W. R. BERKLEY CORPORATION

2018 ANNUAL REPORT

The culture of our Company

CONTENTS

emphasizes that everything we do...

The culture of a successful business enterprise requires many things. Among the most important elements is a committed workforce—people who share a vision, not just for the business's operating objectives, but for how it serves its clients and where it fits into society.

The Company and its employees are committed to helping society as a whole. Our charitable activities focus on health, education and, in general, assisting others. We believe that at times, the experience of giving back may benefit the donor as much as the recipient.

This annual report shows some examples of the not-for-profit activities that our Company and our employees support. For inclusion here, we have only been able to select a few of the many organizations that we give our time and money to, but many others are shown in our online highlights at: highlights.wrberkley.com/2018charities.

We hope all of the shareholders of W. R. Berkley Corporation are proud of the good the many members of our team do every day in support of their communities in which they live.

and every person who participates

2018 FINANCIAL HIGHLIGHTS

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

COMBINED RATIO
Averaged 94.7% over the past 5 years.

95.3%

TOTAL REVENUES
Increased 20% over the past 5 years.

$7.7B

RETURN ON STOCKHOLDERS' EQUITY
Averaged 12.4% over the past 5 years.

11.8%

TOTAL RETURN
Growth in stock price plus dividends outpaced the -4.4% S&P 500® total return in 2018.

6.2%

ACCESS TO HIGHER EDUCATION

20+ EVENTS

More than 20 events were held throughout the year to support fundraising and build awareness for the work of Kids' Chance.

Berkley and its member companies are proud supporters of Kids' Chance of America and its local state chapters.

Kids' Chance provides educational opportunities and scholarships for the children of workers seriously injured or killed on the job. Team members from many of our Berkley companies, including Key Risk, Berkley Net, Berkley Industrial Comp, Berkley Accident & Health and Berkley Mid-Atlantic Group, serve as board representatives for local chapters and host fundraising events from bake sales to game shows, chili contests to penny wars, annual golf tournaments to run/walks, a wine tasting event, and even an attempt at karaoke. Kids' Chance believes that by investing in our children's future, we can provide them with the tools and opportunities to be successful in the workplace, so that they can make a difference in their own and in other people's lives—and so do we!

"*Being able to watch them earn their degree and start their adult lives is amazing.*"

— Kimberly H., Senior Claims Representative (South Carolina), Key Risk

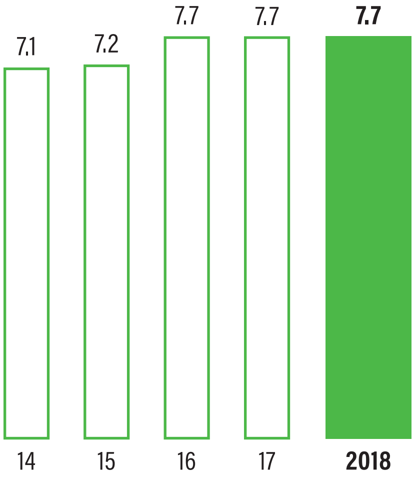
"*Nothing is more rewarding than receiving a letter from a child/ scholarship recipient who says, 'I could not have attended school without the support of Kids' Chance of Virginia.'*"

— John B., Senior Vice President - Claims, Berkley Net

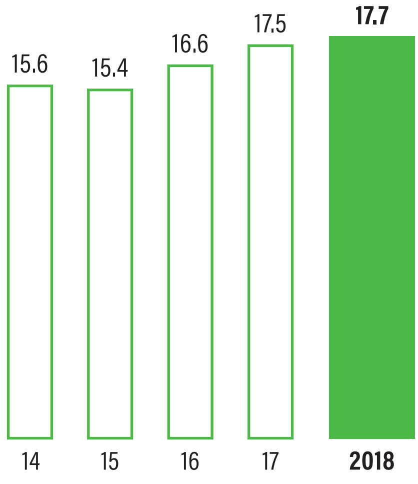
is important to our enterprise, and...

At-a-Glance

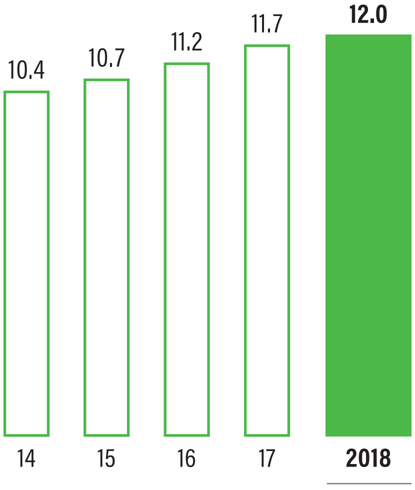
TOTAL REVENUES
(dollars in billions)



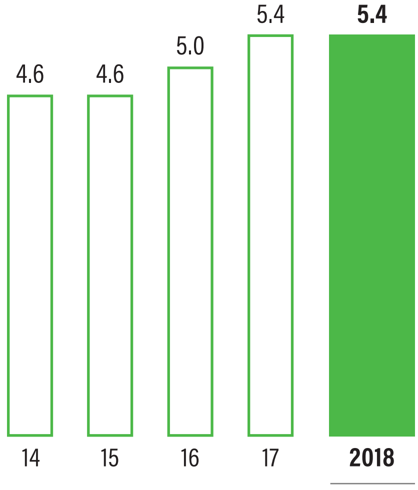
INVESTMENTS
Market Value (dollars in billions)



RESERVES FOR LOSSES AND LOSS EXPENSES
(dollars in billions)



COMMON STOCKHOLDERS' EQUITY*
(dollars in billions)



** Net of $1.3 billion in special dividends and shares repurchased from 2014-2018*

that always doing the right thing

Selected Financial Data

In thousands, except per share data

Years ended December 31,	2014	2015	2016	2017	**2018**
Total revenues	$7,128,928	$7,206,457	$7,654,184	$7,684,764	**$7,691,651**
Net premiums written	5,996,947	6,189,515	6,423,913	6,260,508	**6,433,227**
Net investment income	600,885	512,645	564,163	575,788	**674,235**
Net realized and unrealized gains on investments*	254,852	125,663	285,119	335,858	**154,488**
Insurance service fees	117,443	139,440	138,944	134,729	**117,757**
Net income to common stockholders	648,884	503,694	601,916	549,094	**649,749**
NET INCOME PER COMMON SHARE					
Basic	3.38	2.71	3.27	2.93	**3.37**
Diluted	3.24	2.58	3.12	2.84	**3.33**
Return on common stockholders' equity	15.0%	11.0%	13.1%	10.9%	**11.8%**
AT YEAR END					
Total assets	$21,716,691	$21,730,967	$23,364,844	$24,299,917	**$24,926,845**
Total investments	15,591,824	15,351,467	16,649,792	17,450,508	**17,723,089**
Reserves for losses and loss expenses	10,369,701	10,669,150	11,197,195	11,670,408	**11,966,448**
Common stockholders' equity	4,589,945	4,600,246	5,047,208	5,411,343	**5,437,851**
Common shares outstanding	190,124	184,962	181,791	182,272	**182,994**
Common stockholders' equity per share	24.14	24.87	27.76	29.69	**29.72**

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

* *For 2018, includes net realized gains on investment sales of $480 million, reduced by a change in unrealized gains on equity securities of $320 million. The inclusion of change in unrealized gains on equity securities within net income commenced January 1, 2018 due to our adoption of ASU 2016-01.*

BUILDING HOPE

3 HOUSES

Constructing hope with 3 houses, 1 office space and 1 community improvement day.

