate primarily located in New York. These loans generally earn interest at fixed or stepped interest rates and have maturities through 2026. The commercial loans are with small business owners who have secured the related financing with the assets of the business. Commercial loans primarily earn interest on a fixed basis and have varying maturities generally not exceeding 10 years.

Loans receivable in non-accrual status was $0.2 million as of December 31, 2021 and 2020.

The following table presents the rollforward of the allowance for expected credit losses for loans receivable for the year ended December 31, 2021 and 2020:

	2021			2020		
(In thousands)	Real Estate Loans	Commercial Loans	Total	Real Estate Loans	Commercial Loans	Total
Allowance for expected credit losses, beginning of period	$ 1,683	$ 3,754	$ 5,437	$ 1,502	$ 644	$ 2,146
Cumulative effect adjustment resulting from changes in accounting principles	—	—	—	(905)	548	(357)
Provision for expected credit losses	(321)	(3,398)	(3,719)	1,086	2,562	3,648
Allowance for expected credit losses, end of period	$ 1,362	$ 356	$ 1,718	$ 1,683	$ 3,754	$ 5,437

The Company monitors the performance of its loans receivable and assesses the ability of the borrower to pay principal and interest based upon loan structure, underlying property values, cash flow and related financial and operating performance of the property and market conditions.

In evaluating the real estate loans, the Company considers their credit quality indicators, including loan to value ratios, which compare the outstanding loan amount to the estimated value of the property, the borrower's financial condition and performance with respect to loan terms, the position in the capital structure, the overall leverage in the capital structure and other market conditions.

(10) Net Investment Gains

Net investment gains were as follows:

(In thousands)	2021	2020	2019
Net investment gains:			
Fixed maturity securities:			
Gains	$ 18,981	$ 27,819	$ 23,900
Losses	(6,975)	(56,096)	(13,636)
Equity securities (1):			
Net realized gains on investment sales	16,365	32,647	23,306
Change in unrealized (losses) gains	(38,455)	(25,868)	85,292
Investment funds	44,778	31,481	(2,825)
Real estate	94,911	101,554	5,965
Loans receivable	(881)	—	(970)
Other	(21,766)	(38,023)	(329)
Net realized and unrealized gains on investments in earnings before allowance for expected credit losses	106,958	73,514	120,703
Change in allowance for expected credit losses on investments (2):			
Fixed maturity securities	(20,045)	33,134	—
Loans receivable	3,719	(3,648)	—
Change in allowance for expected credit losses on investments	(16,326)	29,486	—
Net investment gains	90,632	103,000	120,703
Income tax expense	(17,710)	(21,630)	(25,348)
After-tax net investment gains	$ 72,922	$ 81,370	$ 95,355
Change in unrealized investment (losses) gains:			
Fixed maturity securities without allowance for expected credit losses	$ (262,221)	$ 134,129	$ 271,825
Fixed maturity securities with allowance for expected credit losses	10,124	32,004	369
Investment funds	(1,270)	2,280	(2,299)
Other	(1,572)	(3,768)	(7,925)
Total change in unrealized investment (losses) gains	(254,939)	164,645	261,970
Income tax benefit (expense)	56,127	(24,395)	(46,068)
Noncontrolling interests	(1)	(2)	103
After-tax change in unrealized investment (losses) gains	$ (198,813)	$ 140,248	$ 216,005

(1) The net realized gains or losses on investment sales represent the total gains or losses from the purchase dates of the equity securities. The change in unrealized gains consists of two components: (i) the reversal of the gain or loss recognized in previous periods on equity securities sold and (ii) the change in unrealized gain or loss resulting from mark-to-market adjustments on equity securities still held.

(2) The inclusion of the allowance for expected credit losses on investments commenced on January 1, 2020 due to the adoption of ASU 2016-13.

(11) Fixed Maturity Securities in an Unrealized Loss Position

The following tables summarize all fixed maturity securities in an unrealized loss position at December 31, 2021 and 2020 by the length of time those securities have been continuously in an unrealized loss position.

	Less Than 12 Months		12 Months or Greater		Total	
(In thousands)	Fair Value	Gross Unrealized Losses	Fair Value	Gross Unrealized Losses	Fair Value	Gross Unrealized Losses
December 31, 2021						
U.S. government and government agency	$ 487,712	$ 4,026	$ 17,021	$ 268	$ 504,733	$ 4,294
State and municipal	502,333	7,403	29,547	2,156	531,880	9,559
Mortgage-backed securities	558,751	6,900	106,130	4,762	664,881	11,662
Asset-backed securities	3,832,944	18,503	75,385	291	3,908,329	18,794
Corporate	2,582,860	29,322	51,095	3,088	2,633,955	32,410
Foreign government	758,975	15,793	82,057	31,701	841,032	47,494
Fixed maturity securities	$ 8,723,575	$ 81,947	$ 361,235	$ 42,266	$ 9,084,810	$ 124,213
December 31, 2020						
U.S. government and government agency	$ 47,649	$ 347	$ 17	$ —	$ 47,666	$ 347
State and municipal	147,754	1,165	20,528	904	168,282	2,069
Mortgage-backed securities	212,388	5,121	23,943	230	236,331	5,351
Asset-backed securities	1,389,133	6,563	656,877	26,934	2,046,010	33,497
Corporate	612,177	6,721	39,985	1,759	652,162	8,480
Foreign government	143,729	22,871	6,218	21,577	149,947	44,448
Fixed maturity securities	$ 2,552,830	$ 42,788	$ 747,568	$ 51,404	$ 3,300,398	$ 94,192

Substantially all of the securities in an unrealized loss position are rated investment grade, except for the securities in the foreign government classification. A significant amount of the unrealized loss on foreign government securities is the result of changes in currency exchange rates.

Fixed Maturity Securities — A summary of the Company's non-investment grade fixed maturity securities that were in an unrealized loss position at December 31, 2021 is presented in the table below:

($ in thousands)	Number of Securities	Aggregate Fair Value	Gross Unrealized Loss
Foreign government	38	$ 130,621	$ 38,849
Corporate	8	26,903	1,644
Mortgage-backed securities	4	210	13
Asset-backed securities	2	154	14
State and municipal	1	14,594	411
Total	53	$ 172,482	$ 40,931

For fixed maturity securities that management does not intend to sell or to be required to sell, the portion of the decline in value that is considered to be due to credit factors is recognized in earnings, and the portion of the decline in value that is considered to be due to non-credit factors is recognized in other comprehensive income.

The Company has evaluated its fixed maturity securities in an unrealized loss position and believes the unrealized losses are due primarily to temporary market and sector-related factors rather than to issuer-specific factors. None of these securities are delinquent or in default under financial covenants. Based on its assessment of these issuers, the Company expects them to continue to meet their contractual payment obligations as they become due.

(12) Fair Value Measurements

The Company's fixed maturity and equity securities classified as available for sale and its trading account securities are carried at fair value. Fair value is defined as "the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date". The Company utilizes a fair value hierarchy that prioritizes the inputs to valuation techniques used to measure fair value into three broad levels, as follows:

Level 1 - Quoted prices (unadjusted) in active markets for identical assets or liabilities that the Company has the ability to access at the measurement date.

Level 2 - Quoted prices for similar assets or valuations based on inputs that are observable.

Level 3 - Estimates of fair value based on internal pricing methodologies using unobservable inputs. Unobservable inputs are only used to measure fair value to the extent that observable inputs are not available.

Substantially all of the Company's fixed maturity securities were priced by independent pricing services. The prices provided by the independent pricing services are estimated based on observable market data in active markets utilizing pricing models and processes, which may include benchmark yields, reported trades, broker/dealer quotes, issuer spreads, two-sided markets, benchmark securities, bids, offers, sector groupings, matrix pricing and reference data. The pricing services may prioritize inputs differently on any given day for any security based on market conditions, and not all inputs are available for each security evaluation on any given day. The pricing services used by the Company have indicated that they will only produce an estimate of fair value if objectively verifiable information is available. The determination of whether markets are active or inactive is based upon the volume and level of activity for a particular asset class. The Company reviews the prices provided by pricing services for reasonableness and periodically performs independent price tests of a sample of securities to ensure proper valuation.

If prices from independent pricing services are not available for fixed maturity securities, the Company estimates the fair value. For Level 2 securities, the Company utilizes pricing models and processes which may include benchmark yields, sector groupings, matrix pricing, reported trades, broker/dealer quotes, issuer spreads, two-sided markets, bids, offers and reference data. Where broker quotes are used, the Company generally requests two or more quotes and sets a price within the range of quotes received based on its assessment of the credibility of the quote and its own evaluation of the security. The Company generally does not adjust quotes received from brokers. For securities traded only in private negotiations, the Company determines fair value based primarily on the cost of such securities, which is adjusted to reflect prices of recent placements of securities of the same issuer, financial projections, credit quality and business developments of the issuer and other relevant information.

For Level 3 securities, the Company generally uses a discounted cash flow model to estimate the fair value of fixed maturity securities. The cash flow models are based upon assumptions as to prevailing credit spreads, interest rate and interest rate volatility, time to maturity and subordination levels. Projected cash flows are discounted at rates that are adjusted to reflect illiquidity, where appropriate.

The following tables present the assets and liabilities measured at fair value as of December 31, 2021 and 2020 by level:

(In thousands)	Total	Level 1	Level 2	Level 3
December 31, 2021				
Assets:				
Fixed maturity securities available for sale:				
U.S. government and government agency	$ 855,343	$ —	$ 855,343	$ —
State and municipal	3,304,133	—	3,304,133	—
Mortgage-backed securities	1,068,075	—	1,068,075	—
Asset-backed securities	4,490,565	—	4,490,565	—
Corporate	5,595,675	—	5,595,675	
Foreign government	1,214,901	—	1,214,901	—
Total fixed maturity securities available for sale	16,528,692	—	16,528,692	—
Equity securities:				
Common stocks	695,403	684,470	1,639	9,294
Preferred stocks	245,840	—	234,544	11,296
Total equity securities	941,243	684,470	236,183	20,590
Arbitrage trading account	1,179,606	1,153,079	26,527	—
Total	$ 18,649,541	$ 1,837,549	$ 16,791,402	$ 20,590
Liabilities:				
Trading account securities sold but not yet purchased	$ 1,169	$ 1,137	$ 32	$ —
December 31, 2020				
Assets:				
Fixed maturity securities available for sale:				
U.S. government and government agency	$ 603,871	$ —	$ 603,871	$ —
State and municipal	3,620,664	—	3,620,664	—
Mortgage-backed securities	1,020,330	—	1,020,330	—
Asset-backed securities	3,194,586	—	3,194,586	—
Corporate	4,671,581	—	4,670,581	1,000
Foreign government	975,563	—	975,563	—
Total fixed maturity securities available for sale	14,086,595	—	14,085,595	1,000
Equity securities:				
Common stocks	350,181	340,966	—	9,215
Preferred stocks	275,486	—	266,155	9,331
Total equity securities	625,667	340,966	266,155	18,546
Arbitrage trading account	341,473	298,359	43,114	—
Total	$ 15,053,735	$ 639,325	$ 14,394,864	$ 19,546
Liabilities:				
Trading account securities sold but not yet purchased	$ 10,048	$ 10,048	$ —	$ —

The following tables summarize changes in Level 3 assets and liabilities for the years ended December 31, 2021 and 2020:

		Gains (Losses) Included in:							
(In thousands)	**Beginning Balance**	**Earnings (Losses)**	**Other Comprehensive Income (Losses)**	**Impairments**	**Purchases**	**Sales**	**Paydowns/Maturities**	**Transfers In / Out**	**Ending Balance**
Year ended December 31, 2021									
Assets:									
Fixed maturity securities available for sale:									
Corporate	$ 1,000	$ —	$ —	$ —	$ —	$ (1,000)	$ —	$ —	$ —
Total	1,000	—	—	—	—	(1,000)	—	—	—
Equity securities:									
Common stocks	9,215	640	—	—	—	(561)	—	—	9,294
Preferred stocks	9,331	(35)	—	—	2,000	—	—	—	11,296
Total	18,546	605	—	—	2,000	(561)	—	—	20,590
Arbitrage trading account	—	8	—	—	—	(8)	—	—	—
Total	$ 19,546	$ 613	$ —	$ —	$ 2,000	$ (1,569)	$ —	$ —	$ 20,590
Liabilities:									
Trading account securities sold but not yet purchased	$ —	$ 1	$ —	$ —	$ (1)	$ —	$ —	$ —	$ —
Year ended December 31, 2020									
Assets:									
Fixed maturity securities available for sale:									
Corporate	$ —	$ —	$ —	$ —	$ —	$ —	$ —	$ 1,000	$ 1,000
Total	—	—	—	—	—	—	—	1,000	1,000
Equity securities:									
Common stocks	9,053	1,228	—	—	—	(1,066)	—	—	9,215
Preferred stocks	6,505	(174)	—	—	3,000	—	—	—	9,331
Total	15,558	1,054	—	—	3,000	(1,066)	—	—	18,546
Arbitrage trading account	—	19	—	—	—	(19)	—	—	—
Total	$ 15,558	$ 1,073	$ —	$ —	$ 3,000	$ (1,085)	$ —	$ 1,000	$ 19,546

For the year ended December 31, 2021, there were no fixed maturity security transferred into or out of Level 3. For the year ended December 31, 2020, one fixed maturity security was transferred from Level 2 into Level 3 as a result of observable valuation inputs no longer being available.

(13) Reserves for Losses and Loss Expenses

The Company's reserves for losses and loss expenses are comprised of case reserves and incurred but not reported liabilities (IBNR). When a claim is reported, a case reserve is established for the estimated ultimate payment based upon known information about the claim. As more information about the claim becomes available over time, case reserves are adjusted up or down as appropriate. Reserves are also established on an aggregate basis to provide for IBNR liabilities and expected loss reserve development on reported claims.

Loss reserves included in the Company’s financial statements represent management’s best estimates based upon an actuarially derived point estimate and other considerations. The Company uses a variety of actuarial techniques and methods to derive an actuarial point estimate for each business. These methods may include paid loss development, incurred loss development, paid and incurred Bornhuetter-Ferguson methods and frequency and severity methods. In circumstances where one actuarial method is considered more credible than the others, that method is used to set the point estimate. The actuarial point estimate may also be based on a judgmental weighting of estimates produced from each of the methods considered. Industry loss experience is used to supplement the Company’s own data in selecting “tail factors” in areas where the Company’s own data is limited. The actuarial data is analyzed by line of business, coverage and accident or policy year, as appropriate, for each business.

The establishment of the actuarially derived loss reserve point estimate also includes consideration of qualitative factors that may affect the ultimate losses. These qualitative considerations include, among others, the impact of re-underwriting initiatives, changes in claims handling procedures, changes in the mix of business, changes in distribution sources and changes in policy terms and conditions.

The key assumptions used to arrive at the best estimate of loss reserves are the expected loss ratios, rate of loss cost inflation, and reported and paid loss emergence patterns. Expected loss ratios represent management’s expectation of losses at the time the business is priced and written, before any actual claims experience has emerged. This expectation is a significant determinant of the estimate of loss reserves for recently written business where there is little paid or incurred loss data to consider. Expected loss ratios are generally derived from historical loss ratios adjusted for the impact of rate changes, loss cost trends and known changes in the type of risks underwritten. Expected loss ratios are estimated for each key line of business within each business. Expected loss cost inflation is particularly important for the long-tail lines, such as excess casualty, and claims with a high medical component, such as workers’ compensation. Reported and paid loss emergence patterns are used to project current reported or paid loss amounts to their ultimate settlement value. Loss development factors are based on the historical emergence patterns of paid and incurred losses, and are derived from the Company’s own experience and industry data. The paid loss emergence pattern is also significant to excess and assumed workers’ compensation reserves because those reserves are discounted to their estimated present value based upon such estimated payout patterns.

Loss frequency and severity are measures of loss activity that are considered in determining the key assumptions described in our discussion of loss and loss expense reserves, including expected loss ratios, rate of loss cost inflation and reported and paid loss emergence patterns. Loss frequency is a measure of the number of claims per unit of insured exposure, and loss severity is a measure of the average size of claims. Factors affecting loss frequency include the effectiveness of loss controls and safety programs and changes in economic activity or weather patterns. Factors affecting loss severity include changes in policy limits, retentions, rate of inflation and judicial interpretations.

Another factor affecting estimates of loss frequency and severity is the loss reporting lag, which is the period of time between the occurrence of a loss and the date the loss is reported to the Company. The length of the loss reporting lag affects our ability to accurately predict loss frequency (loss frequencies are more predictable for lines with short reporting lags) as well as the amount of reserves needed for incurred but not reported losses (less IBNR is required for lines with short reporting lags). As a result, loss reserves for lines with short reporting lags are likely to have less variation from initial loss estimates. For lines with short reporting lags, which include commercial automobile, primary workers’ compensation, other liability (claims-made) and property business, the key assumption is the loss emergence pattern used to project ultimate loss estimates from known losses paid or reported to date. For lines of business with long reporting lags, which include other liability (occurrence), products liability, excess workers’ compensation and liability reinsurance, the key assumption is the expected loss ratio since there is often little paid or incurred loss data to consider. Historically, the Company has experienced less variation from its initial loss estimates for lines of businesses with short reporting lags than for lines of business with long reporting lags.