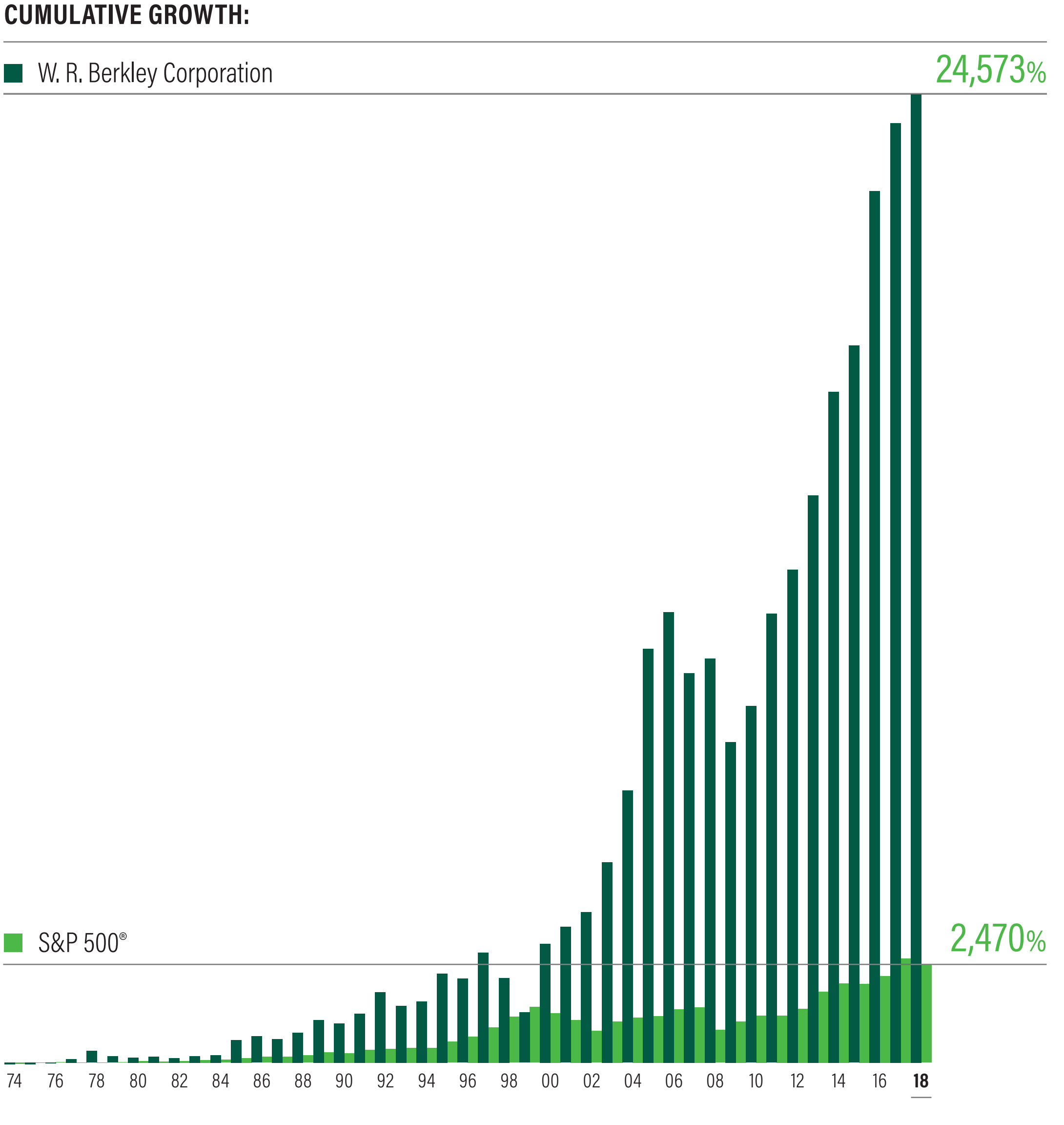
Building homes for those in need offers ways for everyone to participate.

Berkley team members at a number of our operating units, including Berkley Industrial Comp and Berkley One, partnered with Habitat for Humanity and spent time organizing, building homes, painting office space and helping out with community improvements across the country.

> *"Nothing feels as good as giving to others who need it. Uniting together to help others brings us closer as colleagues, sets the stage for our culture and enriches our communities."*
>
> *— Frances B., Inside Sales Manager, Berkley One*

is the cornerstone of our success.

Relative Stock Price Performance vs. the S&P 500®



Our values and principles are

OUR BUSINESS

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

Insurance

The Insurance units underwrite predominately 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.

2018 RESULTS

Total revenues were:

$6.5B

Pre-tax income was:

$856M

Reinsurance

The Reinsurance units 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.

2018 RESULTS

Total revenues were:

$601M

Pre-tax income was:

$62M

THE SPIRIT OF GENEROSITY

230 GINGERBREAD HOUSES

Over the past 15 years, our employees have created 230 gingerbread houses and raised more than $2.3 million for over 100 different charitable organizations.

Berkley employees spread holiday cheer with Gingerbread House Auction.

More than four decades ago, our employees gathered to celebrate the holidays and enjoy the success of our Company. It was a wonderful event, but something was lacking. From that moment forward, we determined that the best way to enjoy our success was to give back to the community. So, we set about creating a "gingerbread house auction" that would enable our employees to raise money for the charities that meant the most to them.

Now, each year our employees create beautiful works of edible art to be auctioned off to the highest bidder at our annual holiday party. The bidder represents a coalition of employees who have banded together to raise money for a particular charity and the funds raised are matched by the W. R. Berkley Corporation Charitable Foundation. The gingerbread houses are then donated to local hospitals, and other community service-based organizations to spread holiday cheer throughout the community.

> *"Our holiday party is a special event, because it focuses on what's really important and captures the true meaning of the season—giving."*
>
> *— Nina T., Senior Communications Specialist, W. R. Berkley Corporation*

demonstrated every day at each of...

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 Berkley Companies, or operating units, 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 units 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 ARE WE 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 53 operating units, 46 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.

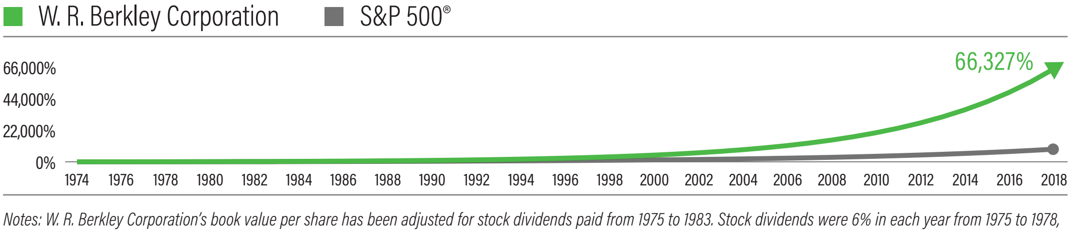
our operating units in the way we

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

ANNUAL PERCENTAGE CHANGE

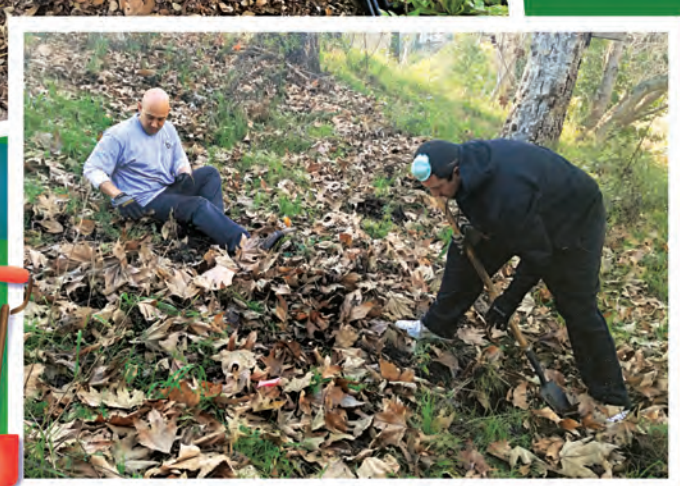
	In Per-Share Book Value of W. R. Berkley Corporation with Dividends Included	In S&P 500® with Dividends Included	Relative Results
Year	(1)	(2)	(1)-(2)
1974	50.0%	-26.4%	76.4%
1975	12.5%	37.2%	-24.7%
1976	29.6%	23.6%	6.0%
1977	28.6%	-7.4%	36.0%
1978	24.4%	6.4%	18.0%
1979	18.2%	18.2%	0.0%
1980	9.4%	32.3%	-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	-4.1%	-37.0%	32.9%
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%
Average Annual Gain — 1974–2018	16.9%	12.1%	4.8%
Overall Gain — 1973–2018	60,675%	9,448%	

Overall gain 1973–2018 with dividends compounded = 66,327%



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 1978.

PRESERVING THE ECOSYSTEM



2.5 MILES OF CLEAN UP

Seven employee volunteers aided the Friends of the Creeks effort to clean up 2.5 miles of creek channels in Walnut Creek.

Associates at Preferred Employers participated in creek restoration work in Walnut Creek.

Friends of the Creeks is an advocate for creek-friendly policies and projects that not only enhance the natural ecosystem functions of the corridor of wetlands adjacent to Walnut Creek, but also create enjoyable amenities. Our Walnut Creek team joined together for some rewarding work, camaraderie and a brief talk about creek ecology; donating their time to help rebuild creek structures, restore habitats and raise awareness, while creating enjoyable amenities for the public.

"The event was not just a way to give back to the community in a small way, but it was really nice to have the camaraderie with my co-workers and learn something about our local environment."

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

"Remember that the happiest people are not those getting more, but those giving more."

— Martha D., Claims Litigation Specialist, Preferred Employers

conduct our business, engage with...

TO OUR SHAREHOLDERS,

▲ *(left to right) W. Robert Berkley, Jr., President and Chief Executive Officer and William R. Berkley, Executive Chairman*

Once again, 2018 was a year of strong performance for the Company. In an environment filled with uncertainty and volatility, we achieved more than satisfactory results. While we are not immune to the impact of catastrophe losses, we again demonstrated our ability to manage volatility. We are acutely conscious of this imperative in both our underwriting and investing activities, and remain focused on delivering superior risk-adjusted returns.

Given the low interest rate environment and this desire to manage risk, several years ago we made the decision to shorten the duration while maintaining the quality of our investment portfolio. And although the vast majority of our assets are still invested in bonds, we also further expanded our allocation of funds to alternative asset classes. These decisions enabled us to improve our investment returns, while mitigating the

our team members and give back to

impact of mark-to-market on our balance sheet and grow book value per share. Capital management is also of paramount importance and a key component of optimizing risk-adjusted returns. We have and will continue to actively manage our capital through share buybacks and special dividends, always being mindful of maintaining the appropriate amount of capital employed in our business. Our first responsibility is to our shareholders; however, we exist as part of a greater society and have always believed in being supportive of the communities that we are a part of, focusing on doing the right thing. In the long run, we do this because our enterprise and all its stakeholders benefit.

We manage our business with a long-term perspective that has increasingly become a differentiator when compared to how many other public companies are managed today. This perspective comes about, in part, because all of our senior managers are substantial shareholders, as are our directors, and the vast majority of our employees own our stock. While we are conscious of short-term results, we are unwilling to compromise our future. We manage the business for long-term investors who want to be our partners. This approach is not just embraced by our senior management and our Board, but is reflective of the culture and values of our more than 7,000 employees. They have a long-term time horizon and understand that our model of starting businesses rather than buying companies may come at a short-term cost, but it is what builds our future. We are always willing to invest a dollar today if we are confident in our ability to generate an appropriate future benefit to shareholders. We are willing to invest in assets that may not reflect well on reported earnings, but fit in well with the overall goal of creating value. Every decision we make is viewed with that long-term perspective and a focus on strong risk-adjusted returns.

> *“We are always willing to invest a dollar today if we are confident in our ability to generate an appropriate future benefit to shareholders.”*

When managing an enterprise for the long term, our perspective must be a little different. The management skills required are not only those of expertise in a particular area, but there must be a true understanding of the entire industry. Overall economic information and an awareness of the global competitive environment are also required if we are to make good decisions.

In a world that is changing at an ever-increasing pace, we embrace that change—proactively attempting to anticipate and adapt rather than react and catch up. Our decentralized structure allows for the inclusion and empowerment of all team members, at every level of our enterprise, who have specialized knowledge of and local proximity to our customers. This allows innovation and the best new ideas to flourish. Our decision-making is, therefore, not solely focused on actuarial data, but encompasses changing customer behavior with

our communities. We exist as part of...

greater visibility and knowledge, allowing us to be more customer-centric. The long-term decisions we make today often require more information and complex judgements, and they lay the foundation, not just for tomorrow, but for years in the future.

From an operating point of view, we have examined our business carefully. We are leveraging the benefits of our structure and considering what things we can do to create greater efficiency. Proximity to our customers continues to be our competitive advantage. The result has allowed us to make changes that enable our staff to focus on value-added activities rather than routine processes. In this way, we can maintain our decentralized approach from our customers' point of view, but take advantage of efficiencies from an administrative point of view. These actions have lowered our expense ratio and improved information systems connectivity. We have worked hard to keep our customer-centric flexibility while at the same time obtaining better data to drive more efficiency, and, simultaneously, improving underwriting. We are achieving better outcomes for the Company with more satisfied customers.

In examining our risk bearing side of the business, we look at each line of business separately. In today's world of technology, measurement takes place not just by line of business but, in fact, by segment and sub-segment of each line of business. We need to be sure to differentiate what is happening at each micro-section of each line of business, so that we can react in a more focused and prompt manner when issues arise and be better able to take advantage of opportunities. We are just beginning to see opportunities in parts of the reinsurance marketplace that, for the prior several years, were extremely competitive and required a reduction in the amount of business we wrote. At the same time, opportunities in areas of commercial transportation seem to have been getting more and more attractive, offering improving returns. We see a changing marketplace in workers' compensation, which has been extremely attractive for the past several years, but is now facing a more competitive current environment. Change is constant; staying ahead of the curve requires a continuous focus on data and trends. The pace of change is increasing and the ability of competition to respond is more evident.