The key assumptions used in calculating the most recent estimate of the loss reserves are reviewed each quarter and adjusted, to the extent necessary, to reflect the latest reported loss data, current trends and other factors observed.

A claim may be defined as an event, as a claimant (number of parties claiming damages from an event) or by exposure type (e.g., an event may give rise to two parties, each claiming loss for bodily injury and property damage).

The most commonly used claim count method is by event. Most of the Company's businesses use the number of events to define and quantify the number of claims. However, in certain lines of business, where it is common for multiple parties to claim damages arising from a single event, a business may quantify claims on the basis of the number of separate parties involved in an event. This may be the case with businesses writing substantial automobile or transportation exposure.

Claim counts for assumed reinsurance will vary based on whether the business is written on a facultative or treaty basis. Further variability as respects treaty claim counts may be reflective of the nature of the treaty, line of business coverage, and type of participation such as quota share or excess of loss contracts. Accordingly, the claim counts have been excluded from the below Reinsurance & Monoline Excess segment tables due to this variability.

The claim count information set forth in the tables presented below may not provide an accurate reflection of ultimate loss payouts by product line.

The following tables present undiscounted incurred and paid claims development as of December 31, 2021, net of reinsurance, as well as cumulative claim frequency and the total of incurred but not reported liabilities (IBNR). The information about incurred and paid claims development for the years ended December 31, 2012 to 2020 is presented as supplementary information. To enhance the comparability of the loss development data, the Company has removed the impact of foreign exchange rate movements by using the December 31, 2021 exchange rate for all periods.

Insurance

Other Liability
(In thousands)

	Loss and Loss Expenses Incurred, Net of Reinsurance For the Year Ended December 31, Unaudited										As of December 31, 2021	
Accident Year	**2012**	**2013**	**2014**	**2015**	**2016**	**2017**	**2018**	**2019**	**2020**	**2021**	**IBNR**	**Cumulative Number of Reported Claims**
2012	$ 692,236	$ 700,946	$ 701,634	$ 707,937	$ 711,876	$ 722,092	$ 716,643	$ 714,681	$ 712,984	$ 708,031	$ 16,190	24
2013		750,501	791,016	783,199	783,020	803,974	810,344	804,919	809,119	811,143	29,110	26
2014			847,878	849,690	847,719	852,171	864,965	871,130	866,292	864,787	51,651	28
2015				951,915	987,552	962,470	965,725	967,764	977,944	984,528	64,794	27
2016					1,018,792	1,011,800	1,020,679	1,032,035	1,046,122	1,062,023	117,676	28
2017						1,066,950	1,100,790	1,123,297	1,140,112	1,179,982	171,499	27
2018							1,105,223	1,132,810	1,122,423	1,157,499	264,059	27
2019								1,242,139	1,238,948	1,239,419	440,178	27
2020									1,341,042	1,214,463	749,747	21
2021										1,537,062	1,269,718	17
Total										$ 10,758,937		

	Cumulative Paid Claims and Claim Adjustment Expenses, Net of Reinsurance For the Year Ended December 31, Unaudited									
Accident Year	**2012**	**2013**	**2014**	**2015**	**2016**	**2017**	**2018**	**2019**	**2020**	**2021**
2012	$ 57,589	$ 157,389	$ 298,293	$ 416,187	$ 511,933	$ 579,062	$ 621,012	$ 651,584	$ 667,147	$ 673,555
2013		63,322	188,374	331,309	472,142	587,822	648,699	694,234	720,773	741,756
2014			79,008	191,072	338,740	481,002	595,187	681,278	731,588	761,143
2015				82,763	211,030	382,589	538,647	676,714	758,115	816,955
2016					69,532	209,118	390,465	558,896	677,852	767,795
2017						80,127	256,176	453,790	639,775	775,705
2018							86,931	264,541	436,100	616,293
2019								88,369	275,680	471,687
2020									72,302	225,344
2021										76,838
Total										$ 5,927,071
Reserves for loss and loss adjustment expenses before 2012, net of reinsurance										117,839
Reserves for loss and loss adjustment expenses, net of reinsurance										$ 4,949,705

Workers' Compensation
(In thousands)

	Loss and Loss Expenses Incurred, Net of Reinsurance										As of December 31, 2021	
	For the Year Ended December 31,											
	Unaudited											
Accident Year	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	IBNR	Cumulative Number of Reported Claims
2012	$ 501,681	$ 501,810	$ 503,956	$ 503,863	$ 509,167	$ 512,707	$ 508,169	$ 506,730	$ 506,827	$ 504,409	$ 13,830	48
2013		552,570	547,295	546,995	543,238	547,000	542,274	541,926	540,322	538,503	17,768	53
2014			639,436	637,307	627,767	617,242	615,435	604,030	600,194	602,000	29,314	57
2015				712,800	690,525	650,997	641,169	626,432	620,741	617,478	40,553	58
2016					702,716	696,339	684,700	660,520	651,278	657,972	46,447	58
2017						762,093	733,505	689,622	673,216	683,880	54,759	58
2018							778,964	724,697	715,055	724,056	62,856	56
2019								784,281	721,018	732,762	89,294	54
2020									725,245	716,430	156,496	42
2021										742,687	340,879	42
Total										$ 6,520,177		

	Cumulative Paid Claims and Claim Adjustment Expenses, Net of Reinsurance									
	For the Year Ended December 31,									
	Unaudited									
Accident Year	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
2012	$ 115,536	$ 255,063	$ 339,560	$ 387,368	$ 419,588	$ 437,196	$ 451,991	$ 459,119	$ 466,028	$ 470,850
2013		117,900	277,538	363,028	414,160	447,894	466,580	479,104	489,075	496,809
2014			148,405	319,743	412,611	471,235	503,915	521,141	531,475	538,914
2015				139,320	323,744	421,734	477,541	512,933	531,512	544,849
2016					142,998	338,835	446,072	504,850	537,861	558,934
2017						153,456	362,299	468,817	525,753	559,198
2018							171,006	397,464	508,546	574,889
2019								184,715	397,376	515,914
2020									172,478	380,454
2021										172,730
Total										$ 4,813,541
					Reserves for loss and loss adjustment expenses before 2012, net of reinsurance					229,691
					Reserves for loss and loss adjustment expenses, net of reinsurance					$ 1,936,327

Professional Liability
(In thousands)

	Loss and Loss Expenses Incurred, Net of Reinsurance										As of December 31, 2021	
	For the Year Ended December 31,											
	Unaudited											
Accident Year	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	IBNR	Cumulative Number of Reported Claims
2012	$ 240,363	$ 243,987	$ 267,284	$ 252,531	$ 240,785	$ 247,348	$ 246,116	$ 246,731	$ 249,539	$ 250,231	$ 6,098	6
2013		271,758	249,477	245,263	251,249	273,074	281,652	286,875	284,479	284,610	6,488	7
2014			255,364	248,723	261,937	245,768	241,329	260,106	258,937	258,330	13,311	7
2015				261,238	259,868	276,829	277,962	293,558	284,747	285,255	24,656	8
2016					312,109	326,427	363,221	404,271	441,535	470,950	40,227	9
2017						334,509	333,657	339,781	378,640	385,450	70,978	10
2018							336,524	323,759	334,854	360,815	104,215	10
2019								338,217	334,821	347,585	127,500	11
2020									396,508	377,674	243,075	11
2021										528,128	447,919	10
Total										$ 3,549,028		

	Cumulative Paid Claims and Claim Adjustment Expenses, Net of Reinsurance									
	For the Year Ended December 31,									
	Unaudited									
Accident Year	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
2012	$ 21,895	$ 87,248	$ 128,924	$ 160,044	$ 191,500	$ 215,952	$ 225,186	$ 233,379	$ 236,216	$ 236,972
2013		24,215	64,245	120,081	178,367	208,123	250,294	259,735	265,007	271,867
2014			19,584	84,141	139,340	176,915	200,319	217,322	228,815	238,121
2015				20,517	85,761	140,253	188,258	217,238	234,207	241,413
2016					28,783	103,108	202,545	256,725	299,198	359,386
2017						36,744	96,818	163,454	244,025	262,273
2018							28,360	100,087	155,836	199,461
2019								31,978	98,260	148,934
2020									28,357	81,026
2021										28,854
Total										$ 2,068,307
Reserves for loss and loss adjustment expenses before 2012, net of reinsurance										24,145
Reserves for loss and loss adjustment expenses, net of reinsurance										$ 1,504,866

Commercial Automobile
(In thousands)

	Loss and Loss Expenses Incurred, Net of Reinsurance										As of December 31, 2021	
	For the Year Ended December 31,											
	Unaudited											
Accident Year	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	IBNR	Cumulative Number of Reported Claims
2012	$ 314,309	$ 326,831	$ 342,588	$ 355,609	$ 364,237	$ 364,483	$ 366,704	$ 365,971	$ 366,128	$ 365,910	$ 218	41
2013		327,514	349,136	368,894	377,050	367,456	367,027	366,165	365,100	365,338	731	44
2014			363,952	385,302	418,639	416,613	414,105	413,953	409,498	408,640	394	47
2015				389,829	417,771	423,928	432,160	433,227	431,675	428,813	1,371	53
2016					432,214	431,939	443,275	444,322	441,122	440,819	3,145	52
2017						431,059	428,988	430,782	434,717	440,610	6,890	47
2018							442,838	462,821	479,257	494,623	12,573	46
2019								483,259	488,562	505,028	36,513	45
2020									523,746	428,769	82,221	30
2021										614,424	279,892	34
Total										$ 4,492,974		

	Cumulative Paid Claims and Claim Adjustment Expenses, Net of Reinsurance									
	For the Year Ended December 31,									
	Unaudited									
Accident Year	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
2012	$ 136,844	$ 215,214	$ 273,446	$ 312,342	$ 344,478	$ 355,786	$ 360,842	$ 361,919	$ 363,073	$ 363,034
2013		142,929	218,596	267,253	322,624	343,742	353,623	362,358	363,118	363,505
2014			155,596	237,723	328,589	365,849	394,562	402,524	405,226	406,228
2015				160,148	265,766	325,697	370,773	398,423	411,898	417,721
2016					185,253	280,373	342,437	391,396	410,843	421,388
2017						181,023	267,859	327,411	372,324	402,422
2018							180,196	281,707	350,368	413,150
2019								185,378	290,306	374,653
2020									142,822	228,366
2021										180,863
Total										$ 3,571,330
Reserves for loss and loss adjustment expenses before 2012, net of reinsurance										1,869
Reserves for loss and loss adjustment expenses, net of reinsurance										$ 923,513

Short-tail lines
(In thousands)

	Loss and Loss Expenses Incurred, Net of Reinsurance										As of December 31, 2021	
	For the Year Ended December 31,											
	Unaudited											
Accident Year	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	IBNR	Cumulative Number of Reported Claims
2012	$ 531,725	$ 539,963	$ 540,845	$ 536,151	$ 508,139	$ 507,093	$ 508,988	$ 508,058	$ 508,815	$ 507,683	$ 801	24
2013		579,486	589,447	580,445	554,736	553,233	549,728	547,806	547,066	546,765	1,424	25
2014			710,530	716,253	666,259	664,951	665,820	666,063	668,510	666,738	1,956	30
2015				744,761	733,145	729,326	727,861	719,612	718,104	716,332	4,505	32
2016					774,764	778,059	765,044	759,531	753,991	756,378	5,444	34
2017						754,050	754,300	748,516	747,861	747,453	9,657	42
2018							761,015	750,095	747,393	745,726	16,064	48
2019								722,118	702,271	692,033	27,521	43
2020									901,702	905,441	56,083	37
2021										829,194	222,879	31
Total										$ 7,113,743		

	Cumulative Paid Claims and Claim Adjustment Expenses, Net of Reinsurance									
	For the Year Ended December 31,									
	Unaudited									
Accident Year	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
2012	$ 282,573	$ 456,559	$ 507,382	$ 518,135	$ 498,826	$ 499,978	$ 504,243	$ 504,973	$ 506,095	$ 506,144
2013		315,019	490,363	539,588	532,472	539,324	540,583	541,182	542,378	543,806
2014			373,791	602,682	614,832	634,310	649,632	656,913	659,487	660,031
2015				396,128	613,338	669,076	691,093	700,867	706,707	713,522
2016					417,882	671,886	713,506	728,853	733,951	740,703
2017						445,934	690,502	719,434	731,588	735,430
2018							415,578	662,714	709,230	726,169
2019								405,592	616,757	646,287
2020									460,749	785,227
2021										405,859
Total										$ 6,463,178
Reserves for loss and loss adjustment expenses before 2012, net of reinsurance										2,523
Reserves for loss and loss adjustment expenses, net of reinsurance										$ 653,088

Reinsurance & Monoline Excess

Casualty
(In thousands)

	Loss and Loss Expenses Incurred, Net of Reinsurance For the Year Ended December 31, Unaudited										As of December 31, 2021
Accident Year	**2012**	**2013**	**2014**	**2015**	**2016**	**2017**	**2018**	**2019**	**2020**	**2021**	**IBNR**
2012	$ 333,116	$ 337,114	$ 332,252	$ 325,045	$ 333,992	$ 338,118	$ 336,201	$ 332,861	$ 335,933	$ 337,124	$ 11,446
2013		320,581	271,557	274,682	284,710	295,143	300,778	305,290	303,563	304,709	14,065
2014			321,644	321,504	320,902	332,730	326,964	326,496	338,190	339,321	20,465
2015				260,768	233,204	231,859	253,982	294,804	304,972	306,358	23,525
2016					242,375	254,415	246,947	269,481	303,385	303,036	29,111
2017						232,886	222,888	240,900	263,476	283,323	48,441
2018							222,959	212,101	232,643	249,019	68,680
2019								238,411	232,709	241,187	104,193
2020									302,420	295,992	192,023
2021										364,611	325,434
Total										$ 3,024,680	

	Cumulative Paid Claims and Claim Adjustment Expenses, Net of Reinsurance For the Year Ended December 31, Unaudited									
Accident Year	**2012**	**2013**	**2014**	**2015**	**2016**	**2017**	**2018**	**2019**	**2020**	**2021**
2012	$ 22,419	$ 62,289	$ 112,036	$ 153,349	$ 188,208	$ 220,821	$ 242,644	$ 258,404	$ 277,926	$ 282,363
2013		28,982	63,939	110,735	144,985	178,889	206,595	227,087	243,100	255,948
2014			21,340	69,248	116,424	155,908	199,109	228,728	253,573	273,024
2015				17,894	48,628	91,566	141,855	179,308	206,222	234,736
2016					19,939	61,940	100,578	140,897	172,489	206,266
2017						16,490	40,310	69,844	124,265	148,128
2018							11,144	41,213	77,939	110,082
2019								14,612	39,297	64,306
2020									20,803	49,871
2021										10,984
Total										$ 1,635,708
Reserves for loss and loss adjustment expenses before 2012, net of reinsurance										385,481
Reserves for loss and loss adjustment expenses, net of reinsurance										$ 1,774,453

Monoline Excess
(In thousands)

	Loss and Loss Expenses Incurred, Net of Reinsurance										As of December 31, 2021
	For the Year Ended December 31,										
	Unaudited										
Accident Year	**2012**	**2013**	**2014**	**2015**	**2016**	**2017**	**2018**	**2019**	**2020**	**2021**	**IBNR**
2012	$ 72,366	$ 73,230	$ 73,670	$ 75,274	$ 74,061	$ 67,878	$ 69,361	$ 67,205	$ 66,269	$ 65,686	$ 7,617
2013		63,995	50,355	48,143	44,162	38,551	35,120	31,752	29,758	25,701	7,609
2014			63,561	57,650	49,570	45,758	41,671	42,541	42,618	40,652	10,922
2015				69,977	57,897	50,099	45,115	39,682	39,781	36,774	13,941
2016					72,657	70,281	71,404	64,957	65,485	65,222	18,607
2017						76,701	80,508	70,749	71,025	66,795	23,023
2018							77,820	72,505	71,448	66,180	28,214
2019								78,929	77,482	76,242	29,909
2020									84,354	83,468	43,519
2021										98,109	75,305
Total										$ 624,829	

	Cumulative Paid Claims and Claim Adjustment Expenses, Net of Reinsurance									
	For the Year Ended December 31,									
	Unaudited									
Accident Year	**2012**	**2013**	**2014**	**2015**	**2016**	**2017**	**2018**	**2019**	**2020**	**2021**
2012	$ 1,127	$ 6,097	$ 10,815	$ 11,167	$ 13,234	$ 15,738	$ 17,982	$ 20,004	$ 22,528	$ 24,365
2013		647	1,897	2,158	3,008	3,396	4,418	5,349	6,476	8,805
2014			377	1,729	3,354	4,175	5,808	7,595	11,154	11,938
2015				2,069	2,481	3,272	4,099	4,416	5,083	5,421
2016					2,498	4,783	5,573	5,928	7,685	9,883
2017						6,282	12,810	15,356	17,327	18,375
2018							6,141	8,230	9,368	10,359
2019								6,241	10,884	12,728
2020									4,869	8,699
2021										4,586
Total										$ 115,159
Reserves for loss and loss adjustment expenses before 2012, net of reinsurance										716,077
Reserves for loss and loss adjustment expenses, net of reinsurance										$ 1,225,747

Property
(In thousands)

	Loss and Loss Expenses Incurred, Net of Reinsurance For the Year Ended December 31, Unaudited										As of December 31, 2021
Accident Year	**2012**	**2013**	**2014**	**2015**	**2016**	**2017**	**2018**	**2019**	**2020**	**2021**	**IBNR**
2012	$ 103,984	$ 94,860	$ 86,525	$ 85,548	$ 84,010	$ 84,020	$ 84,950	$ 84,759	$ 91,078	$ 89,460	$ 591
2013		141,705	112,805	114,245	112,054	112,687	112,006	109,814	107,669	106,436	567
2014			113,373	96,894	97,509	100,255	99,508	99,171	99,572	97,640	1,049
2015				127,387	117,724	131,963	130,553	129,668	131,342	130,933	1,157
2016					168,347	174,793	182,026	181,291	186,605	184,600	2,039
2017						206,795	200,656	199,645	198,251	192,014	2,784
2018							108,436	112,243	103,386	105,447	2,904
2019								103,305	77,255	81,994	4,475
2020									114,807	118,039	6,928
2021										134,134	86,160
Total										$ 1,240,697	

	Cumulative Paid Claims and Claim Adjustment Expenses, Net of Reinsurance For the Year Ended December 31, Unaudited									
Accident Year	**2012**	**2013**	**2014**	**2015**	**2016**	**2017**	**2018**	**2019**	**2020**	**2021**
2012	$ 15,690	$ 51,802	$ 64,282	$ 70,725	$ 77,604	$ 79,166	$ 81,874	$ 82,745	$ 88,932	$ 89,461
2013		36,620	74,650	92,728	101,651	104,437	106,157	107,721	104,521	104,506
2014			38,919	67,041	82,380	88,561	91,701	93,409	94,893	95,523
2015				53,508	89,251	109,217	118,733	122,763	125,663	127,086
2016					78,994	133,740	157,734	168,884	176,358	178,508
2017						72,160	141,484	171,880	179,997	182,799
2018							34,116	65,313	82,509	88,050
2019								23,078	54,577	68,557
2020									26,599	65,718
2021										15,243
Total										$ 1,015,451
Reserves for loss and loss adjustment expenses before 2012, net of reinsurance										2,474
Reserves for loss and loss adjustment expenses, net of reinsurance										$ 227,720

The reconciliation of the net incurred and paid claims development tables to the reserves for losses and loss expenses in the consolidated balance sheet is as follows:

(In thousands)	**December 31, 2021**
Undiscounted reserves for loss and loss expenses, net of reinsurance:	
Other liability	$ 4,949,705
Workers' compensation	1,936,327
Professional liability	1,504,866
Commercial automobile	923,513
Short-tail lines	653,088
Other	105,259
Insurance	10,072,758
Casualty	1,774,453
Monoline excess	1,225,747
Property	227,720
Reinsurance & Monoline Excess	3,227,920
Total undiscounted reserves for loss and loss expenses, net of reinsurance	$ 13,300,678

(In thousands)	**December 31, 2021**
Due from reinsurers on unpaid claims:	
Other liability	$ 693,801
Workers' compensation	247,361
Professional liability	851,485
Commercial automobile	42,991
Short-tail lines	426,003
Other	56,660
Insurance	2,318,301
Casualty	107,593
Monoline excess	40,313
Property	76,319
Reinsurance & Monoline Excess	224,225
Total due from reinsurers on unpaid claims	$ 2,542,526

(In thousands)	December 31, 2021
Loss reserve discount:	
Other liability	$ —
Workers' compensation	(12,338)
Professional liability	—
Commercial automobile	—
Short-tail lines	—
Other	—
Insurance	(12,338)
Casualty	(97,202)
Monoline excess	(342,776)
Property	—
Reinsurance & Monoline Excess	(439,978)
Total loss reserve discount	$ (452,316)
Total gross reserves for loss and loss expenses	$ 15,390,888

The following is supplementary information regarding average historical claims duration as of December 31, 2021:

Insurance

	Average Annual Percentage Payout of Incurred Claims by Age, Net of Reinsurance									
Years	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**
Other liability	7.2 %	14.1 %	17.1 %	16.2 %	13.0 %	8.7 %	5.8 %	3.7 %	2.4 %	0.9 %
Workers' compensation	23.2 %	29.5 %	15.9 %	9.2 %	5.6 %	3.2 %	2.3 %	1.5 %	1.4 %	1.0 %
Professional liability	7.8 %	19.1 %	18.1 %	15.5 %	9.3 %	10.0 %	3.5 %	2.9 %	3.1 %	0.3 %
Commercial automobile	37.1 %	21.0 %	15.5 %	11.3 %	6.5 %	2.7 %	1.4 %	0.2 %	0.2 %	— %
Short-tail lines	55.4 %	33.0 %	6.1 %	1.8 %	0.4 %	0.7 %	0.6 %	0.1 %	0.2 %	— %

Reinsurance & Monoline Excess

	Average Annual Percentage Payout of Incurred Claims by Age, Net of Reinsurance									
Years	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**
Casualty	6.1 %	11.3 %	13.3 %	13.9 %	10.9 %	9.5 %	7.5 %	5.2 %	5.0 %	1.3 %
Monoline excess	5.2 %	4.9 %	2.9 %	1.9 %	2.3 %	3.5 %	4.2 %	3.1 %	6.5 %	2.8 %
Property	30.7 %	33.2 %	15.5 %	6.4 %	3.7 %	1.7 %	1.8 %	1.5 %	1.2 %	0.9 %

The table below provides a reconciliation of the beginning and ending reserve balances:

(In thousands)	2021	2020	2019
Net reserves at beginning of year	$ 11,620,393	$ 10,697,998	$ 10,248,883
Cumulative effect adjustment resulting from changes in accounting principles (1)	—	5,927	—
Restated net reserves at beginning of period	11,620,393	10,703,925	10,248,883
Net provision for losses and loss expenses:			
Claims occurring during the current year (2)	4,921,191	4,432,937	4,057,989
Increase in estimates for claims occurring in prior years (3)	863	627	34,079
Loss reserve discount accretion	31,906	35,142	39,048
Total	4,953,960	4,468,706	4,131,116
Net payments for claims:			
Current year	887,896	921,054	985,599
Prior year	2,777,798	2,677,595	2,673,803
Total	3,665,694	3,598,649	3,659,402
Foreign currency translation	(60,297)	46,411	(22,599)
Net reserves at end of year	12,848,362	11,620,393	10,697,998
Ceded reserve at end of year	2,542,526	2,164,037	1,885,251
Gross reserves at end of year	$ 15,390,888	$ 13,784,430	$ 12,583,249
Net change in premiums and losses occurring in prior years:			
Increase in estimates for claims occurring in prior years (3)	$ (863)	$ (627)	$ (34,079)
Retrospective premium adjustments for claims occurring in prior years (4)	7,510	16,807	53,511
Net favorable premium and reserve development on prior years	$ 6,647	$ 16,180	$ 19,432

(1) The cumulative effect adjustment resulting from changes in accounting principals relates to the allowance for expected credit losses on reinsurance recoverables that commenced on January 1, 2020 due to the adoption of ASU 2016-13. See Note 1 for more details.
(2) Claims occurring during the current year are net of loss reserve discounts of $21 million, $10 million and $20 million in 2021, 2020, and 2019, respectively.
(3) The change in estimates for claims occurring in prior years is net of loss reserve discount. On an undiscounted basis, the estimates for claims occurring in prior years decreased by $19 million in 2021, decreased by $21 million in 2020, and increased by $19 million in 2019, respectively.
(4) For certain retrospectively rated insurance polices and reinsurance agreements, changes in loss and loss expenses for prior years are offset by additional or return premiums.

The COVID-19 global pandemic has impacted, and may further impact, the Company's results through its effect on claim frequency and severity. Loss cost trends have been impacted and may be further impacted by COVID-19-related claims in certain lines of business. Losses incurred from COVID-19-related claims have been offset, to a certain extent, by lower claim frequency in certain lines of our businesses; however, as the economy and legal systems have reopened, the benefit of lower claim frequency has begun to abate. Although as populations have continued to be vaccinated against the virus and the effects of the pandemic have receded in many jurisdictions, most particularly the United States, it remains too early to determine the ultimate net impact of COVID-19 on the Company. New variants of the COVID-19 virus, including the "Omicron" variant, and the slowing of vaccination rates among certain populations continue to create risks with respect to loss costs and the potential for renewed impact of the other effects of COVID-19 associated with economic conditions, inflation, and social distancing and work from home rules.

Most of the COVID-19-related claims reported to the Company to date involve certain short-tailed lines of business, including contingency and event cancellation, business interruption, and film production delay. The Company has also received COVID-19-related claims for longer-tailed casualty lines of business such as workers' compensation and other liability; however, the estimated incurred loss impact for these reported claims are not material at this time. Given the continuing uncertainty regarding the pandemic's pervasiveness, the future impact that the pandemic may have on claim frequency and severity remains uncertain at this time.

The Company has estimated the potential COVID-19 impact to its contingency and event cancellation, workers' compensation, and other lines of business under a number of possible scenarios; however, due to COVID-19's continued evolving impact, there remains a high degree of uncertainty around the Company's COVID-19 reserves. In addition, should the pandemic continue or worsen as a result of new COVID-19 variants or otherwise, governments in the jurisdictions where we operate may renew their efforts to expand policy coverage terms beyond the policy's intended coverage. Accordingly, losses arising from these actions, and the other factors described above, could exceed the Company's reserves established for those related policies.

As of December 31, 2021, the Company had recognized losses for COVID-19-related claims activity, net of reinsurance, of approximately $274 million, of which $233 million relates to the Insurance segment and $41 million relates to the Reinsurance & Monoline Excess segment. Such $274 million of COVID-19-related losses included $239 million of reported losses and $35 million of IBNR. For the year ended December 31, 2021, the Company recognized current accident year losses for COVID-19-related claims activity, net of reinsurance, of approximately $58 million, of which $54 million relates to the Insurance segment and $4 million relates to the Reinsurance & Monoline Excess segment.

Favorable prior year development (net of additional and return premiums) was $7 million in 2021.

Insurance – Reserves for the Insurance segment developed favorably by $20 million in 2021 (net of additional and return premiums). The overall favorable development in 2021 was attributable to favorable development on the 2020 accident year, partially offset by adverse development on the 2016 through 2019 accident years.

The favorable development on the 2020 accident year was largely concentrated in the commercial auto liability and other liability lines of business, including commercial multi-peril liability. During 2020 the Company achieved larger rate increases in these lines of business than were contemplated in its budget and in its initial loss ratio selections. The Company also experienced significantly lower reported claim frequency in these lines in 2020 relative to historical averages, and lower reported incurred losses relative to its expectations. We believe that the lower claim frequency and lower reported incurred losses were caused by the impacts of the COVID-19 pandemic, for example, lockdowns, reduced driving and traffic, work from home, and court closures. However, due to the uncertainty regarding the ultimate impacts of the pandemic on accident year 2020 incurred losses, the Company elected not to react to these lower reported trends during 2020. As more information became available and the 2020 accident year continued to mature, during 2021 the Company started to recognize favorable accident year 2020 development in response to the continuing favorable reported loss experience relative to its expectations.

The adverse development on the 2016 through 2019 accident years is concentrated largely in the other liability line of business, including commercial multi-peril liability, but is also seen to a lesser extent in commercial auto liability. The adverse development for these accident years is driven by a higher than expected number of large losses reported, and particularly impacted the directors and officers liability, lawyers professional liability, and excess and surplus lines casualty classes of business. We also believe that increased social inflation is contributing to the increased number of large losses, for example, higher jury awards on cases which go to trial, and the corresponding higher demands from plaintiffs and higher values required to reach settlement on cases which do not go to trial.

Reinsurance & Monoline Excess – Reserves for the Reinsurance & Monoline Excess segment developed unfavorably by $13 million in 2021. The unfavorable development in the segment was driven by the non-proportional reinsurance assumed liability and other liability lines of business, related primarily to accident years 2017 through 2019, and was partially offset by favorable development in excess workers' compensation business which was spread across many prior accident years. The unfavorable non-proportional reinsurance assumed liability and other liability development was associated with our U.S. and U.K. assumed reinsurance business, and related primarily to accounts insuring construction projects and professional liability exposures.

Favorable prior year development (net of additional and return premiums) was $16 million in 2020.

Insurance - Reserves for the Insurance segment developed favorably by $24 million in 2020 (net of additional and return premiums). Continuing the pattern seen in recent years, the overall favorable development in 2020 resulted from more significant favorable development on workers' compensation business, which was partially offset by unfavorable development on professional liability, including excess professional liability.

For workers' compensation, the favorable development was spread across almost all prior accident years, including prior to 2011, but was most significant in accident years 2016 through 2019. The favorable workers' compensation development reflects a continuation of the benign loss cost trends experienced during recent years, particularly the favorable claim frequency trends (i.e., number of reported claims per unit of exposure). The long term trend of declining workers' compensation frequency can be attributable to improved workplace safety. Loss severity trends were also aided by our continued investment in claims handling initiatives such as medical case management services and vendor savings through usage of preferred provider networks and pharmacy benefit managers. Reported workers' compensation losses in 2020 continued to be below our expectations at most of our businesses, and were below the assumptions underlying our initial loss ratio picks and our previous reserve estimates for most prior accident years.

For professional liability business, unfavorable development was driven mainly by large losses reported in the directors and officers ("D&O"), lawyers professional and excess hospital professional liability lines of business. For these lines of business, we continue to see an increase in the number of large losses reported and a lengthening of the reporting "tail" beyond historical levels. We believe a contributing cause is rising social inflation in the form of, for example, higher jury awards on cases that go to trial, and the corresponding higher demands from plaintiffs and higher values required to reach settlement on cases that do not go to trial. The unfavorable development for professional liability affected mainly accident years 2016 through 2018.

Reinsurance & Monoline Excess - Reserves for the Reinsurance & Monoline Excess segment developed unfavorably by $8 million in 2020. The unfavorable development in the segment was driven by non-proportional assumed liability business written in both the U.S. and U.K., and was partially offset by favorable development on excess workers' compensation business. The unfavorable non-proportional assumed liability development was concentrated in accident years 2014 through 2018, and related primarily to accounts insuring construction projects and professional liability exposures.

Favorable prior year development (net of additional and return premiums) was $19 million in 2019.

Insurance - Reserves for the Insurance segment developed favorably by $21 million in 2019 (net of additional and return premiums). This overall favorable development resulted from more significant favorable development on workers' compensation business, which was partially offset by unfavorable development on professional liability and general liability business.

For workers' compensation, the favorable development was spread across many accident years, including prior to 2010, but was most significant in accident years 2014 through 2018, and particularly 2017 and 2018. The favorable workers' compensation development reflects a continuation during 2019 of the benign loss cost trends experienced during recent years, particularly the favorable claim frequency trends (i.e., number of reported claims per unit of exposure). The long term trend of declining workers' compensation frequency can be attributable to improved workplace safety. Loss severity trends were also aided by our continued investment in claims handling initiatives such as medical case management services and vendor savings through usage of preferred provider networks and pharmacy benefit managers. Our initial loss ratio "picks" for this line of business over the past few accident years have contemplated an increase in loss cost trends and reflect decreasing premium rates in the marketplace; reported workers' compensation losses in 2019 continued to be below our expectations at most of our businesses, and were below the assumptions underlying our initial loss ratio picks and our previous reserve estimates.

For professional liability business, the unfavorable development was driven mainly by an increase in the number of large losses reported in the lawyers professional liability and directors and officers ("D&O") liability lines of business. Many of the lawyers large losses involved claims made against insured law firms relating to work performed on matters stemming from the 2008 financial crisis. These claims affected mainly accident years 2013 through 2016. In addition, for both of these lines of business, we have seen evidence of social inflation in the form of higher jury awards on cases that go to trial, and corresponding higher demands from plaintiffs and higher values required to reach settlement on cases that do not go to trial. The unfavorable development for D&O affected mainly accident years 2014 through 2017.

For general liability business, most of the unfavorable development emanated from our excess and surplus lines (E&S) businesses, and was driven by an increase in the number of large losses reported. Many of these large losses were from construction and contracting classes of business, which have also been impacted by social inflation. The general liability unfavorable development impacted mainly accident years 2015 through 2018.

Reinsurance & Monoline Excess - Reserves for the Reinsurance & Monoline Excess segment developed unfavorably by $2 million in 2019. The unfavorable development in the segment was driven by non-proportional assumed liability business in both the U.S. and U.K., and was largely offset by favorable development on excess workers' compensation business. The unfavorable non-proportional assumed liability development was concentrated in accident years 2015 through 2018, and included an adjustment for the Ogden discount rate in the U.K.

Environmental and Asbestos — To date, known environmental and asbestos claims have not had a material impact on the Company’s operations, because its subsidiaries generally did not insure large industrial companies that are subject to significant environmental or asbestos exposures prior to 1986 when an absolute exclusion was incorporated into standard policy language.