12%

2018 RETURN ON STOCKHOLDERS' EQUITY

36%

FIVE YEAR GROWTH IN BOOK VALUE PER SHARE

a greater society and have always

Expertise in each line of business by each geographic locale is necessary to make decisions, not based on what happened yesterday, nor based on what is happening at the moment, but based on our expectations for the next year or two or three. We think that gives us a competitive advantage because our outstanding people rooted in the local communities have a real perspective on each line of business. We look ahead and see tremendous opportunities. At the same time, there are areas where we will have to cut back. Again, the long-term view allows us to make decisions that are different than what many others might elect to do. Deciding not to grow in some lines of business or in some geographic areas may well be a good decision. Disciplined behavior has been one of our core tenets since our inception.

New opportunities are constantly presenting themselves. This is a cornerstone of our business model. We expect substantial premiums from our new units. Berkley One and our cyber business both are beginning to grow, as are other new startups that began over the past several years. At the same time, we continue to be disciplined by cutting back on those areas that do not offer satisfactory returns.

Measuring performance is a constant process; it requires patience and discipline.

In the investment world, there has rarely been more uncertainty. The global economy is slowing down, and much of the world has negative interest rates. Governments have increasing deficits that, in theory, should lead to increasing rates of inflation. This increasing potential inflation is something we currently do not see in most of the world's capital markets, including in the United States. In spite of the fact that the United States has a trillion dollar deficit, we have not seen a concomitant rise in interest rates as one would have expected. Eventually, these deficits have to be funded. Currently, the deficit is being funded by money coming into the United States from overseas because the U.S. has higher interest rates than much of the rest of the world. If and when that changes, it is likely inflation will return and, in all likelihood, reduce the real value of our currency. We will have to fund our national deficits and begin to rebalance the economic realities of rapid inflation and higher interest rates. In the meantime, we are faced with the prospect of relatively modest fixed-income returns and

43

YEARS OF CONSECUTIVE DIVIDEND PAYMENTS

53

OPERATING UNITS

believed in being supportive of...

In a world that is changing at an ever-increasing pace, we embrace that change—proactively attempting to anticipate and adapt rather than react and catch up.

uncertain equity markets. We continue to search for non-traditional ways to invest our money. This includes our own private equity fund and direct real estate opportunities. These alternatives have resulted in excellent, though bumpy, returns in recent years.

Our business continues to be focused on the optimization of risk-adjusted returns. We seek consistency with intense management focus on unforeseen risks and risks that cannot be forecast. We test every decision for the volatility it brings to our business and the potential rewards it can deliver. Today, a lot of attention in the property casualty business is being focused on Insuretech. Although we selectively invest in these opportunities, we believe they are tools that enable the industry to better adapt to a changing world, and that the fundamentals of managing an insurance company remain unchanged. While there may be better ways to execute each step of the insurance process, we continue to focus on delivering consistent returns to our shareholders and delivering client-centric services.

There continue to be positive trends in our business, including opportunities to develop further efficiencies as well as expand our business overall. Our management seeks out opportunities that will give us acceptable returns to justify the commitment of capital, and we believe that over the next several years, we will be able to attain returns in line with our goal of 15%.

Our return over the past 45 years as a public company has been extraordinary. It has come about because of the commitment of our employees, our terrific agents and brokers who have joined with us, and the loyalty of our customers as well as guidance provided by our Board of Directors. We anticipate the future being even brighter.

William R. Berkley
Executive Chairman

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

the communities that we are part of,

SEGMENT OVERVIEW

Each of our business segments—Insurance and Reinsurance—comprises individual operating units 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 permanent competitive advantage that can only be acquired over many years with consistent discipline.

MEETING THE NEEDS OF CHILDREN AND FAMILIES

$1.5 MILLION RAISED

21 years ago, the chief strategy and innovation officer at Berkley Re Solutions and Berkley Program Specialists founded a golf outing that has raised over $1.5 million for Channel 3 Kids Camp, which provides year-round recreational and educational programs to children and teens from Connecticut and throughout New England.

Helping families and children is a major theme at our Berkley Companies.

Support for families at Berkley takes a variety of forms, from supporting local chapters of national efforts like Cradles to Crayons or the Human Race, to volunteering and fundraising for causes closer to home such as foster care foundations, children's shelters, teen centers and "adopting" families to provide them with gifts and groceries, handing out warm coats to children or hosting a personal-care items fundraiser for the homeless. In keeping with that theme, team members at Continental Western Group build and deliver beds, mattresses, sheets, pillows, stuffed animals and other items to families in need through a local chapter of Sleep in Heavenly Peace.

"I think my favorite thing about participating in the Human Race is the energy and excitement that surrounds the event. Everyone participating is there because of a special cause that they support. It's not only a great way for us as a company to give back to our community, but it's also a fun way to interact with our insured organizations on a personal level."

— Jake R., Director of Marketing and Distribution, Berkley Human Services

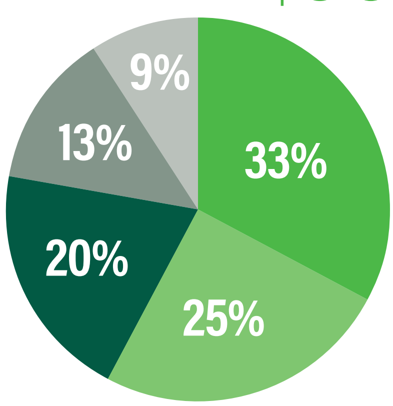
because in the long run, our enterprise...

2018 Segment Data

2018 NET PREMIUMS WRITTEN BY MAJOR LINE OF BUSINESS
(in percent)

INSURANCE

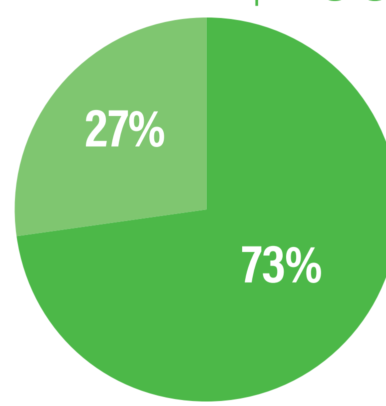
$6.0B



- Other Liability
- Short-tail Lines
- Professional Liability
- Workers' Compensation
- Commercial Automobile

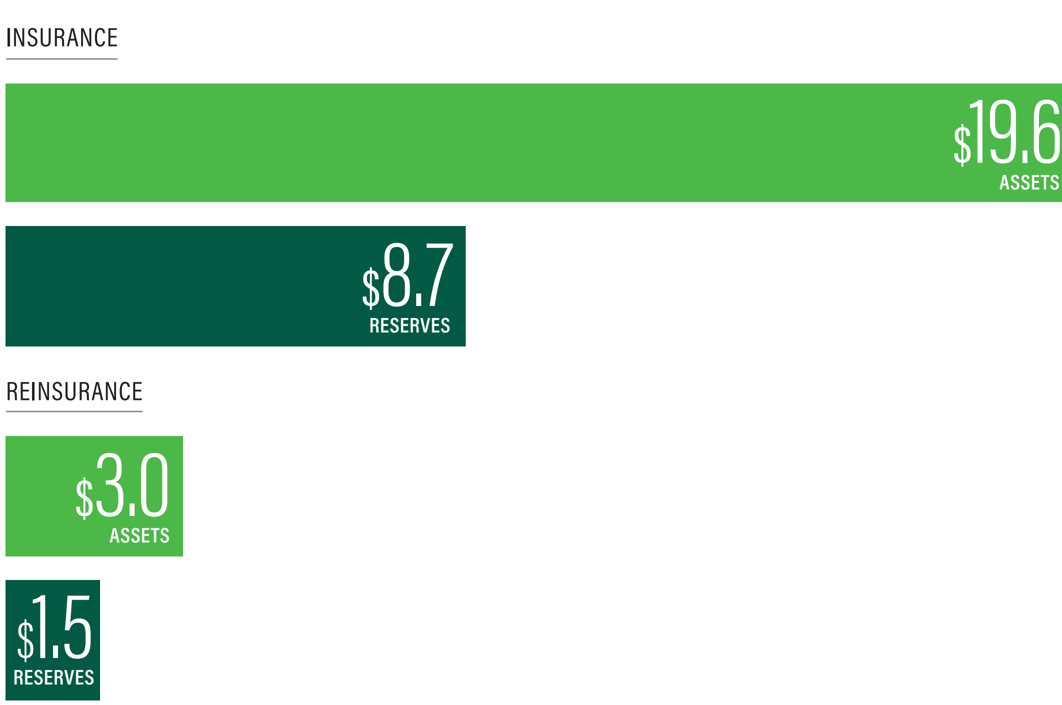
REINSURANCE

$480M



- Casualty
- Property

2018 ASSETS AND NET RESERVES
(dollars in billions)



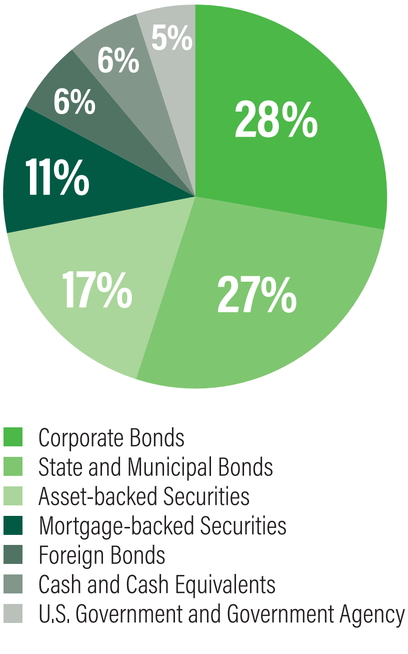
and all its stakeholders benefit."

— William R. Berkley

INVESTMENTS

Over the past few years, we have shortened the duration of our fixed-maturity portfolio to 2.8 years to manage the yield curve as well as the impact of potential inflation. These changes limited the impact of mark-to-market on our portfolio and enabled us to take advantage of rising interest rates in 2018. In addition, we have allocated a portion of our portfolio to investments designed to generate capital gains. As investment income is an important component of our economic model, we will continue to position our portfolio to take advantage of opportunities to improve returns.

BREAKDOWN OF FIXED MATURITY SECURITIES
(including cash) (in percent)



INVESTMENT DATA
(dollars in millions)

	2017	2018
CASH AND INVESTED ASSETS		
Invested assets	17, 451	17,723
Cash and cash equivalents	950	818
TOTAL	18,401	18,541
Net investment income	576	674
Net realized and unrealized gains on investments*	336	154

** Includes change in unrealized gains on equity securities in 2018 due to adoption of ASU-2016-01.*

ENHANCING PATIENT ACCOMMODATIONS

300+ HOURS

Over 300 hours spent on 4 projects for Hope Lodge in St. Louis.

Berkley Med organized into four teams to spruce up temporary lodging for cancer patients undergoing treatment.

The American Cancer Society's Hope Lodge in St. Louis provides a free home away from home for cancer patients and their caregivers. Opened in 1995, the facility—which provides a supportive environment to its residents during treatment—was in need of a little TLC. The Berkley Med teams improved the look and décor of guest rooms to make them feel more like home; enhanced the patio and other outdoor spaces with new furniture, plantings and landscaping to make them more inviting and relaxing; and replaced the artwork throughout the facility with more contemporary and inspiring pieces.

“*I truly appreciate being part of an organization that sets aside time for the whole company to be actively engaged in the community during our Volunteer Week. Cancer has touched my life in many ways, so our time spent at Hope Lodge over the past two years has been very rewarding. While it's been fun digging in the dirt to transform the gardens and creating new art to liven up the guest rooms, the best part has been having the chance to engage with the patients and caregivers and build relationships with the lodge staff.*”

*— **Debbie E.**, Business Process Manager, Berkley Med*

W. R. BERKLEY CORPORATION

2018 FINANCIAL INFORMATION

FORM

10-K

SECURITIES AND EXCHANGE COMMISSION
Washington, D.C. 20549

Form 10-K

(Mark One)

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

For the fiscal year ended December 31, 2018
OR

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

For the transition period from ______ to ______.

Commission file number 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	Name of Each Exchange on Which Registered
Common Stock, par value $.20 per share	New York Stock Exchange
5.625% Subordinated Debentures due 2053	New York Stock Exchange
5.9% Subordinated Debentures due 2056	New York Stock Exchange
5.75% Subordinated Debentures due 2056	New York Stock Exchange
5.70% Subordinated Debentures due 2058	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 if disclosure of delinquent filers pursuant to Item 405 of Regulation S-K is not contained herein, and will not be contained, to the best of registrant's knowledge, in definitive proxy or information statements incorporated by reference in Part III of this Form 10-K or any amendment to this Form 10-K. ☒

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 is a shell company (as defined in Rule 12b-2 of the Act). Yes ☐ No ☒

The aggregate market value of the voting and non-voting common stock held by non-affiliates (computed by reference to the price at which the common stock was last sold) as of the last business day of the registrant’s most recently completed second fiscal quarter was $7,014,828,524.

Number of shares of common stock, $.20 par value, outstanding as of February 19, 2019: 122,013,621

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, 2018, 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 2019 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 alternative 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;
- natural and man-made catastrophic losses, including as a result of terrorist activities;
- the impact of climate change, which may increase the frequency and 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 2015 ("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 2019 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 - 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.

Our two reporting segments are composed of individual operating units that serve a market defined by geography, products, services or industry served. Each of our operating units is positioned close to its customer base and participates in a niche market requiring specialized knowledge about a territory, product or industry served. This strategy of decentralized operations allows each of our units 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 53 operating units, 46 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 operating segments for each of the past five years were as follows:

	Year Ended December 31,				
(In thousands)	**2018**	**2017**	**2016**	**2015**	**2014**
Net premiums written:					
Insurance	$ 5,952,861	$ 5,715,871	$ 5,743,620	$ 5,555,437	$ 5,302,436
Reinsurance	480,366	544,637	680,293	634,078	694,511
Total	$ 6,433,227	$ 6,260,508	$ 6,423,913	$ 6,189,515	$ 5,996,947

	Year Ended December 31,				
	2018	**2017**	**2016**	**2015**	**2014**
Percentage of net premiums written:					
Insurance	92.5%	91.3%	89.4%	89.8%	88.4%
Reinsurance	7.5	8.7	10.6	10.2	11.6
Total	100.0%	100.0%	100.0%	100.0%	100.0%

Thirty-two of our insurance company subsidiaries are rated by A.M. Best Company, Inc. ("A.M. Best") and have 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: "The Financial Strength Rating opinion addresses the relative ability of an insurer to meet its ongoing insurance obligations. The ratings are not assigned to specific insurance policies or contracts and do 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-five 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 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).