The Company’s net reserves for losses and loss expenses relating to asbestos and environmental claims on policies written before adoption of the absolute exclusion was $20 million at December 31, 2021 and $19 million at December 31, 2020. The estimation of these liabilities is subject to significantly greater than normal variation and uncertainty because it is difficult to make an actuarial estimate of these liabilities due to the absence of a generally accepted actuarial methodology for these exposures and the potential effect of significant unresolved legal matters, including coverage issues, as well as the cost of litigating the legal issues. Additionally, the determination of ultimate damages and the final allocation of such damages to financially responsible parties are highly uncertain.

Discounting — The Company discounts its liabilities for certain workers’ compensation reserves. The amount of workers’ compensation reserves that were discounted was $1,387 million and $1,655 million at December 31, 2021 and 2020, respectively. The aggregate net discount for those reserves, after reflecting the effects of ceded reinsurance, was $452 million and $483 million at December 31, 2021 and 2020, respectively. At December 31, 2021, discount rates by year ranged from 0.7% to 6.5%, with a weighted average discount rate of 3.4%.

Substantially all discounted workers’ compensation reserves (97% of total discounted reserves at December 31, 2021) are excess workers’ compensation reserves. In order to properly match loss expenses with income earned on investment securities supporting the liabilities, reserves for excess workers’ compensation business are discounted using risk-free discount rates determined by reference to the U.S. Treasury yield curve. These rates are determined annually based on the weighted average rate for the period. Once established, no adjustments are made to the discount rate for that period, and any increases or decreases in loss reserves in subsequent years are discounted at the same rate, without regard to when any such adjustments are recognized. The expected loss and loss expense payout patterns subject to discounting are derived from the Company’s loss payout experience.

The Company also discounts reserves for certain other long-duration workers’ compensation reserves (representing approximately 3% of total discounted reserves at December 31, 2021), including reserves for quota share reinsurance and reserves related to losses regarding occupational lung disease. These reserves are discounted at statutory rates prescribed or permitted by the Department of Insurance of the State of Delaware.

(14) Premiums and Reinsurance Related Information

The Company reinsures a portion of its insurance exposures in order to reduce its net liability on individual risks and catastrophe losses. Reinsurance coverage and retentions vary depending on the line of business, location of the risk and nature of loss. The Company's reinsurance purchases include the following: property reinsurance treaties that reduce exposure to large individual property losses and catastrophe events; casualty reinsurance treaties that reduce its exposure to large individual casualty losses, workers' compensation catastrophe losses and casualty losses involving multiple claimants or insureds; and facultative reinsurance that reduces exposure on individual policies or risks for losses that exceed treaty reinsurance capacity. Depending on the business, the Company purchases specific additional reinsurance to supplement the above programs.

The following is a summary of reinsurance financial information:

(In thousands)	2021	2020	2019
Written premiums:			
Direct	$ 9,531,050	$ 7,874,050	$ 7,386,759
Assumed	1,169,084	973,597	875,459
Ceded	(1,837,267)	(1,585,210)	(1,398,719)
Total net written premiums	$ 8,862,867	$ 7,262,437	$ 6,863,499
Earned premiums:			
Direct	$ 8,825,568	$ 7,489,470	$ 7,141,427
Assumed	1,085,804	941,321	820,705
Ceded	(1,805,341)	(1,499,948)	(1,328,844)
Total net earned premiums	$ 8,106,031	$ 6,930,843	$ 6,633,288
Ceded losses and loss expenses incurred	$ 1,236,960	$ 955,630	$ 836,831
Ceded commission earned	$ 449,739	$ 358,253	$ 314,191

The following table presents the rollforward of the allowance for expected credit losses for premiums and fees receivable for the years ended December 31, 2021 and 2020:

(In thousands)	2021	2020
Allowance for expected credit losses, beginning of period	$ 22,883	$ 19,823
Cumulative effect adjustment resulting from changes in accounting principles	—	1,270
Provision for expected credit losses	2,335	1,790
Allowance for expected credit losses, end of period	$ 25,218	$ 22,883

Estimated amounts due from reinsurers are reported net of an allowance for expected credit losses of $7,712,903, $7,800,649 and $690,127 as of December 31, 2021, 2020 and 2019, respectively. The following table presents the rollforward of the allowance for expected credit losses associated with due from reinsurers for the years ended December 31, 2021 and 2020:

(In thousands)	2021	2020
Allowance for expected credit losses, beginning of period	$ 7,801	$ 690
Cumulative effect adjustment resulting from changes in accounting principles	—	5,927
Provision for expected credit losses	(88)	1,184
Allowance for expected credit losses, end of period	$ 7,713	$ 7,801

The following table presents the amounts due from reinsurers as of December 31, 2021:

(In thousands)

Munich Re	$	313,150
Lloyd's of London		308,119
Partner Re		231,251
Alleghany Group		204,699
Swiss Re		203,165
Hannover Re Group		167,906
Everest Re		162,432
Renaissance Re		138,408
Berkshire Hathaway		126,806
Axis Capital		88,938
Liberty Mutual		85,367
Lifson Re		64,242
Arch Capital Group		58,156
Korean Re		55,643
Fairfax Financial		43,975
Axa Insurance		40,014
Markel Corp Group		26,737
Sompo Holdings Group		24,220
Helvetia Holdings Group		23,986
Other reinsurers less than $20,000		350,287
Subtotal		2,717,501
Residual market pools (1)		213,238
Allowance for expected credit losses		(7,713)
Total	$	2,923,026

(1) Many states require licensed insurers that provide workers' compensation insurance to participate in programs that provide workers' compensation to employers that cannot procure coverage from an insurer on a voluntary basis. Insurers can fulfill this residual market obligation by participating in pools where results are shared by the participating companies. The Company acts as a servicing carrier for workers' compensation pools in certain states. As a servicing carrier, the Company writes residual market business directly and then cedes 100% of this business to the respective pool. As a servicing carrier, the Company receives fee income for its services. The Company does not retain underwriting risk, and credit risk is limited as ceded balances are jointly shared by all the pool members.

(15) Indebtedness

Indebtedness consisted of the following as of December 31, 2021 (the difference between the face value and the carrying value is unamortized discount and debt issuance costs):

(In thousands)	Interest Rate	Face Value	Carrying Value 2021	Carrying Value 2020
Senior notes and other debt due on:				
January 1, 2022	8.700%	$ 76,503	$ 76,503	$ 76,419
March 15, 2022	4.625%	350,000	349,923	349,505
February 15, 2037	6.250%	250,000	248,336	248,226
August 1, 2044	4.750%	350,000	345,836	345,652
May 12, 2050	4.000%	470,000	491,478	492,236
March 30, 2052 (3)	3.550%	400,000	394,015	—
September 30, 2061 (3)	3.150%	350,000	342,761	—
Subsidiary debt (1) (2)	Various	10,564	10,564	110,987
Total senior notes and other debt		$ 2,257,067	$ 2,259,416	$ 1,623,025
Subordinated debentures due on:				
March 1, 2056 (3)	5.900%	$ —	$ —	$ 106,365
June 1, 2056 (3)	5.750%	—	—	282,003
March 30, 2058	5.700%	185,000	179,166	179,006
December 30, 2059	5.100%	300,000	290,941	290,702
September 30, 2060	4.250%	250,000	244,378	244,233
March 30, 2061 (3)	4.125%	300,000	293,167	—
Total subordinated debentures		$ 1,035,000	$ 1,007,652	$ 1,102,309

(1) Subsidiary debt is due as follows: $6.1 million in 2024 and $4.5 million in 2025.
(2) In the second quarter of 2021, the Company sold a real estate asset which resulted in a $102 million reduction of the Company's non-recourse debt that was supporting the property. See Note 8, Real Estate, for more details.
(3) In February 2021, the Company issued $300 million aggregate principal amount of 4.125% subordinated debentures due 2061. In March 2021, the Company issued $400 million aggregate principal amount of 3.550% senior notes due 2052 and redeemed its $110 million aggregate principal amount of 5.900% subordinated debentures due 2056. In June 2021, the Company redeemed the $290 million aggregate principal amount of its 5.750% subordinated debentures due 2056. In September 2021, the Company issued $350 million aggregate principal amount of 3.150% senior notes due 2061.

(16) Income Taxes

Income tax expense (benefit) consists of:

(In thousands)	Current Expense	Deferred Expense (Benefit)	Total
December 31, 2021			
Domestic	$ 239,090	$ 2,752	$ 241,842
Foreign	—	10,048	10,048
Total expense	$ 239,090	$ 12,800	$ 251,890
December 31, 2020			
Domestic	$ 162,305	$ 17	$ 162,322
Foreign	23,375	(13,880)	9,495
Total expense (benefit)	$ 185,680	$ (13,863)	$ 171,817
December 31, 2019			
Domestic	$ 124,231	$ 27,616	$ 151,847
Foreign	9,030	8,058	17,088
Total expense	$ 133,261	$ 35,674	$ 168,935

Income before income taxes from domestic operations was $1,224 million, $831 million and $739 million for the years ended December 31, 2021, 2020 and 2019, respectively. Income (loss) before income taxes from foreign operations was $59 million, ($126) million and $114 million for the years ended December 31, 2021, 2020 and 2019, respectively.

A reconciliation of the income tax expense and the amounts computed by applying the Federal and foreign income tax rate of 21% for 2021, 2020 and 2019 to pre-tax income are as follows:

(In thousands)	2021	2020	2019
Computed "expected" tax expense	$ 269,410	$ 148,008	$ 179,113
Tax-exempt investment income	(11,380)	(12,770)	(14,666)
Change in valuation allowance	2,974	46,238	(1,945)
Impact of foreign tax rates	(2,368)	6,753	7,700
State and local taxes	4,230	2,561	4,842
Other, net	(10,976)	(18,973)	(6,109)
Total expense	$ 251,890	$ 171,817	$ 168,935

At December 31, 2021 and 2020, the tax effects of differences that give rise to significant portions of the deferred tax asset and deferred tax liability are as follows:

(In thousands)	2021	2020
Deferred tax asset:		
Loss reserve discounting	$ 162,636	$ 141,877
Unearned premiums	163,143	134,971
Net operating losses & foreign tax credits	88,502	90,601
Other-than-temporary impairments	5,176	5,973
Employee compensation plans	61,301	60,551
Other	54,269	59,230
Gross deferred tax asset	535,027	493,203
Less valuation allowance	(75,230)	(79,488)
Deferred tax asset	459,797	413,715
Deferred tax liability:		
Amortization of intangibles	12,787	12,761
Loss reserve discounting - transition rule	19,796	24,747
Deferred policy acquisition costs	137,893	113,084
Unrealized investment gains	36,850	100,241
Property, furniture and equipment	43,186	48,235
Investment funds	101,999	77,783
Other	67,331	49,970
Deferred tax liability	419,842	426,821
Net deferred tax asset (liability)	$ 39,955	$ (13,106)

The Company had a current tax net receivable of $2.5 million and net payable of $35.4 million at December 31, 2021 and 2020, respectively. At December 31, 2021, the Company had foreign net operating loss carryforwards of $6.8 million that expire beginning in 2027, and an additional $238.2 million that have no expiration date. At December 31, 2021, the Company had a valuation allowance of $75.2 million, as compared to $79.5 million at December 31, 2020. The Company has provided a valuation allowance against the utilization of foreign tax credits and the future net operating loss carryforward benefits of certain foreign operations. The statute of limitations for the Company’s U.S. Federal income tax returns has closed for all years through December 31, 2017.

The realization of the deferred tax asset is dependent upon the Company’s ability to generate sufficient taxable income in future periods. Based on historical results and the prospects for future current operations, management anticipates that it is more likely than not that future taxable income will be sufficient for the realization of this asset.

The Tax Cuts and Jobs Act of 2017 (the "Tax Act") provided for a reduction of the U.S. corporate income tax rate from 35% to 21% effective January 1, 2018. The U.S. tax law requires insurance reserves to be discounted for tax purposes. The Tax Act modified this computation. The IRS issued revised discount factors to be applied to the 2017 reserves, which increased the beginning of year 2018 deferred tax asset for loss reserve discounting. Under the related transition rule, a deferred tax liability was established which will be included in taxable income over the eight year period that began in 2018.

The Company has not provided U.S. deferred income taxes on the undistributed earnings of approximately $126.7 million of its non-U.S. subsidiaries since these earnings are intended to be permanently reinvested in the non-U.S. subsidiaries. In the future, if such earnings were distributed the Company projects that the incremental tax, if any, will be immaterial.

(17) Dividends from Subsidiaries and Statutory Financial Information

The Company's insurance subsidiaries are restricted by law as to the amount of dividends they may pay without the approval of regulatory authorities. The Company's lead insurer, Berkley Insurance Company ("BIC"), directly or indirectly owns all of the Company's other insurance companies. During 2022, the maximum amount of dividends that can be paid by BIC without such approval is approximately $966 million.

BIC's combined net income and statutory capital and surplus, as determined in accordance with statutory accounting practices ("SAP"), are as follows:

(In thousands)	2021	2020	2019
Net income	$ 1,040,342	$ 771,990	$ 601,564
Statutory capital and surplus	$ 6,817,535	$ 6,188,121	$ 6,013,062

The significant variances between SAP and GAAP are that for statutory purposes bonds are carried at amortized cost, unrealized gains and losses on equity securities are recorded in surplus, acquisition costs are charged to income as incurred, deferred Federal income taxes are subject to limitations, excess and assumed workers' compensation reserves are discounted at different discount rates and certain assets designated as "non-admitted assets" are charged against surplus. The Commissioner of Insurance of the State of Delaware has allowed BIC to recognize a non-tabular discount on certain workers' compensation loss reserves, which is a permitted practice that differs from SAP. The effect of using this permitted practice was an increase to BIC's statutory capital and surplus by $189 million at December 31, 2021.

The National Association of Insurance Commissioners ("NAIC") has risk-based capital ("RBC") requirements that require insurance companies to calculate and report information under a risk-based formula which measures statutory capital and surplus needs based on a regulatory definition of risk in a company's mix of products and its balance sheet. This guidance is used to calculate two capital measurements: Total Adjusted Capital and RBC Authorized Control Level. Total Adjusted Capital is equal to the Company's statutory capital and surplus excluding capital and surplus derived from the use of permitted practices that differ from statutory accounting practices. RBC Authorized Control Level is the capital level used by regulatory authorities to determine whether remedial action is required. Generally, no remedial action is required if Total Adjusted Capital is 200% or more of the RBC Authorized Control Level. At December 31, 2021, BIC's Total Adjusted Capital of $6.6 billion was 362% of its RBC Authorized Control Level.

See Note 3, Investments in Fixed Maturity Securities, for a description of assets held on deposit as security.

(18) Common Stockholders' Equity

The weighted average number of shares used in the computation of net income per share was as follows:

(In thousands)	2021	2020	2019
Basic	184,953	186,924	190,722
Diluted	186,499	188,763	193,521

Treasury shares have been excluded from average outstanding shares from the date of acquisition. The weighted average number of basic shares outstanding includes the impact of 7,728,466 common shares held in a grantor trust. The common shares held in the grantor trust are for delivery upon settlement of vested but mandatorily deferred restricted stock units ("RSUs"). Shares held by the grantor trust do not affect diluted shares outstanding since shares deliverable under vested RSUs were already included in diluted shares outstanding. The difference in calculating basic and diluted net income per share is attributable entirely to the dilutive effect of stock-based compensation plans. Changes in shares of common stock outstanding, net of treasury shares, are presented below. Shares of common stock issued and outstanding do not include shares related to unissued restricted stock units (including shares held in the grantor trust).

	2021	2020	2019
Balance, beginning of year	177,825,150	183,411,907	182,993,640
Shares issued	708,057	776,544	687,339
Shares repurchased	(1,752,619)	(6,363,301)	(269,072)
Balance, end of year	176,780,588	177,825,150	183,411,907

The amount of dividends paid is dependent upon factors such as the receipt of dividends from our subsidiaries, our results of operations, cash flow, financial condition and business needs, the capital and surplus requirements of our subsidiaries, and applicable insurance regulations that limit the amount of dividends that may be paid by our regulated insurance subsidiaries.

(19) Fair Value of Financial Instruments

The following table presents the carrying amounts and estimated fair values of the Company's financial instruments as of December 31, 2021 and 2020:

	2021		2020	
(In thousands)	Carrying Value	Fair Value	Carrying Value	Fair Value
Assets:				
Fixed maturity securities	$ 16,602,673	$ 16,614,118	$ 14,159,369	$ 14,173,629
Equity securities	941,243	941,243	625,667	625,667
Arbitrage trading account	1,179,606	1,179,606	341,473	341,473
Loans receivable	115,172	116,534	84,913	86,596
Cash and cash equivalents	1,568,843	1,568,843	2,372,366	2,372,366
Trading accounts receivable from brokers and clearing organizations	—	—	524,727	524,727
Due from broker	20,448	20,448	2,585	2,585
Liabilities:				
Due to broker	53,636	53,636	—	—
Trading account securities sold but not yet purchased	1,169	1,169	10,048	10,048
Senior notes and other debt	2,259,416	2,526,630	1,623,025	1,892,444
Subordinated debentures	1,007,652	1,095,600	1,102,309	1,202,842

The estimated fair values of the Company's fixed maturity securities, equity securities available for sale and arbitrage trading account securities are based on various valuation techniques that rely on fair value measurements as described in Note 12 above. The fair value of loans receivable is estimated by using current institutional purchaser yield requirements for loans with similar credit characteristics, which is considered a Level 2 input. The fair value of the senior notes and other debt and the subordinated debentures is based on spreads for similar securities, which is considered a Level 2 input.

(20) Commitments, Litigation and Contingent Liabilities

In the ordinary course of business, the Company is subject to disputes, litigation and arbitration arising from its insurance and reinsurance businesses. These matters are generally related to insurance and reinsurance claims and are considered in the establishment of loss and loss expense reserves. In addition, the Company may also become involved in legal actions which seek extra-contractual damages, punitive damages or penalties, including claims alleging bad faith in handling of insurance claims. The Company expects its ultimate liability with respect to such matters will not be material to its financial condition. However, adverse outcomes on such matters are possible, from time to time, and could be material to the Company's results of operations in any particular financial reporting period.

At December 31, 2021, the Company had commitments to invest up to $621 million and $139 million in certain investment funds and real estate construction projects, respectively.

(21) Leases

Lessees are required to recognize a right-of-use asset and a lease liability for leases with terms of more than 12 months on the balance sheet. All leases disclosed within this note are classified as operating leases. Recognized right-of-use asset and lease liability are reported within other assets and other liabilities, respectively, in the consolidated balance sheet. Lease expense is reported in other operating costs and expenses in the consolidated statement of income and accounted for on a straight-line basis over the lease term.

To determine the discount rate used to calculate present value of future minimum lease payments, the Company uses its incremental borrowing rate during the lease commencement period in line with the respective lease duration. In certain cases, the Company has the option to renew the lease. Lease renewal future payments are included in the present value of the future minimum lease payments when the Company determines it is reasonably certain to renew.

The main leases entered into by the Company are for office space used by the Company's operating units across the world. Additionally, the Company, to a lesser extent, has equipment leases mainly for office equipment. Further information relating to operating lease expense and other operating lease information is as follows:

	For the Year Ended December 31,	
(In thousands)	2021	2020
Leases:		
Lease cost	$ 44,051	$ 44,291
Cash paid for amounts included in the measurement of lease liabilities reported in operating cash flows	$ 45,592	$ 45,348
Right-of-use assets obtained in exchange for new lease liabilities	$ 38,929	$ 8,870

	As of December 31,	
($ in thousands)	2021	2020
Right-of-use assets	$ 172,180	$ 164,476
Lease liabilities	$ 208,729	$ 203,643
Weighted-average remaining lease term	7.2 years	6.8 years
Weighted-average discount rate	4.83 %	5.94 %

Contractual maturities of the Company's future minimum lease payments are as follows:

(In thousands)	December 31, 2021
Contractual Maturities:	
2022	$ 44,962
2023	43,674
2024	37,663
2025	28,109
2026	21,486
Thereafter	68,019
Total undiscounted future minimum lease payments	243,913
Less: Discount impact	35,184
Total lease liability	$ 208,729

(22) Stock Incentive Plan

Pursuant to the Company's stock incentive plan, the Company may issue restricted stock units ("RSUs") to employees of the Company and its subsidiaries. The RSUs generally vest three to five years from the award date and are subject to other vesting and forfeiture provisions contained in the award agreement. The following table summarizes RSU information for the three years ended December 31, 2021:

	2021	2020	2019
RSUs granted and unvested at beginning of period:	3,804,336	4,124,260	5,062,661
Granted	848,660	962,453	840,796
Vested	(1,015,973)	(1,111,588)	(1,447,522)
Canceled	(207,344)	(170,789)	(331,675)
RSUs granted and unvested at end of period:	3,429,679	3,804,336	4,124,260

Upon vesting, shares of the Company's common stock equal to the number of vested RSUs are issued or deferred to a later date, depending on the terms of the specific award agreement. As of December 31, 2021, 7,475,528 RSUs had been deferred. RSUs that have not yet vested and vested RSUs that have been deferred are not considered to be issued and outstanding shares.

The fair value of RSUs at the date of grant are recorded as unearned compensation, a component of stockholders' equity, and expensed over the vesting period. Following is a summary of changes in unearned compensation for the three years ended December 31, 2021:

(In thousands)	2021	2020	2019
Unearned compensation at beginning of year	$ 132,310	$ 128,390	$ 129,669
RSUs granted, net of cancellations	56,711	54,270	53,583
RSUs expensed	(46,441)	(47,108)	(47,329)
RSUs forfeitures	(7,045)	(3,242)	(7,533)
Unearned compensation at end of year	$ 135,535	$ 132,310	$ 128,390

(23) Compensation Plans

The Company and its subsidiaries have profit sharing plans in which substantially all employees participate. The plans provide for minimum annual contributions of 5% of eligible compensation; contributions above the minimum are discretionary and vary with each participating businesses's profitability. Employees become eligible to participate in the plan on the first day of the calendar quarter following the first full calendar quarter after the employee's date of hire provided the employee has completed 250 hours of service during the calendar quarter. The plans provide that 40% of the contributions vest immediately and that the remaining 60% vest at varying percentages based upon years of service. Profit sharing expense was $50 million, $48 million and $47 million in 2021, 2020 and 2019, respectively.

The Company has a long-term incentive compensation plan ("LTIP") that provides for compensation to key executives based on the growth in the Company's book value per share over a five year period.

The following table summarizes the outstanding LTIP awards as of December 31, 2021:

	Units Outstanding	Maximum Value	Inception to date earned through December 31, 2021 on outstanding units
2017 grant	192,750	$ 19,275,000	$ 18,937,688
2018 grant	197,250	19,725,000	15,103,433
2019 grant	216,500	21,650,000	10,659,096
2020 grant	222,250	22,225,000	7,303,735
2021 grant	227,500	22,750,000	4,905,969

The following table summarizes the LTIP expense for each of the three years ended December 31, 2021:

(In thousands)	2021	2020	2019
2014 grant	$ —	$ —	$ (558)
2015 grant	—	(168)	3,319
2016 grant	(117)	3,176	3,548
2017 grant	6,012	2,914	3,432
2018 grant	5,503	2,776	3,310
2019 grant	5,309	2,490	3,068
2020 grant	5,065	2,276	—
2021 grant	4,906	—	—
Total	$ 26,678	$ 13,464	$ 16,119

(24) Supplemental Financial Statement Data

Other operating costs and expenses consist of the following:

(In thousands)	2021	2020	2019
Amortization of deferred policy acquisition costs	$ 961,628	$ 904,955	$ 1,001,611
Insurance operating expenses	1,345,099	1,206,058	1,088,690
Insurance service expenses	86,003	85,724	101,317
Net foreign currency losses (gains)	(25,725)	363	(30,715)
Debt extinguishment costs	11,521	8,440	—
Other costs and expenses	220,744	184,852	201,179
Total	$ 2,599,270	$ 2,390,392	$ 2,362,082

(25) Industry Segments

The Company's reportable segments include the following two business segments, plus a corporate segment:

- Insurance - predominantly commercial insurance business, including excess and surplus lines, admitted lines and specialty personal lines throughout the United States, as well as insurance business in the United Kingdom, Continental Europe, South America, Canada, Mexico, Scandinavia, Asia and Australia.

- Reinsurance & Monoline Excess - reinsurance business on a facultative and treaty basis, primarily in the United States, United Kingdom, Continental Europe, Australia, the Asia-Pacific region and South Africa, as well as operations that solely retain risk on an excess basis.

The accounting policies of the segments are the same as those described in the summary of significant accounting policies. Income tax expense and benefits are calculated based upon the Company's overall effective tax rate.

Summary financial information about the Company's reporting segments is presented in the following table. Income before income taxes by segment includes allocated investment income. Identifiable assets by segment are those assets used in or allocated to the operation of each segment.

	Revenues					
(In thousands)	Earned Premiums (1)	Investment Income	Other	Total (2)	Pre-Tax Income (Loss)	Net Income (Loss) to Common Stockholders
Year ended December 31, 2021						
Insurance	$ 7,077,708	$ 468,821	$ 32,063	$ 7,578,592	$ 1,219,798	$ 976,184
Reinsurance & Monoline Excess	1,028,323	175,324	—	1,203,647	270,563	215,439
Corporate, other and eliminations (3)	—	27,473	555,122	582,595	(298,088)	(242,055)
Net investment gains	—	—	90,632	90,632	90,632	72,922
Consolidated	$ 8,106,031	$ 671,618	$ 677,817	$ 9,455,466	$ 1,282,905	$ 1,022,490
Year ended December 31, 2020						
Insurance	$ 6,067,669	$ 375,554	$ 35,611	$ 6,478,834	$ 668,012	$ 487,125
Reinsurance & Monoline Excess	863,174	146,029	—	1,009,203	205,587	164,655
Corporate, other and eliminations (3)	—	62,238	445,650	507,888	(271,797)	(214,291)
Net investment gains	—	—	103,000	103,000	103,000	93,181
Consolidated	$ 6,930,843	$ 583,821	$ 584,261	$ 8,098,925	$ 704,802	$ 530,670
Year ended December 31, 2019						
Insurance	$ 5,919,819	$ 429,405	$ 47,850	$ 6,397,074	$ 814,862	$ 650,510
Reinsurance & Monoline Excess	713,469	164,082	—	877,551	189,188	152,046
Corporate, other and eliminations (3)	—	52,127	454,741	506,868	(271,833)	(215,967)
Net investment gains	—	—	120,703	120,703	120,703	95,355
Consolidated	$ 6,633,288	$ 645,614	$ 623,294	$ 7,902,196	$ 852,920	$ 681,944

Identifiable Assets

(In thousands)	December 31,	
	2021	2020
Insurance	$ 24,414,305	$ 21,739,360
Reinsurance & Monoline Excess	4,916,894	4,652,074
Corporate, other and eliminations (3)	2,755,215	2,215,479
Consolidated	$ 32,086,414	$ 28,606,913

(1) Certain amounts included in earned premiums of each segment are related to inter-segment transactions.

(2) Revenues for Insurance includes $873 million, $692 million, and $725 million in 2021, 2020, and 2019, respectively, from foreign countries. Revenues for Reinsurance & Monoline Excess includes $380 million, $292 million, and $250 million in 2021, 2020 and 2019, respectively, from foreign countries.

(3) Corporate, other and eliminations represent corporate revenues and expenses and other items that are not allocated to

business segments.

Net premiums earned by major line of business were as follows:

(In thousands)	2021	2020	2019
Insurance			
Other liability	$ 2,639,601	$ 2,237,285	$ 2,063,401
Short-tail lines	1,389,068	1,247,908	1,223,902
Workers' compensation	1,131,283	1,127,487	1,301,980
Commercial automobile	990,945	794,171	750,051
Professional liability	926,811	660,818	580,485
Total Insurance	7,077,708	6,067,669	5,919,819
Reinsurance & Monoline Excess			
Casualty	643,193	521,559	405,063
Monoline Excess	201,187	171,522	160,071
Property	183,943	170,093	148,335
Total Reinsurance & Monoline Excess	1,028,323	863,174	713,469
Total	$ 8,106,031	$ 6,930,843	$ 6,633,288

(26) Subsequent Event

On February 23, 2022, the Company announced that it has entered into an agreement for the sale of a real estate investment consisting of an office building located at 52 Lime Street, London, U.K. (known as "The Scalpel") for £718 million, subject to agreed upon adjustments. The transaction is scheduled to close on March 7, 2022. The Company estimates that it will realize a pretax gain of more than $300 million in the first quarter of 2022, subject to adjustment for final transaction expenses and certain items, including the impact of the foreign exchange rate at the date of the close.

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

None.

ITEM 9A. CONTROLS AND PROCEDURES

The Company's management, including its Chief Executive Officer and Chief Financial Officer, have conducted an evaluation of the effectiveness of the Company's disclosure controls and procedures pursuant to Exchange Act Rule 13a-15(b) as of the end of the period covered by this annual report. Based on that evaluation, the Chief Executive Officer and Chief Financial Officer concluded that the Company has in place effective controls and procedures designed to ensure that information required to be disclosed by the Company in the reports it files or submits under the Exchange Act and the rules thereunder, is recorded, processed, summarized and reported within the time periods specified in the Commission's rules and forms.
During the quarter ended December 31, 2021, there have been no changes in our internal controls over financial reporting that have materially affected, or are reasonably likely to materially affect, our internal controls over financial reporting.

Management's Report On Internal Control Over Financial Reporting

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

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

Our management is responsible for establishing and maintaining adequate internal control over financial reporting. Under the supervision and with the participation of our management, including our principal executive officer and principal financial officer, we conducted an evaluation of the effectiveness of our internal control over financial reporting based on the framework in Internal Control - Integrated Framework (2013) issued by the Committee of Sponsoring Organizations of Treadway Commission. Based on our evaluation under the framework in Internal Control - Integrated Framework, our management concluded that our internal control over financial reporting was effective as of December 31, 2021.

Report of Independent Registered Public Accounting Firm

To the Stockholders and the Board of Directors
W. R. Berkley Corporation:

Opinion on Internal Control Over Financial Reporting

We have audited W. R. Berkley Corporation and subsidiaries' (the Company) internal control over financial reporting as of December 31, 2021, based on criteria established in *Internal Control - Integrated Framework (2013)* issued by the Committee of Sponsoring Organizations of the Treadway Commission. In our opinion, the Company maintained, in all material respects, effective internal control over financial reporting as of December 31, 2021, based on criteria established in *Internal Control - Integrated Framework (2013)* issued by the Committee of Sponsoring Organizations of the Treadway Commission.

We also have audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States) (PCAOB), the consolidated balance sheets of the Company as of December 31, 2021 and 2020, the related consolidated statements of income, comprehensive income, stockholders' equity, and cash flows for each of the years in the three-year period ended December 31, 2021, and the related notes and financial statement schedules II to VI (collectively, the consolidated financial statements), and our report dated February 24, 2022 expressed an unqualified opinion on those consolidated financial statements.

Basis for Opinion

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

We conducted our audit in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether effective internal control over financial reporting was maintained in all material respects. Our audit 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 audit also included performing such other procedures as we considered necessary in the circumstances. We believe that our audit provides a reasonable basis for our opinion.

Definition and Limitations of Internal Control Over Financial Reporting

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

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

/S/ KPMG LLP

New York, New York
February 24, 2022

ITEM 9B. OTHER INFORMATION

None.

ITEM 9C. DISCLOSURE REGARDING FOREIGN JURISDICTIONS THAT PREVENT INSPECTIONS

Not applicable.

PART III

ITEM 10. DIRECTORS, EXECUTIVE OFFICERS AND CORPORATE GOVERNANCE

Reference is made to the registrant's definitive proxy statement, which will be filed with the Securities and Exchange Commission within 120 days after December 31, 2021, and which is incorporated herein by reference.

ITEM 11. EXECUTIVE COMPENSATION

Reference is made to the registrant's definitive proxy statement, which will be filed with the Securities and Exchange Commission within 120 days after December 31, 2021, and which is incorporated herein by reference.

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

(a) Security ownership of certain beneficial owners

Reference is made to the registrant's definitive proxy statement, which will be filed with the Securities and Exchange Commission within 120 days after December 31, 2021, and which is incorporated herein by reference.

(b) Security ownership of management

Reference is made to the registrant's definitive proxy statement, which will be filed with the Securities and Exchange Commission within 120 days after December 31, 2021, and which is incorporated herein by reference.

(c) Changes in control

Reference is made to the registrant's definitive proxy statement, which will be filed with the Securities and Exchange Commission within 120 days after December 31, 2021, and which is incorporated herein by reference.

(d) Equity compensation plan information

Reference is made to the registrant's definitive proxy statement, which will be filed with the Securities and Exchange Commission within 120 days after December 31, 2021, and which is incorporated herein by reference.

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

Reference is made to the registrant's definitive proxy statement, which will be filed with the Securities and Exchange Commission within 120 days after December 31, 2021, and which is incorporated herein by reference.

ITEM 14. PRINCIPAL ACCOUNTING FEES AND SERVICES

Our independent registered public accounting firm is KPMG LLP, New York, NY, Auditor Firm ID: 185.

Reference is made to the registrant's definitive proxy statement, which will be filed with the Securities and Exchange Commission within 120 days after December 31, 2021, and which is incorporated herein by reference.

PART IV

ITEM 15. EXHIBITS AND FINANCIAL STATEMENT SCHEDULES

(a) Index to Financial Statements

The schedules to the consolidated financial statements listed below should be read in conjunction with the consolidated financial statements included in this Annual Report on Form 10-K. Financial statement schedules not included in this Annual Report on Form 10-K have been omitted because they are not applicable or required information is shown in the financial statements or notes thereto.