The following sections describe our reporting segments and their operating units in greater detail. These operating units underwrite on behalf of one or more affiliated insurance companies within the group. The operating units are identified by us for descriptive purposes only and are not legal entities. 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 operating units. W. R. Berkley Corporation is a Delaware corporation formed in 1970.

Insurance

Our U.S.-based operating units 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 operating units are dedicated to the U.S. excess and surplus lines market. They serve a highly 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 operating units include premises operations, commercial automobile, property, products liability and professional liability lines. Products are generally distributed through wholesale agents and brokers.

Industry Specialty: Certain other operating units 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 operating unit 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 operating units 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 units 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 operating units offer standard insurance products and services focused on meeting the specific needs of a geographically differentiated customer base. Key clients of these units are small-to-midsized businesses. These regionally focused operating units 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 operating units, we write business in more than 60 countries worldwide, with branches or offices in 26 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 operating units also provide a wide variety of fee-based services, including claims, administrative and consulting services.

Operating units 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 and Vermont. In addition to its general offerings, Acadia has specialized expertise in insuring regional industries such as construction, lumber, fishing 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. Its lines of business include general liability, professional liability, property, and excess and umbrella coverage. Admiral's professional liability and program operations include special coverages for technology, ambulatory surgery centers, chiropractors and concierge physicians. Its products are distributed exclusively by wholesale brokers.

American Mining Insurance Group specializes in mono-line workers' compensation coverage for mining and mining related and high hazard industries in select states.

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 Risk Specialists 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 specializes in professional liability for the design professional, construction professional and certified public accounting industries. The Berkley Design Professional division specializes in architects, engineers and consultants. The Berkley Construction Professional division provides both project specific and annual policies for owners and contractors. The Accountants division insures mainly mid-sized CPA firms.

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 consisting of select Berkley member company agents.

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 Custom Insurance focuses on the excess casualty insurance market and offers umbrella liability, pollution liability, excess liability, construction wrap-ups and completed operations coverages to wholesalers, retailers, manufacturers, insurance companies, financial institutions and construction companies.

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 specialty insurance products for environmental customers such as contractors, consultants and owners of sites and facilities.

Berkley Europe is comprised of specialist operating units offering a focused range of insurance products to markets in Continental Europe and Nordic countries.

Berkley FinSecure serves the insurance needs of companies in the financial services industry. It offers a comprehensive range of property, casualty, professional liability, and specialty lines insurance products. Its Berkley crime division provides crime-related insurance products for commercial organizations, financial institutions and governmental entities.

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 provides customized, comprehensive management and professional liability solutions for the full spectrum of healthcare providers.

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 Insurance Asia underwrites specialty commercial insurance coverages to clients in North Asia and Southeast Asia through offices in Hong Kong, Singapore 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, and specialty products such as professional and management liability to the life sciences industry on a global basis, including both primary and excess 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 Medical Excess insures healthcare organizations such as hospitals and clinics that retain a portion of their risk exposure through a self-funded mechanism and seek to maximize the effectiveness and efficiency of their excess risk financing program.

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 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 Net Underwriters also manages Berkley's assigned risk servicing carrier operations.

Berkley North Pacific provides local underwriting, claims and risk management services for businesses in the Northwest. It operates with a select group of agents in Idaho, Montana, Oregon, Utah and Washington to sell and service property and casualty policies for larger middle-market standard businesses and specialty lines, such as construction, restaurants and manufacturing.

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 on a surplus lines basis for law firms and accounting firms through a limited number of brokers. It also offers executive and professional liability products, including directors and officers liability, errors and omissions, and employment practices liability, to small to middle market privately held and not for profit customers on both an admitted and surplus lines basis.

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 broad array of surety products for contract and commercial surety risks in the U.S. and Canada, including specialty niches such as environmental and secured credit for small contractors, through an independent agency and broker platform across a network of 21 field offices.

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. It underwrites liability insurance policies for the railroad industry as well as excess liability policies for the trucking, busing and other industries that use rubber-wheeled vehicles for over-the-road use.

Intrepid Direct offers business coverages to franchise restaurants and auto repair garages on a direct basis.

Key Risk is a premier provider of workers' compensation insurance. It focuses on middle market accounts in several niches that appreciate expertise and exceptional service. The unit operates two business units; one focused on middle market accounts located primarily in the mid-Atlantic and southeastern United States and one focused on national temporary staffing and United States Longshoreman & Harbor Act (USL&H) specialty programs. Its products are distributed by a select group of independent retail agents and wholesale brokers located through the United States.

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 that help its insureds lower their total cost of risk.

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 in California. It serves over 12,000 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 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 Underwriting Managers 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 and agents.

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, crisis management, personal accident and asset protection.

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

	Year Ended December 31,				
	2018	2017	2016	2015	2014
Acadia Insurance	6.5%	6.8%	6.8%	6.7%	7.2%
Admiral Insurance	5.7	5.7	5.5	4.9	5.3
American Mining Insurance Group	0.9	0.8	0.7	0.8	0.7
Berkley Accident and Health	5.6	4.7	4.4	3.7	2.9
Berkley Agribusiness Risk Specialists	1.2	1.2	1.1	0.9	0.9
Berkley Alliance Managers	2.5	1.9	1.5	0.7	0.1
Berkley Aspire	0.3	0.3	0.3	0.3	0.4
Berkley Canada	1.0	0.9	0.8	0.6	0.5
Berkley Custom Insurance	2.6	2.5	2.7	2.9	2.4
Berkley Cyber Risk Solutions	0.2	0.1	—	—	—
Berkley Entertainment	2.5	2.1	2.0	1.9	1.8
Berkley Environmental	5.0	4.7	4.1	3.8	3.5
Berkley Europe	1.9	1.7	1.7	1.9	2.4
Berkley FinSecure	0.9	1.0	0.9	1.0	0.7
Berkley Fire & Marine	0.6	0.5	0.4	0.3	0.2
Berkley Global Product Recall Management	0.5	0.3	0.2	—	—
Berkley Healthcare	0.3	0.2	0.2	—	—
Berkley Human Services	0.7	0.6	0.7	0.6	0.6
Berkley Insurance Asia	0.4	0.2	—	—	—
Berkley Insurance Australia	1.1	1.0	1.0	0.8	1.3
Berkley Latinoamérica	4.1	4.8	4.2	4.7	4.6
Berkley Life Sciences	0.8	0.8	0.8	0.8	0.9
Berkley Luxury Group	1.4	1.3	1.3	1.3	1.3
Berkley Medical Excess	0.9	0.9	0.8	0.9	0.8
Berkley Mid-Atlantic Group	1.2	1.1	1.2	1.8	2.4
Berkley Net Underwriters	4.9	6.7	8.0	4.0	3.7
Berkley North Pacific	1.2	1.5	1.5	1.7	1.6
Berkley Offshore Underwriting Managers	1.1	1.1	1.1	1.4	1.7
Berkley Oil & Gas	3.5	2.7	2.8	3.2	3.5
Berkley One	0.2	—	—	—	—
Berkley Professional Liability	1.8	1.6	1.5	1.7	1.8
Berkley Program Specialists	1.1	1.2	1.2	1.2	1.2
Berkley Public Entity	0.4	0.5	0.5	0.4	0.4
Berkley Risk	0.2	0.2	0.2	4.0	3.9
Berkley Select	3.1	3.4	3.9	4.0	4.0
Berkley Southeast	2.0	1.9	2.0	2.3	2.5
Berkley Surety	1.3	1.2	1.2	1.2	1.2
Berkley Technology Underwriters	0.7	0.7	0.6	0.5	0.4
Carolina Casualty	0.5	0.4	0.6	1.2	1.8
Continental Western Group	3.4	3.8	4.0	4.0	3.9
Gemini Transportation	2.3	2.1	1.8	1.1	0.9
Intrepid Direct	0.3	0.1	—	—	—
Key Risk	2.8	2.7	2.6	2.9	3.0
Midwest Employers Casualty	2.5	2.5	2.3	2.3	2.3
Nautilus Insurance Group	4.9	5.1	5.0	4.7	4.7
Preferred Employers Insurance	2.4	2.8	2.6	2.5	2.1
Union Standard	2.6	2.7	2.6	2.6	2.7