(b) Exhibits

EXHIBITS

Number	
(3.1)	The Company's Restated Certificate of Incorporation, as amended through May 10, 2004 (incorporated by reference to Exhibits 3.1 and 3.2 of the Company's Quarterly Report on Form 10-Q (File No. 1-15202) filed with the Commission on August 6, 2003).
(3.2)	Amendment, dated May 11, 2004, to the Company's Restated Certificate of Incorporation, as amended (incorporated by reference to Exhibit 3.2 of the Company's Quarterly report on Form 10-Q (File No. 1-15202) filed with the Commission on August 5, 2004).
(3.3)	Amendment, dated May 16, 2006, to the Company's Restated Certificate of Incorporation, as amended (incorporated by reference to Exhibit 3.2 of the Company's Current Report on Form 8-K (File No. 1-15202) filed with the Commission on May 17, 2006).
(3.4)	Amendment, dated June 12, 2020, to the Company's Restated Certificate of Incorporation, as amended (incorporated by reference to Exhibit 3.1 of the Company's Current Report on Form 8-K (File No. 1-15202) filed with the Commission on June 16, 2020).
(3.5)	Amended and Restated By-Laws (incorporated by reference to Exhibit 3 (ii) of the Company's Current Report on Form 8-K (File No. 1-15202) filed with the Commission on August 5, 2015).
(4.1)	Description of Registrant's Securities Registered Pursuant to Section 12 of the Securities Exchange Act of 1934.
(4.2)	Indenture, dated as of February 14, 2003, between the Company and The Bank of New York, as Trustee (incorporated by reference to Exhibit 4.1 of the Company's Annual Report on Form 10-K (File No. 1-15202) filed with the Commission on March 31, 2003).
(4.3)	Fifth Supplemental Indenture, dated as of February 9, 2007, between the Company and The Bank of New York, as Trustee, relating to $250,000,000 principal amount of the Company's 6.25% Senior Notes due 2037, including form of the Notes as Exhibit A (incorporated by reference to Exhibit 4.7 of the Company's Annual Report on Form 10-K (File No. 1-15202) filed with the Commission on March 1, 2007).
(4.4)	Eighth Supplemental Indenture, dated as of March 16, 2012, between the Company and The Bank of New York Mellon, as Trustee, relating to $350,000,000 principal amount of the Company's 4.625% Senior Notes due 2022, including form of the Notes as Exhibit A (incorporated by reference to Exhibit 4.2 of the Company's Current Report on Form 8-K (File No. 1-15202) filed with the Commission on March 16, 2012).
(4.5)	Ninth Supplemental Indenture, dated as of August 6, 2014, between the Company and The Bank of New York Mellon, as Trustee, relating to $350,000,000 principal amount of the Company's 4.75% Senior Notes due 2044, including form of the Notes as Exhibit A (incorporated by reference to Exhibit 4.2 of the Company's Current Report on Form 8-K (File No. 1-15202) filed with the Commission on August 6, 2014).
(4.6)	Indenture, dated as of May 12, 2020, between the Company and The Bank of New York Mellon, as Trustee (incorporated by reference to Exhibit 4.1 of the Company's Current Report on Form 8-K (File No. 1-15202) filed with the Commission on May 12, 2020).
(4.7)	First Supplemental Indenture, dated as of May 12, 2020, between the Company and The Bank of New York Mellon, as Trustee, relating to $470,000,000 principal amount of the Company's 4.00% Senior Notes due 2050, including form of the Notes as Exhibit A (incorporated by reference to Exhibit 4.2 of the Company's Current Report on Form 8-K (File No. 1-15202) filed with the Commission on May 12, 2020).
(4.8)	Second Supplemental Indenture, dated as of March 16, 2021, between the Company and The Bank of New York Mellon, as Trustee, relating to $400,000,000 principal amount of the Company's 3.550% Senior Notes due 2052, including form of the Notes as Exhibit A (incorporated by reference to Exhibit 4.2 of the Company's Current Report on Form 8-K (File No. 1-15202) filed with the Commission on March 16, 2021).
(4.9)	Third Supplemental Indenture, dated as of September 15, 2021, between the Company and The Bank of New York Mellon, as Trustee, relating to $350,000,000 principal amount of the Company's 3.150% Senior Notes due 2061, including form of the Notes as Exhibit A (incorporated by reference to Exhibit 4.2 of the Company's Current Report on Form 8-K (File No. 1-15202) filed with the Commission on September 15, 2021).

(4.10)	Subordinated Indenture, dated as of March 26, 2018, between the Company and The Bank of New York Mellon, as Trustee (incorporated by reference to Exhibit 4.1 of the Company’s Current Report on Form 8-K (File No. 1-15202) filed with the Commission on March 26, 2018).
(4.11)	First Supplemental Indenture, dated as of March 26, 2018, between the Company and The Bank of New York Mellon, as Trustee, relating to $185,000,000 principal amount of the Company’s 5.7% Subordinated Debentures due 2058, including the form of the Securities as Exhibit A (incorporated by reference to Exhibit 4.2 of the Company’s Current Report on Form 8-K (File No. 1-15202) filed with the Commission on March 26, 2018).
(4.12)	Second Supplemental Indenture, dated as of December 16, 2019, between the Company and the Bank of New York Mellon, as Trustee, relating to $300,000,000 principal amount of the Company's 5.10% Subordinated Debentures due 2059, including the form of the Securities as Exhibit A (incorporated by reference to Exhibit 4.2 of the Company's Current Report on Form 8-K (File No. 1-15202) filed with the Commission on December 16, 2019).
(4.13)	Third Supplemental Indenture, dated as of September 21, 2020, between the Company and The Bank of New York Mellon, as Trustee, relating to $250,000,000 principal amount of the Company’s 4.25% Subordinated Debentures Notes due 2060, including form of the Securities as Exhibit A (incorporated by reference to Exhibit 4.2 of the Company’s Current Report on Form 8-K (File No. 1-15202) filed with the Commission on September 21, 2020).
(4.14)	Fourth Supplemental Indenture, dated as of February 10, 2021, between the Company and The Bank of New York Mellon, as Trustee, relating to $300,000,000 principal amount of the Company’s 4.125% Subordinated Debentures Notes due 2061, including form of the Securities as Exhibit A (incorporated by reference to Exhibit 4.2 of the Company’s Current Report on Form 8-K (File No. 1-15202) filed with the Commission on February 10, 2021).
(4.15)	The instruments defining the rights of holders of the other long term debt securities of the Company are omitted pursuant to Section (b)(4)(iii)(A) of Item 601 of Regulation S-K. The Company agrees to furnish supplementally copies of these instruments to the Commission upon request.
(10.1)	W. R. Berkley Corporation 2018 Stock Incentive Plan (incorporated by reference to Annex B of the Company’s 2018 Proxy Statement (File No. 1-15202) filed with the Commission on April 19, 2018).
(10.2)	Form of Restricted Stock Unit Agreement for grant of April 4, 2003 (incorporated by reference to Exhibit 10.2 of the Company’s Quarterly Report on Form 10-Q (File No. 1-15202) filed with the Commission on August 6, 2003).
(10.3)	Form of Restricted Stock Unit Agreement under the W. R. Berkley Corporation 2003 Stock Incentive Plan (incorporated by reference to Exhibit 10.2 of the Company’s Quarterly Report on Form 10-Q (File No. 1-15202) filed with the Commission on May 3, 2005).
(10.4)	Form of Restricted Stock Unit Agreement under the W. R. Berkley Corporation 2003 Stock Incentive Plan (incorporated by reference to Exhibit 10.1 of the Company’s Quarterly Report on Form 10-Q (File No. 1-15202) filed with the Commission on August 6, 2010).
(10.5)	Form of Restricted Stock Unit Agreement under the W. R. Berkley Corporation 2012 Stock Incentive Plan (incorporated by reference to Exhibit 10.1 of the Company's Quarterly Report on Form 10-Q (File No. 1-15202) filed with the Commission on November 8, 2012).
(10.6)	Form of 2014 Performance-Based Restricted Stock Unit Agreement under the W. R. Berkley Corporation 2012 Stock Incentive Plan (incorporated by reference to Exhibit 10.1 of the Company's Quarterly Report on Form 10-Q (File No. 1-15202) filed with the Commission on November 7, 2014).
(10.7)	Form of 2015 Performance-Based Restricted Stock Unit Agreement under the W. R. Berkley Corporation 2012 Stock Incentive Plan (incorporated by reference to Exhibit 10.1 of the Company's Quarterly Report on Form 10-Q (File No. 1-15202) filed with the Commission on November 9, 2015).
(10.8)	Form of 2017 Performance-Based Restricted Stock Unit Agreement Under the W. R. Berkley Corporation 2012 Stock Incentive Plan (incorporated by reference to Exhibit 10.1 of the Company’s Quarterly Report on Form 10-Q (File No. 1-15202) filed with the Commission on November 8, 2017).

(10.9) Form of 2018 Performance-Based Restricted Stock Unit Agreement Under the W. R. Berkley Corporation 2018 Stock Incentive Plan (incorporated by reference to Exhibit 10.1 of the Company’s Quarterly Report on Form 10-Q (File No. 1-15202) filed with the Commission on November 7, 2018).

(10.10) Form of 2020 Performance-Based Restricted Stock Unit Agreement Under the W. R. Berkley Corporation 2018 Stock Incentive Plan (incorporated by reference to Exhibit 10.1 of the Company’s Quarterly Report on Form 10-Q (File No. 1-15202) filed with the Commission on November 5, 2020).

(10.11) W. R. Berkley Corporation Deferred Compensation Plan for Officers as amended and restated effective December 1, 2021 (incorporated by reference to Exhibit 10.1 of the Company’s Current Report on Form 8-K (File No. 1-15202) filed with the Commission on November 12, 2021).

(10.12) W. R. Berkley Corporation Deferred Compensation Plan for Directors as amended and restated effective December 1, 2021 (incorporated by reference to Exhibit 10.2 of the Company’s Current Report on Form 8-K (File No. 1-15202) filed with the Commission on November 12, 2021).

(10.13) W. R. Berkley Corporation Amended and Restated Annual Incentive Compensation Plan (incorporated by reference to Exhibit 10.1 of the Company's Current Report on Form 8-K (File No. 1-15202) filed with the Commission on February 25, 2019).

(10.14) W. R. Berkley Corporation 2014 Long-Term Incentive Plan (incorporated by reference to Annex A of the Company’s 2014 Proxy Statement (File No. 1-15202) filed with the Commission on April 7, 2014).

(10.15) Form of 2018 Performance Unit Award Agreement under the W. R. Berkley Corporation 2014 Long-Term Incentive Plan (incorporated by reference to Exhibit 10.1 of the Company’s Quarterly Report on Form 10-Q (File No. 1-15202) filed with the Commission on May 7, 2018).

(10.16) W. R. Berkley Corporation 2019 Long-Term Incentive Plan (incorporated by reference to Exhibit 10.2 of the Company's current Report on Form 8-K (File No. 1-15202) filed with the Commission on February 25, 2019).

(10.17) Form of 2019 Performance Unit Award Agreement under the W. R. Berkley Corporation 2019 Long-Term Incentive Plan (incorporated by reference to Exhibit 10.3 of the Company’s Current Report on Form 8-K (File No. 1-15202) filed with the Commission on February 25, 2019).

(10.18) Form of 2020 Performance Unit Award Agreement under the W. R. Berkley Corporation 2019 Long-Term Incentive Plan (incorporated by reference to Exhibit 10.1 of the Company’s Quarterly Report on Form 10-Q (File No. 1-15202) filed with the Commission on August 3, 2020).

(10.19) Form of 2021 Performance Unit Award Agreement under the W. R. Berkley Corporation 2019 Long-Term Incentive Plan (incorporated by reference to Exhibit 10.1 of the Company’s Quarterly Report on Form 10-Q (File No. 1-15202) filed with the Commission on November 4, 2021).

(10.20) W. R. Berkley Corporation 2009 Directors Stock Plan (incorporated by reference to Annex B of the Company’s 2021 Proxy Statement (File No. 1-15202) filed with the Commission on April 27, 2021).

(10.21) Supplemental Benefits Agreement between William R. Berkley and the Company as amended and restated as of December 21, 2011 (incorporated by reference to Exhibit 10.14 of the Company's Annual Report on Form 10-K (File No. 1-15202) filed with the Commission on February 28, 2012).

(14) Code of Ethics for Senior Financial Officers (incorporated by reference to Exhibit 14 of the Company’s Annual Report on Form 10-K (File No. 1-15202) filed with the Commission on March 14, 2005).

(21) List of the Company’s subsidiaries.

(23) Consent of Independent Registered Public Accounting Firm.

(31.1) Certification of the Chief Executive Officer pursuant to Rule 13a-14(a)/ 15d-14(a).

(31.2) Certification of the Chief Financial Officer pursuant to Rule 13a-14(a)/ 15d-14(a).

(32.1) Certification of the Chief Executive Officer and Chief Financial Officer pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.

ITEM 16. FORM 10-K Summary

None.

SIGNATURES

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

W. R. BERKLEY CORPORATION

By /s/ W. Robert Berkley, Jr.
W. Robert Berkley, Jr.
President and Chief Executive Officer

February 24, 2022

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

Signature	Title	Date
/s/ William R. Berkley William R. Berkley	Executive Chairman of the Board of Directors	February 24, 2022
/s/ W. Robert Berkley, Jr. W. Robert Berkley, Jr.	President Chief Executive Officer and Director (Principal executive officer)	February 24, 2022
/s/ Christopher L. Augostini Christopher L. Augostini	Director	February 24, 2022
/s/ Ronald E. Blaylock Ronald E. Blaylock	Director	February 24, 2022
/s/ Mark E. Brockbank Mark E. Brockbank	Director	February 24, 2022
/s/ Mary C. Farrell Mary C. Farrell	Director	February 24, 2022
/s/ María Luisa Ferré María Luisa Ferré	Director	February 24, 2022
/s/ Leigh Ann Pusey Leigh Ann Pusey	Director	February 24, 2022
/s/ Mark L. Shapiro Mark L. Shapiro	Director	February 24, 2022
/s/ Jonathan Talisman Jonathan Talisman	Director	February 24, 2022
/s/ Richard M. Baio Richard M. Baio	Executive Vice President and Chief Financial Officer (Principal financial officer and principal accounting officer)	February 24, 2022

Schedule II

W. R. Berkley Corporation
Condensed Financial Information of Registrant
Balance Sheets (Parent Company)

(In thousands)		December 31, 2021		December 31, 2020
Assets:				
Cash and cash equivalents	$	684,037	$	296,960
Fixed maturity securities available for sale at fair value (cost $805,211 and $792,752 at December 31, 2021 and 2020, respectively)		806,074		800,263
Loans receivable (net of allowance for expected credit losses of $647 and $28 at December 31, 2021 and 2020, respectively)		93,397		75,789
Equity securities, at fair value (cost $3,430 in 2021 and 2020 respectively)		3,430		3,430
Investment in subsidiaries		8,516,916		7,957,501
Current federal income taxes		23,424		—
Deferred federal income taxes		11,796		—
Property, furniture and equipment at cost, less accumulated depreciation		11,916		11,412
Other assets		43,793		11,231
Total assets	$	10,194,783	$	9,156,586
Liabilities and stockholders' equity:				
Liabilities:				
Due to subsidiaries	$	138,376	$	77,860
Other liabilities		146,892		106,064
Current federal income taxes		—		15,662
Deferred federal income taxes		—		31,851
Subordinated debentures		1,007,652		1,102,309
Senior notes		2,248,852		1,512,038
Total liabilities		3,541,772		2,845,784
Stockholders' equity:				
Preferred stock		—		—
Common stock		70,535		70,535
Additional paid-in capital		1,016,372		1,012,483
Retained earnings (including accumulated undistributed net income of subsidiaries of $6,463,882 and $5,700,515 at December 31, 2021 and 2020, respectively)		9,015,135		8,348,381
Accumulated other comprehensive loss		(281,955)		(62,172)
Treasury stock, at cost		(3,167,076)		(3,058,425)
Total stockholders' equity		6,653,011		6,310,802
Total liabilities and stockholders' equity	$	10,194,783	$	9,156,586

See Report of Independent Registered Public Accounting Firm and note to condensed financial information.

Schedule II, Continued

W. R. Berkley Corporation
Condensed Financial Information of Registrant, Continued
Statements of Income (Parent Company)

(In thousands)	Year Ended December 31, 2021	2020	2019
Management fees and investment income including dividends from subsidiaries of $520,251, $617,424, and $416,027 for the years ended December 31, 2021, 2020 and 2019, respectively	$ 548,512	$ 654,485	$ 470,773
Net investment gains	1,474	3,580	850
Other income	1,138	568	117
Total revenues	551,124	658,633	471,740
Operating costs and expense	214,995	166,892	204,812
Interest expense	144,837	145,417	148,282
Income before federal income taxes	191,292	346,324	118,646
Federal income taxes:			
Federal income taxes provided by subsidiaries on a separate return basis	294,731	188,490	207,647
Federal income tax expense on a consolidated return basis	(226,900)	(139,679)	(141,190)
Net federal income tax expense	67,831	48,811	66,457
Income before undistributed equity in net income of subsidiaries	259,123	395,135	185,103
Equity in undistributed net income of subsidiaries	763,367	135,535	496,841
Net income	$ 1,022,490	$ 530,670	$ 681,944

See Report of Independent Registered Public Accounting Firm and note to condensed financial information.

Schedule II, Continued

W. R. Berkley Corporation
Condensed Financial Information of Registrant, Continued
Statements of Cash Flows (Parent Company)

(In thousands)	**Year Ended December 31, 2021**	**2020**	**2019**
Cash flows from operating activities:			
Net income	$ 1,022,490	$ 530,670	$ 681,944
Adjustments to reconcile net income to net cash from operating activities:			
Net investment gains	(1,474)	(3,580)	(850)
Depreciation and amortization	18,761	15,133	7,058
Equity in undistributed earnings of subsidiaries	(763,367)	(135,535)	(496,841)
Tax payments received from subsidiaries	328,851	165,495	192,407
Federal income taxes provided by subsidiaries on a separate return basis	(294,731)	(188,489)	(207,646)
Stock incentive plans	48,440	49,599	28,389
Change in:			
Federal income taxes	(22,017)	32,069	11,841
Other assets	(33,319)	1,220	(5,343)
Other liabilities	(11,758)	3,964	11,866
Accrued investment income	755	836	4,395
Net cash from operating activities	292,631	471,382	227,220
Cash (used in) from investing activities:			
Proceeds from sales of fixed maturity securities	402,046	414,802	619,334
Proceeds from maturities and prepayments of fixed maturity securities	654,134	258,413	435,473
Cost of purchases of fixed maturity securities	(1,071,823)	(747,713)	(459,418)
Change in loans receivable	(18,227)	(20,023)	(4,250)
Investments in and advances to subsidiaries, net	(1,411)	(100,704)	(36,170)
Change in balance due to security broker	10,487	(245)	245
Net additions to real estate, furniture & equipment	(1,496)	(81)	(112)
Other, net	95	103	142
Net cash (used in) from investing activities	(26,195)	(195,448)	555,244
Cash from (used in) financing activities:			
Net proceeds from issuance of senior notes	1,029,579	736,609	290,454
Repayment and redemption of debt	(400,000)	(650,000)	(440,651)
Purchase of common treasury shares	(122,426)	(346,357)	(18,225)
Cash dividends to common stockholders	(355,736)	(84,147)	(308,191)
Other, net	(30,776)	(24,880)	—
Net cash from (used in) financing activities	120,641	(368,775)	(476,613)
Net increase (decrease) in cash and cash equivalents	387,077	(92,841)	305,851
Cash and cash equivalents at beginning of year	296,960	389,801	83,950
Cash and cash equivalents at end of year	$ 684,037	$ 296,960	$ 389,801

See Report of Independent Registered Public Accounting Firm and note to condensed financial information.

W. R. Berkley Corporation

Condensed Financial Information of Registrant, Continued

December 31, 2021

Note to Condensed Financial Information (Parent Company)

The accompanying condensed financial information should be read in conjunction with the notes to consolidated financial statements included elsewhere herein. Reclassifications have been made in the 2020 and 2019 financial statements as originally reported to conform them to the presentation of the 2021 financial statements.

The Company files a consolidated federal income tax return with the results of its domestic insurance subsidiaries included on a statutory basis. Under present Company policy, federal income taxes payable by subsidiary companies on a separate-return basis are paid to W. R. Berkley Corporation, and the Company pays the tax due on a consolidated return basis.

Schedule III

W. R. Berkley Corporation and Subsidiaries
Supplementary Insurance Information
December 31, 2021, 2020 and 2019

(In thousands)	Deferred Policy Acquisition Cost	Reserve for Losses and Loss Expenses	Unearned Premiums	Net Premiums Earned	Net Investment Income	Loss and Loss Expenses	Amortization of Deferred Policy Acquisition Cost	Other Operating Costs and Expenses	Net Premiums Written
December 31, 2021									
Insurance	$ 566,718	$ 12,379,395	$ 4,348,171	$ 7,077,708	$ 468,821	$ 4,326,403	$ 830,199	$ 1,202,192	$ 7,743,814
Reinsurance & Monoline Excess	109,427	3,011,493	498,989	1,028,323	175,324	627,557	131,429	174,098	1,119,053
Corporate, other and eliminations	—	—	—	—	27,473	—	—	261,352	—
Total	$ 676,145	$ 15,390,888	$ 4,847,160	$ 8,106,031	$ 671,618	$ 4,953,960	$ 961,628	$ 1,637,642	$ 8,862,867
December 31, 2020									
Insurance	$ 467,871	$ 10,977,674	$ 3,660,758	$ 6,067,669	$ 375,554	$ 3,939,759	$ 734,062	$ 1,137,002	$ 6,347,101
Reinsurance & Monoline Excess	88,297	2,806,756	412,433	863,174	146,029	528,947	170,893	103,775	915,336
Corporate, other and eliminations	—	—	—	—	62,238	—	—	244,660	—
Total	$ 556,168	$ 13,784,430	$ 4,073,191	$ 6,930,843	$ 583,821	$ 4,468,706	$ 904,955	$ 1,485,437	$ 7,262,437
December 31, 2019									
Insurance	$ 438,082	$ 9,836,950	$ 3,304,152	$ 5,919,819	$ 429,405	$ 3,692,551	$ 840,333	$ 1,049,328	$ 6,086,009
Reinsurance & Monoline Excess	79,282	2,746,299	352,355	713,469	164,082	438,565	161,278	88,520	777,490
Corporate, other and eliminations	—	—	—	—	52,127	—	—	222,623	—
Total	$ 517,364	$ 12,583,249	$ 3,656,507	$ 6,633,288	$ 645,614	$ 4,131,116	$ 1,001,611	$ 1,360,471	$ 6,863,499

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See Report of Independent Registered Public Accounting Firm.

Schedule IV

W. R. Berkley Corporation and Subsidiaries
Reinsurance
Years ended December 31, 2021, 2020 and 2019

(In thousands, other than percentages)	Premiums Written: Direct Amount	Ceded to Other Companies	Assumed from Other Companies	Net Amount	Percentage of Amount Assumed to Net
Year ended December 31, 2021					
Insurance	$ 9,220,683	$ 1,727,854	$ 250,985	$ 7,743,814	3.2 %
Reinsurance & Monoline Excess	310,367	109,413	918,099	1,119,053	82.0 %
Total	$ 9,531,050	$ 1,837,267	$ 1,169,084	$ 8,862,867	13.2 %
Year ended December 31, 2020					
Insurance	$ 7,625,981	$ 1,490,395	$ 211,515	$ 6,347,101	3.3 %
Reinsurance & Monoline Excess	248,069	94,815	762,082	915,336	83.3 %
Total	$ 7,874,050	$ 1,585,210	$ 973,597	$ 7,262,437	13.4 %
Year ended December 31, 2019					
Insurance	$ 7,180,759	$ 1,312,564	$ 217,814	$ 6,086,009	3.6 %
Reinsurance & Monoline Excess	206,000	86,155	657,645	777,490	84.6 %
Total	$ 7,386,759	$ 1,398,719	$ 875,459	$ 6,863,499	12.8 %

See Report of Independent Registered Public Accounting Firm.

Schedule V

W. R. Berkley Corporation and Subsidiaries
Valuation and Qualifying Accounts
Years ended December 31, 2021, 2020 and 2019

(In thousands)	Opening Balance	Cumulative Effect Adjustment - CECL	Additions- Charged to Expense	Deduction- Amounts Written Off	Ending Balance
Year ended December 31, 2021					
Premiums, fees and other receivables	$ 27,855	$ —	$ 10,807	$ (7,802)	$ 30,860
Due from reinsurers	7,801	—	334	(422)	7,713
Deferred federal and foreign income taxes	79,488	—	6,011	(10,269)	75,230
Fixed maturity securities	2,580	—	21,013	(968)	22,625
Loan loss reserves	5,437	—	—	(3,719)	1,718
Total	$ 123,161	$ —	$ 38,165	$ (23,180)	$ 138,146
Year ended December 31, 2020					
Premiums, fees and other receivables	$ 26,546	$ 1,270	$ 6,783	$ (6,744)	$ 27,855
Due from reinsurers	690	5,927	1,187	(3)	7,801
Deferred federal and foreign income taxes	33,250	—	46,756	(518)	79,488
Fixed maturity securities	—	35,714	16,909	(50,043)	2,580
Loan loss reserves	2,146	(357)	3,648	—	5,437
Total	$ 62,632	$ 42,554	$ 75,283	$ (57,308)	$ 123,161
Year ended December 31, 2019					
Premiums, fees and other receivables	$ 39,093	$ —	$ (5,549)	$ (6,998)	$ 26,546
Due from reinsurers	947	—	—	(257)	690
Deferred federal and foreign income taxes	35,195	—	1,298	(3,243)	33,250
Loan loss reserves	3,383	—	—	(1,237)	2,146
Total	$ 78,618	$ —	$ (4,251)	$ (11,735)	$ 62,632

See Report of Independent Registered Public Accounting Firm.

Schedule VI

W. R. Berkley Corporation and Subsidiaries
Supplementary Information Concerning Property-Casualty Insurance Operations
Years Ended December 31, 2021, 2020 and 2019

(In thousands)	2021	2020	2019
Deferred policy acquisition costs	$ 676,145	$ 556,168	$ 517,364
Reserves for losses and loss expenses	15,390,888	13,784,430	12,583,249
Unearned premiums	4,847,160	4,073,191	3,656,507
Net premiums earned	8,106,031	6,930,843	6,633,288
Net investment income	671,618	583,821	645,614
Losses and loss expenses incurred:			
Current year	4,921,191	4,432,937	4,057,989
Prior years	863	627	34,079
Loss reserve discount accretion	31,906	35,142	39,048
Amortization of deferred policy acquisition costs	961,628	904,955	1,001,611
Paid losses and loss expenses	3,665,694	3,598,649	3,659,402
Net premiums written	8,862,867	7,262,437	6,863,499

See Report of Independent Registered Public Accounting Firm.

Businesses

BERKLEY INSURANCE COMPANY

475 Steamboat Road	
Greenwich, Connecticut 06830	(203) 542 3800

William R. Berkley, Chairman
W. Robert Berkley, Jr., President and Chief Executive Officer

Insurance

ACADIA INSURANCE

One Acadia Commons	
Westbrook, Maine 04092	(800) 773 4300
www.acadiainsurance.com	

David J. LeBlanc, President

Albany, New York	(800) 773 4300
Bedford, New Hampshire	(800) 224 8850
Marlborough, Massachusetts	(888) 665 1170
Rocky Hill, Connecticut	(866) 382 0036
Syracuse, New York	(866) 811 7722

ADMIRAL INSURANCE GROUP

1000 Howard Boulevard, Suite 300	
P.O. Box 5430	
Mount Laurel, New Jersey 08054	(856) 429 9200
www.admiralins.com	

Daniel Smyrl, President and Chief Executive Officer

Atlanta, Georgia	(770) 476 1561
Austin, Texas	(512) 795 0766
Chicago, Illinois	(312) 368 1107
Seattle, Washington	(206) 467 6511

BERKLEY ACCIDENT AND HEALTH

2445 Kuser Road, Suite 201	
Hamilton Square, New Jersey 08690	(609) 584 6990
www.berkleyah.com	

Brad N. Nieland, President and Chief Executive Officer

Atlanta, Georgia	(678) 387 1824
Charlotte, North Carolina	(727) 415 0759
Chicago, Illinois	(847) 946 8406
Cleveland, Ohio	(440) 728 1805
Dallas, Texas	(972) 849 7406
Denver, Colorado	(303) 667 5198
Hamilton Square, New Jersey	(908) 415 2711
Hartford, Connecticut	(860) 380 1190
Kansas City, Kansas	(913) 515 7374
Marlborough, Massachusetts	(908) 415 2711
Minneapolis, Minnesota	(303) 667 5198
New York, New York	(212) 822 3333
Philadelphia, Pennsylvania	(908) 415 2711
San Francisco, California	(623) 208 0556

BERKLEY AGRIBUSINESS

11201 Douglas Avenue	
Urbandale, Iowa 50322	(866) 382 7314
www.berkleyag.com	

Bradley T. London, President

BERKLEY ALLIANCE MANAGERS

30 South Pearl Street, 6th Floor	
Albany, New York 12207	(518) 407 0088

Stephen L. Porcelli, President

BERKLEY CONSTRUCTION PROFESSIONAL

www.berkleycp.com	(405) 805 6635

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www.berkleydp.com	(405) 805 6635

BERKLEY SERVICE PROFESSIONALS
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BERKLEY ASPIRE

14902 North 73rd Street	
Scottsdale, Arizona 85260	(866) 412 7742
www.berkleyaspire.com	

Brian R. Griffith, President

Scottsdale, Arizona	(480) 444 5950
Charlotte, North Carolina	(704) 759 7049
Glen Allen, Virginia	(804) 237 5273
West Chester, Ohio	(513) 826 4875

Businesses

BERKLEY ASSET PROTECTION
757 Third Avenue, 10th Floor
New York, New York 10017 (212) 497 3700
www.berkleyassetpro.com

Joseph P. Dowd, President

BERKLEY CANADA
145 King Street West, Suite 1000
Toronto, Ontario M5H 1J8 (416) 304 1178
www.berkleycanada.com

1002, Rue Sherbrooke Ouest
Bureau 2220
Montreal, Quebec H3A 3L6 (514) 842 5587

Andrew Steen, President

BERKLEY CONSTRUCTION SOLUTIONS
303 Wyman Street, Suite 300
Waltham, Massachusetts 02451 (617) 610 4980

Andrew Robinson, President

BERKLEY CUSTOM INSURANCE
One Metro Center
1 Station Place, Suite 600
Stamford, Connecticut 06902 (203) 658 1500
www.berkleycustom.com

Michael P. Fujii, President and Chief Executive Officer

BERKLEY CUSTOM INSURANCE SERVICES, LLC
Los Angeles, California (213) 417 5431

BXM INSURANCE SERVICES, INC.
Chicago, Illinois (312) 605 4648
Los Angeles, California (213) 417 5431

BERKLEY CYBER RISK SOLUTIONS
412 Mount Kemble Avenue, Suite G50
Morristown, New Jersey 07960 (973) 775 7494
www.berkleycyberrisk.com

Tracey Vispoli, President

BERKLEY ENTERTAINMENT
600 Las Colinas Boulevard, Suite 1400
Irving, Texas 75039 (972) 819 8980
www.berkleyentertainment.com

Cindy Broschart, President

BERKLEY ENVIRONMENTAL
101 Hudson Street, Suite 2550
Jersey City, New Jersey 07302 (201) 748 3121
www.berkleyenvironmental.com

Kenneth J. Berger, President

Atlanta, Georgia	(404) 443 2117
Boston, Massachusetts	(857) 265 7479
Chicago, Illinois	(312) 727 0302
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Jersey City, New Jersey	(201) 748 3047
Philadelphia, Pennsylvania	(215) 533 7360

BERKLEY MANAGERS INSURANCE SERVICES, LLC
Walnut Creek, California (925) 472 8210

BERKLEY FINANCIAL SPECIALISTS
757 Third Avenue, 10th Floor
New York, New York 10017 (866) 539 3995
www.berkleyfs.com

Michael G. Connor, President

BERKLEY CRIME
29 South Main Street, 3rd Floor
West Hartford, Connecticut 06107 (844) 44 CRIME
www.berkleycrime.com
Towson, Maryland (866) 539 3995

BERKLEY FIRE & MARINE UNDERWRITERS
425 North Martingale Road, Suite 1520
Schaumburg, Illinois 60173 (847) 466 9371
www.berkleymarine.com

David A. Higley, President

BERKLEY GLOBAL PRODUCT RECALL MANAGEMENT
80 Broad Street, Suite 3200
New York, New York 10004 (212) 413 2499
www.berkleygpr.com

Louis Lubrano, President

Dallas, Texas (972) 552 6100
London, United Kingdom 44 (0) 20 7088 1900

BERKLEY MANAGERS INSURANCE SERVICES, LLC
Los Angeles, California (213) 372 1727
San Francisco, California (415) 417 5950

BERKLEY HEALTHCARE
16305 Swingley Ridge Road, Suite 450
Chesterfield, Missouri 63017 (212) 822 3343
www.berkleyhealthcare.com

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BERKLEY HEALTHCARE PROFESSIONAL INSURANCE SERVICES, LLC
Sebastopol, California (707) 829 4720

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BERKLEY HUMAN SERVICES
222 South Ninth Street, Suite 2700
Minneapolis, Minnesota 55402 (612) 766 3100
www.berkleyhumanservices.com

Roger M. Nulton, President

BERKLEY INDUSTRIAL COMP
One Metroplex Drive, Suite 500
Birmingham, Alabama 35209 (205) 870 3535
www.berkindcomp.com

Chandler F. Cox, Jr., President and Chief Executive Officer

Las Vegas, Nevada (855) 425 5800
Lexington, Kentucky (888) 886 9006

BERKLEY INSURANCE ASIA
Room 4407, 44/F Hopewell Centre
183 Queen's Road East
Wanchai, Hong Kong (852) 3708 5000
www.berkleyasia.com

18 Cross Street
Unit 09-02, Cross Street Exchange
Singapore 048423 (65) 6902 0601

30th Floor, Shanghai Tower
501 Middle Yincheng Road
Pudong, Shanghai 200120, China 86 (21) 6162 8122

Shasi Nair, Chief Executive Officer

BERKLEY INSURANCE AUSTRALIA
Level 7, 321 Kent Street
Sydney NSW 2000, Australia 61 (2) 9275 8500
www.berkleyinaus.com.au