Vela Insurance Services	2.6	3.0	3.9	3.3	3.2
Verus Underwriting Managers	0.9	0.9	0.9	0.8	0.8
W/R/B Underwriting	3.4	3.1	4.0	5.5	7.2
Other	1.1	2.0	1.9	2.2	0.9
Total	100.0%	100.0%	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,				
	2018	**2017**	**2016**	**2015**	**2014**
Other liability	31.6%	30.6%	30.9%	28.9%	28.3%
Short-tail lines (1)	22.9	22.8	23.1	24.3	25.9
Workers' compensation	22.6	24.6	25.1	25.5	24.2
Professional liability	11.7	11.0	10.5	10.0	9.9
Commercial auto	11.2	11.0	10.4	11.3	11.7
Total	100.0%	100.0%	100.0%	100.0%	100.0%

(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

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.

Operating units comprising the Reinsurance 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 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 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.

The following table sets forth the percentages of gross premiums written by each Reinsurance operating unit:

	Year Ended December 31,				
	2018	2017	2016	2015	2014
Berkley Re America	42.0%	52.0%	64.0%	60.3%	56.2%
Berkley Re Asia Pacific	14.8	12.8	9.2	8.0	6.7
Berkley Re Solutions	14.1	15.8	10.8	10.1	10.4
Berkley Re UK	22.2	12.6	10.0	15.4	19.9
Lloyd's Syndicate 2791 Participation	6.8	5.5	4.4	5.2	5.3
Other	0.1	1.3	1.6	1.0	1.5
Total	100.0%	100.0%	100.0%	100.0%	100.0%

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

	Year Ended December 31,				
	2018	2017	2016	2015	2014
Casualty	70.2%	66.9%	58.7%	65.1%	65.5%
Property	29.8	33.1	41.3	34.9	34.5
Total	100.0%	100.0%	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)	2018	2017	2016	2015	2014
Insurance					
Revenue	$ 6,456,441	$ 6,229,485	$ 6,148,210	$ 5,876,454	$ 5,586,230
Income before income taxes	856,011	756,153	799,139	748,515	786,723
Reinsurance					
Revenue	600,815	696,122	777,123	745,325	837,901
Income (loss) before income taxes	62,144	(15,276)	98,277	122,930	155,042
Other(1)					
Revenue	634,395	759,157	728,851	584,678	704,797
(Loss) income before income taxes	(106,061)	31,893	(978)	(139,415)	10,431
Total					
Revenue	$ 7,691,651	$ 7,684,764	$ 7,654,184	$ 7,206,457	$ 7,128,928
Income before income taxes	$ 812,094	$ 772,770	$ 896,438	$ 732,030	$ 952,196

(1) Represents corporate revenues, corporate 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,				
	2018	2017	2016	2015	2014
Insurance					
Loss ratio	61.8%	61.6%	61.0%	60.8%	60.8%
Expense ratio	32.5	32.9	32.5	32.6	32.8
Combined ratio	94.3%	94.5%	93.5%	93.4%	93.6%
Reinsurance					
Loss ratio	68.7%	80.2%	61.6%	58.2%	60.5%
Expense ratio	37.7	37.4	39.0	38.4	34.6
Combined ratio	106.4%	117.6%	100.6%	96.6%	95.1%
Total					
Loss ratio	62.4%	63.4%	61.1%	60.5%	60.8%
Expense ratio	32.9	33.3	33.2	33.2	33.0
Combined ratio	95.3%	96.7%	94.3%	93.7%	93.8%

Investments

Investment results, before income taxes, were as follows:

	Year Ended December 31,				
(In thousands)	**2018**	**2017**	**2016**	**2015**	**2014**
Average investments, at cost (1)	$ 18,392,297	$ 17,530,590	$ 16,730,964	$ 15,970,931	$ 15,560,335
Net investment income (1)	$ 674,235	$ 575,788	$ 564,163	$ 512,645	$ 600,885
Percent earned on average investments (1)	3.7%	3.3%	3.4%	3.2%	3.9%
Net realized and unrealized gains on investments (2)	$ 154,488	$ 335,858	$ 267,005	$ 92,324	$ 254,852
Change in unrealized investment (losses) gains (3)	$ (302,737)	$ (69,425)	$ 371,715	$ (192,186)	$ 72,889

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

(2) Represents realized gains on investments not classified as trading account securities prior to 2018. The inclusion of change in unrealized gains on equity securities within net income commenced January 1, 2018 due to our adoption of ASU 2016-01. For the twelve months ended December 31, 2018, includes net realized gains on investment sales of $480 million reduced by a change in unrealized gains on equity securities of $320 million.

(3) Represents the change in unrealized investment (losses) gains for available for sale securities. Effective January 1, 2018, the Company adopted new accounting guidance that requires all equity investments with readily determinable fair values (subject to certain exceptions) to be measured at fair value with changes in the fair value recognized in net income. As a result of this guidance, the Company recorded a cumulative effect adjustment of $291 million that increased retained earnings and decreased accumulated other comprehensive income ("AOCI"), resulting in no net impact to total 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,				
	2018	2017	2016	2015	2014
Barclays U.S. Aggregate Bond Index	3.0%	3.0%	3.0%	3.0%	3.2%
S&P 500® Index	2.0	2.4	2.4	2.1	2.1

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,				
	2018	**2017**	**2016**	**2015**	**2014**
1 year or less	6.9%	5.0%	7.9%	5.8%	7.0%
Over 1 year through 5 years	34.3	37.2	39.6	33.6	32.4
Over 5 years through 10 years	22.3	24.8	24.6	30.5	29.8
Over 10 years	24.7	23.3	18.8	20.3	20.4
Mortgage-backed securities	11.8	9.7	9.1	9.8	10.4
Total	100.0%	100.0%	100.0%	100.0%	100.0%

At December 31, 2018, the fixed maturity portfolio had an effective duration of 2.8 years, including cash and cash equivalents.

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 $1,793 million and $1,855 million at December 31, 2018 and 2017, respectively. The aggregate net discount for those reserves, after reflecting the effects of ceded reinsurance, was $563 million and $591 million at December 31, 2018 and 2017, respectively. At December 31, 2018, discount rates by year ranged from 2.0% to 6.5%, with a weighted average discount rate of 3.8%.