Tony Wheatley, Chief Executive Officer

Adelaide SA, Australia 61 (8) 8470 9020
Brisbane QLD, Australia 61 (7) 3220 9900
Melbourne VIC, Australia 61 (3) 8622 2000
Perth WA, Australia 61 (8) 6488 0900

Businesses

BERKLEY INTERNATIONAL LATINOAMÉRICA
BERKLEY INTERNATIONAL SEGUROS S.A.
BERKLEY INTERNATIONAL ASEGURADORA DE RIESGOS DEL TRABAJO S.A.
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Carlos Pellegrini 1023, Piso 8
C1009ABU Buenos Aires, Argentina 54 (11) 4378 8100
www.berkley.com.ar

Bartolomé Mitre 699
S2000COM Rosario, Argentina 54 (341) 410 4200

Eduardo I. Llobet, President and Chief Executive Officer

BERKLEY INTERNATIONAL DO BRASIL SEGUROS S.A.
Avenida Presidente Juscelino Kubitschek, 1455
15° andar - cj. 151 Vila Nova Conceição
04543-011 São Paulo, Brazil 55 (11) 3848 8622
www.berkley.com.br

Luciano Calabró Calheiros, President and Chief Executive Officer

BERKLEY INTERNATIONAL FIANZAS MÉXICO, S.A. DE C.V.
Avenida Santa Fe 505
Piso 17, Oficina 1702
Cruz Manca, Cuajimalpa de Morelos
05349, México 52 (55) 1037 5300
www.berkleymex.com

Guillermo Espinosa Barragan, President and Chief Executive Officer

BERKLEY INTERNATIONAL PUERTO RICO, LLC
Metro Office Park
Edificio 17 Calle 2, Suite 500
Guaynabo, Puerto Rico 00968 (787) 466 7466

Eduardo I. Llobet, President

BERKLEY INTERNATIONAL SEGUROS COLOMBIA S.A.
Carrera 7 # 71 – 21 Torre B, Oficina 1002
110231 Bogotá, Colombia 57 (1) 357 2727
www.berkley.com.co

Sylvia Luz Rincón, President and Chief Executive Officer

BERKLEY INTERNATIONAL SEGUROS MÉXICO, S.A. DE C.V.
Avenida Santa Fe 505, Piso 17, Oficina 1702
Cruz Manca, Cuajimalpa de Morelos
05349, México 52 (55) 1037 5300
www.berkleymex.com

Javier García Ortíz de Zárate, President and Chief Executive Officer

BERKLEY INTERNATIONAL SEGUROS S.A. (URUGUAY)
Rincón 391, Piso 5
11100 Montevideo, Uruguay (598) 2916 6998
www.berkley.com.uy

Eduardo I. Llobet, President

BERKLEY LATIN AMERICA AND CARIBBEAN MANAGERS
600 Brickell Avenue, Suite 3900
Miami, Florida 33131 (305) 921 6200

Eduardo I. Llobet, President and Chief Executive Officer

BERKLEY INSURANCE COMPANY REPRESENTATIVE OFFICE IN COLOMBIA
Carrera 7 # 80-49, Oficina 303
Edificio Centro de Negocios El Nogal
Bogotá, Colombia 57 (1) 744 4015

Jaime Aramburo, Director

BERKLEY INSURANCE COMPANY REPRESENTATIVE OFFICE IN MÉXICO
Avenida Santa Fe 505
Piso 17, Oficina 1702
Cruz Manca, Cuajimalpa de Morelos
05349, México 52 (55) 1037 5300
www.berkleymex.com

Hiram García, Director

BERKLEY LIFE SCIENCES
200 Princeton South Corporate Center, Suite 250
Ewing, New Jersey 08628 (609) 844 7800
www.berkleyls.com

Emily J. Urban, President

Naperville, Illinois (609) 844 7800

BERKLEY LS INSURANCE SOLUTIONS, LLC
Walnut Creek, California

BERKLEY LUXURY GROUP
301 Route 17 North, Suite 900
Rutherford, New Jersey 07070 (201) 518 2500
www.berkleyluxurygroup.com

Maureen E. Hackett, President

Chicago, Illinois (312) 881 1456

BERKLEY FINE DINING SPECIALISTS
www.berkleyfinedining.com (800) 504 7012

BERKLEY LUXURY REAL ESTATE SPECIALISTS
www.berkleyluxuryrealestate.com (800) 504 7012

BERKLEY MANAGEMENT PROTECTION
433 S. Main Street, Suite 324
West Hartford, Connecticut 06110 (959) 205 5001
www.berkleymp.com

Charles E. Thompson, President

BERKLEY MEDICAL MANAGEMENT SOLUTIONS
5400 West 110th Street, 4th Floor
Overland Park, Kansas 66211 (855) 444 2667
www.berkleymms.com

Eric-Jason Smith, Chief Operating Officer

Boston, Massachusetts (855) 444 2667
Greensboro, North Carolina (855) 444 2667

BERKLEY MID-ATLANTIC GROUP
4820 Lake Brook Drive, Suite 300
Glen Allen, Virginia 23060 (804) 285 2700
www.wrbmag.com

Michelle D. Middleton, President

Columbus, Ohio (800) 283 1153
Glen Allen, Virginia (800) 283 1153
Harrisburg, Pennsylvania (800) 283 1153
Pittsburgh, Pennsylvania (800) 283 1153

BERKLEY NET UNDERWRITERS
9301 Innovation Drive, Suite 200
Manassas, Virginia 20110 (877) 497 2637
www.berkleynet.com

Brian P. Douglas, President

Las Vegas, Nevada (877) 497 2637
Minneapolis, Minnesota (877) 497 2637

BERKLEY NORTH PACIFIC GROUP
660 East Watertower Street
Meridian, Idaho 83642 (800) 480 2942
www.berkleynpac.com

Carrie H. Cheshier, President

Bellevue, Washington (877) 316 9038

BERKLEY OFFSHORE UNDERWRITING MANAGERS
757 Third Avenue, 10th Floor
New York, New York 10017 (212) 618 2950
www.berkleyoffshore.com

Frank A. Costa, President

Houston, Texas (832) 547 2900

BERKLEY OFFSHORE UNDERWRITING MANAGERS UK, LIMITED
Level 13, 52 Lime Street
London EC3M 7AF, United Kingdom 44 (0) 20 3943 1400

R. Christian Walker, Executive Vice President

BERKLEY OIL & GAS
2107 CityWest Boulevard, 8th Floor
Houston, Texas 77042 (877) 972 2264
www.berkleyoil-gas.com

Linda A. Eppolito, President

BERKLEY RENEWABLE ENERGY
www.berkleyrenewable.com

BERKLEY ONE
412 Mount Kemble Avenue, Suite G50
Morristown, New Jersey 07960 (203) 542 3301
www.berkleyone.com

Kathleen M. Tierney, President

BERKLEY PROFESSIONAL LIABILITY
757 Third Avenue, 10th Floor
New York, New York 10017 (212) 618 2900
www.berkleypro.com

John R. Benedetto, President

Alpharetta, Georgia (470) 769 7312
London, United Kingdom 44 (0) 20 7088 1916
Schaumburg, Illinois (630) 237 3650
Toronto, Ontario (416) 304 1178

Businesses

BERKLEY TRANSACTIONAL
412 Mount Kemble Avenue, Suite G50
Morristown, New Jersey 07960 (973) 775 7499
www.berkleytransactional.com
Randolph Hein, President

BERKLEY PROGRAM SPECIALISTS
1250 East Diehl Road, Suite 200
Naperville, Illinois 60563 (630) 210 0360
www.berkley-ps.com
Gregory A. Douglas, President

BERKLEY EQUINE & CATTLE DIVISION
www.berkleyequine.com
230 Lexington Green Circle, Suite 215
Lexington, Kentucky 40503 (859) 300 8035
Sheila Gott, Senior Vice President and Manager

BERKLEY PUBLIC ENTITY
200 Princeton South Corporate Center, Suite 280
Ewing, New Jersey 08628 (844) 972 2736
www.berkleypublicentity.com
Scott R. Barraclough, Chief Executive Officer

Ewing, New Jersey	(609) 963 3321
Morristown, New Jersey	(973) 775 7461

BERKLEY RISK
222 South Ninth Street, Suite 2700
Minneapolis, Minnesota 55402 (612) 766 3000
www.berkleyrisk.com
John M. Goodwin, President

Council Bluffs, Iowa	(800) 832 0137
Denver, Colorado	(303) 357 2600
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550 West Jackson Boulevard, Suite 500
Chicago, Illinois 60661 (312) 800 6200
www.berkleyselect.com
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BERKLEY SMALL BUSINESS SOLUTIONS
433 South Main Street, Suite 300
West Hartford, Connecticut 06110 (855) 272 7555
Jeanne R. Fenster, President

BERKLEY SOUTHEAST INSURANCE GROUP
1745 North Brown Road, Suite 400
Lawrenceville, Georgia 30043 (678) 533 3400
www.berkleysig.com
Dennis L. Barger, President

Birmingham, Alabama	(855) 610 4545
Charlotte, North Carolina	(855) 610 4545
Lawrenceville, Georgia	(855) 610 4545
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412 Mount Kemble Avenue, Suite 310N
Morristown, New Jersey 07960 (973) 775 5024
www.berkleysurety.com
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Atlanta, Georgia	(678) 624 1818
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Urbandale, Iowa	(800) 456 5486
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Minneapolis, Minnesota 55402 (612) 344 4550
www.berkley-tech.com

Matthew A. Mueller, President

Washington, D.C.	(571) 778 6635
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Building 200, Suite 200
Jacksonville, Florida 32256 (904) 363 0900
www.carolinacas.com

David R. Lockhart, President

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433 South Main Street, Suite 300
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www.berkleyprimetrans.com

David R. Lockhart, President

CONTINENTAL WESTERN GROUP
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Urbandale, Iowa 50322 (515) 473 3500
www.cwgins.com

Timothy J. Nelligan, President

Denver, Colorado	(800) 235 2942
Lincoln, Nebraska	(800) 235 2942
Luverne, Minnesota	(800) 235 2942

GEMINI TRANSPORTATION UNDERWRITERS
99 Summer Street, Suite 1800
Boston, Massachusetts 02110 (617) 310 8200
www.geminiunderwriters.com

Jason R. Lewis, President

INTREPID DIRECT INSURANCE
5400 West 110th Street, Suite 400
Overland Park, Kansas 66211 (877) 249 7181
www.intrepiddirect.com

Bill Strout, President

KEY RISK INSURANCE
7823 National Service Road
Greensboro, North Carolina 27409 (800) 942 0225
www.keyrisk.com

Scott A. Holbrook, President

NAUTILUS INSURANCE GROUP
7233 East Butherus Drive
Scottsdale, Arizona 85260 (480) 951 0905
www.nautilusinsgroup.com

Thomas Joyce, President

PREFERRED EMPLOYERS INSURANCE
9797 Aero Drive, Suite 200
San Diego, California 92123 (888) 472 9001
www.peiwc.com

Dennis J. Levesque, President

UNION STANDARD INSURANCE GROUP
222 Las Colinas Boulevard W, Suite 1300
Irving, Texas 75039 (972) 719 2400
www.usic.com

John Henle, President

Albuquerque, New Mexico	(800) 444 0049
Dallas, Texas	(800) 444 0049
Little Rock, Arkansas	(800) 444 0049
Oklahoma City, Oklahoma	(800) 444 0049
Phoenix, Arizona	(800) 444 0049
San Antonio, Texas	(800) 444 0049

Businesses

VELA INSURANCE SERVICES
550 West Jackson Boulevard, Suite 500
Chicago, Illinois 60661 (877) 835 2467
www.vela-ins.com

Arthur G. Davis, President

Atlanta, Georgia	(877) 835 2467
Chicago, Illinois	(877) 835 2467
Minneapolis, Minnesota	(877) 835 2467
Naperville, Illinois	(877) 835 2467
New York, New York	(877) 835 2467
Omaha, Nebraska	(877) 835 2467
Scottsdale, Arizona	(877) 835 2467

VELA INSURANCE SERVICES, LLC

Los Angeles, California	(877) 835 2467
Walnut Creek, California	(877) 835 2467

VERUS SPECIALTY INSURANCE
4820 Lake Brook Drive, Suite 200
Glen Allen, Virginia 23060 (804) 525 1360
www.verusins.com

Marlo M. Edwards, President

Centennial, Colorado (303) 357 2640

W.R. BERKLEY EUROPEAN HOLDINGS AG
Genferstrasse 23
8002 Zürich, Switzerland
www.berkleyinsurance.li

Mark Talbot, Managing Director

W. R. BERKLEY EUROPE AG
Städtle 35A, P.O. Box 835
9490 Vaduz, Liechtenstein 423 237 27 47

Hans-Peter Naef, General Manager

Akersgata 35-39
N-0158 Oslo, Norway 47 (0) 23 27 24 00

Birger Jarlsgatan 22, 4 tr
114 34 Stockholm, Sweden 46 (8) 410 337 00

Christophstrasse 19
50670 Cologne, Germany 49 (0) 22199386-0

Paseo de la Castellana, 141-Planta 18
28046 Madrid, Spain 34 (0) 914492646

Level 17, 52 Lime Street
London EC3M 7AF, United Kingdom 44 (0) 2039431000

BERKLEY EUROPEAN UNDERWRITERS AS
Akersgata 35-39
N-0158 Oslo, Norway 47 (0) 23272400

Ivar Pedersen, Chief Executive Officer

W/R/B UNDERWRITING
SYNDICATE 1967 AT LLOYD'S
W. R. BERKLEY UK LIMITED
Level 14, 52 Lime Street
London EC3M 7AF, United Kingdom 44 (0) 20 3943 1900
www.wrbunderwriting.com

David Brosnan, Chief Executive Officer
James Hastings, President

Reinsurance & Monoline Excess

BERKLEY RE
www.berkleyre.com

BERKLEY RE AMERICA
One Metro Center
1 Station Place, Suite 702
Stamford, Connecticut 06902 (203) 905 4444

Daniel R. Westcott, President

BERKLEY RE AUSTRALIA
Level 7, 321 Kent Street
Sydney NSW 2000, Australia 61 (2) 8117 2100

Level 10, 340 Adelaide Street
Brisbane QLD 4000, Australia 61 (7) 3175 0200

Glen Riddell, Chief Executive Officer, Australia and New Zealand

BERKLEY RE ASIA
18 Cross Street
Unit 09-04, Cross Street Exchange
Singapore 048423 (65) 6671 2070

Glen Riddell, Chief Executive Officer, Asia

Room 4901, ChinaWorld Tower B
No. 1 Jian Guo MenWai Avenue
Beijing 100004, China (86) 108 526 4826

BERKLEY RE SOLUTIONS
1250 East Diehl Road, Suite 200
Naperville, Illinois 60563 (630) 210 0360
www.berkleyre.com/solutions

Gregory A. Douglas, President

Johns Creek, Georgia (800) 348 4229
Lakewood, Ohio (216) 978 1652
Philadelphia, Pennsylvania (800) 519 6341
Stamford, Connecticut (800) 974 5714

BERKLEY RE UK LIMITED
Level 17, 52 Lime Street
London EC3M 7AF, United Kingdom 44 (0) 20 3943 1000

Clare Himmer, Chief Executive Officer

MIDWEST EMPLOYERS CASUALTY
14755 North Outer Forty Drive, Suite 300
Chesterfield, Missouri 63017 (636) 449 7000
www.mecasualty.com

Timothy F. Galvin, President

Service Operations

BERKLEY CAPITAL, LLC
600 Brickell Avenue, 39th Floor
Miami, Florida 33131 (786) 450 5510

Frank T. Medici, President

BERKLEY DEAN & COMPANY, INC.
475 Steamboat Road
Greenwich, Connecticut 06830 (203) 629 3000

James G. Shiel, President

BERKLEY TECHNOLOGY SERVICES LLC
101 Bellevue Parkway
Wilmington, Delaware 19809 (302) 439 2000

James B. Gilbert, President

Des Moines, Iowa (515) 564 2300

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Senior Vice President —
Investments

John M. Littzi
Senior Vice President —
Deputy General Counsel and Assistant Secretary

A. Scott Mansolillo
Senior Vice President —
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Corporate Information

ANNUAL MEETING
The Annual Meeting of Stockholders of W. R. Berkley Corporation will be held at 1:30 p.m. on June 15, 2022 at its executive offices at 475 Steamboat Road, Greenwich, Connecticut 06830.

SHARES TRADED
Common Stock of W. R. Berkley Corporation is traded on the New York Stock Exchange.
Symbol: WRB

TRANSFER AGENT AND REGISTRAR
EQ Shareowner Services
1110 Centre Pointe Curve, Suite 101
Mendota Heights, Minnesota 55120-4100
(800) 468 9716
www.shareowneronline.com

WEBSITE
For additional information, including press releases, visit our website at: www.berkley.com
Follow us on Twitter @WRBerkleyCorp and LinkedIn.

AUDITORS
KPMG LLP, New York, New York

OUTSIDE COUNSEL
Willkie Farr & Gallagher LLP, New York, New York

Cover Illustration: Magnolia
Artist: Djordje Skendzic
www.skendzicphoto.com

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"Always do right. This will gratify some people and astonish the rest."

MARK TWAIN