Substantially all discounted workers' compensation reserves (97% of total discounted reserves at December 31, 2018) 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, 2018), 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 asbestos and environmental claims on policies written before adoption of the absolute exclusion was $28 million at December 31, 2018 and $30 million at December 31, 2017. 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)	**2018**	**2017**	**2016**
Net reserves at beginning of year	$ 10,056,914	$ 9,590,265	$ 9,244,872
Net provision for losses and loss expenses:			
Claims occurring during the current year (1)	3,926,489	3,963,543	3,826,620
Increase (decrease) in estimates for claims occurring in prior years (2)	6,831	(5,165)	(29,904)
Loss reserve discount amortization	41,382	43,970	49,084
Total	3,974,702	4,002,348	3,845,800
Net payments for claims:			
Current year	964,808	1,027,405	1,052,452
Prior years	2,700,077	2,562,550	2,401,722
Total	3,664,885	3,589,955	3,454,174
Foreign currency translation	(117,848)	54,256	(46,233)
Net reserves at end of year	10,248,883	10,056,914	9,590,265
Ceded reserves at end of year	1,717,565	1,613,494	1,606,930
Gross reserves at end of year	$ 11,966,448	$ 11,670,408	$ 11,197,195
Net change in premiums and losses occurring in prior years:			
(Increase) decrease in estimates for claims occurring in prior years (2)	$ (6,831)	$ 5,165	$ 29,904
Retrospective premium adjustments for claims occurring in prior years (3)	45,638	32,162	29,000
Net favorable premium and reserve development on prior years	$ 38,807	$ 37,327	$ 58,904

(1) Claims occurring during the current year are net of loss reserve discounts of $24,381,000, $22,064,000 and $18,929,000 in 2018, 2017 and 2016, respectively.

(2) The increase (decrease) 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 $3,738,000 in 2018, $32,132,000 in 2017 and $59,175,000 in 2016, respectively.

(3) 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.

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, 2018 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	$ 9,819,932
Reserves for non-U.S. companies	479,939
Loss reserve discounting (1)	(50,988)
Ceded reserves	1,717,565
Gross reserves reported in the consolidated GAAP financial statements	$ 11,966,448

(1) For statutory purposes, the Company discounts its workers’ compensation reinsurance reserves at 3.3% 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 subject to varying degrees of regulation and supervision in the jurisdictions in which they do business.

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 excess and surplus and reinsurance subsidiaries, must generally file all rates with the insurance department of each state in which they operate. Our excess and surplus and reinsurance subsidiaries generally operate free of rate and form regulation.

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.

In addition, we must 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.

Approximately half the states have also 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. International standard setters, such as the International Association of Insurance Supervisors (“IAIS”), are developing capital standards for international groups, and U.S. insurance regulators are currently working on U.S. group capital standards for insurance groups. In 2019, the IAIS expects to conduct the final round of field testing of the insurance capital standard for internationally active insurance groups. The U.S. group capital calculation is expected to incorporate existing risk-based capital standards. The National Association of Insurance Commissioners (“NAIC”) intends to enter the next phase of development by field testing the calculation tool in early 2019 using year-end 2018 data. It is unclear how the development of group capital measures will interact with existing capital requirements for insurance companies in the United States and with international capital standards. It is possible that we may be required to hold additional capital as a result of these developments.

Most 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”). The ORSA 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 ORSA, 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 a confidential high-level ORSA Summary Report annually to the Commissioner of Insurance of the State of Delaware (our lead state commissioner).

Cybersecurity Regulations. New York’s cybersecurity regulation for financial services institutions that are authorized by the New York State Department of Financial Services ("Part 500"), including our insurance subsidiaries licensed in New York, became effective on March 1, 2017. The regulation, which is being implemented in stages, requires these entities to establish and maintain a cybersecurity program designed to protect consumers’ private data and the confidentiality, integrity and availability of the licensee’s information systems. On October 24, 2017, the NAIC adopted the Insurance Data Security Model Law (the “Cybersecurity Model Law”), which 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 new regulatory burdens intended to protect the confidentiality, integrity and availability of information systems. Its implementation will be based on adoption by state legislatures. To date, the Cybersecurity Model Law has only been adopted in South Carolina. Importantly, 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. We made the initial certifications as required by Part 500 for licensed entities. Finally, privacy and data security legislation has become an issue in many states and localities over the last 12 months. For example, in 2018 California enacted the California Consumer Privacy Act (“CCPA”), which broadly regulates the sale of California residents’ personal information and grants California residents certain rights to, among other things, access and delete data about them in certain circumstances. CCPA goes into effect on January 1, 2020, and compliance with the CCPA may increase the cost of providing our services in California. Other states have considered - and may adopt - similar proposals. We cannot predict the impact, if any, that any proposed or future cybersecurity regulations 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, 2018.

Insurance Regulatory Information System. The NAIC also has developed a set of 13 financial ratios 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 2015 (“TRIPRA”), the program has been extended for a six year period ending on December 31, 2020. 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 currently pay 82% of an insurer's covered losses in excess of the insurer's applicable deductible. This amount will decrease to 80% on a pro-rata basis over five years, which began in 2017. 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 2018 earned premiums, our aggregate deductible under TRIPRA during 2019 will be approximately $969 million. The federal program will not pay losses for certified acts unless such losses exceed $180 million industry-wide for calendar year 2019. This threshold will increase to $200 million on a pro-rata basis over five years which began in 2016. 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.

Federal Regulation. Although the federal government and its regulatory agencies generally do not directly regulate the business of insurance, 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. The Dodd-Frank Act created two new federal government bodies, the Federal Insurance Office (the “FIO”) and the Financial Stability Oversight Council (the “FSOC”), which may impact the regulation of insurance. Although the FIO has preemption authority over state insurance laws that conflict with certain international agreements, it does not have general supervisory or regulatory authority over the business of insurance. 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. In May 2018, the Economic Growth, Regulatory Relief and Consumer Protection Act (“Economic Growth Act”) was signed into law. Among other things, the Economic Growth Act addresses the roles played by federal regulators at international insurance standard-setting forums. 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 (a “Covered Agreement”). In January 2017, the U.S. Department of Treasury and the U.S. Trade Representative announced the completion of Covered Agreement negotiations with the European Union (“EU”).

The Covered Agreement addresses three areas of prudential supervision: reinsurance, group supervision and the exchange of information between the U.S. and EU. In September 2017, the U.S. and EU signed the Covered Agreement. Each party has begun the process of completing its internal requirements and procedures (such as amending or promulgating appropriate statutes and regulations) in order for the Covered Agreement to enter into force. Under the 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 Covered Agreement establishes group supervision practices that apply only to U.S. and EU insurance groups operating in both territories. For instance, the Covered Agreement provides that U.S. insurance groups with operations in the EU will be supervised at the worldwide level only by U.S. insurance regulators, and precludes EU insurance supervisors from exercising solvency and capital requirements over the worldwide operations of U.S. insurers.

U.S. states have five years from the date of signature to remove reinsurance collateral requirements for EU reinsurers that meet certain standards (such as minimum capital and solvency ratios and claims payment standards), while EU member states have two years to revise their “local presence” laws. Under the Dodd-Frank Act, the FIO has preemption authority over state insurance laws that conflict with the Covered Agreement. Accordingly, the NAIC is working on proposed amendments to the NAIC’s Credit for Reinsurance Model Law in order to satisfy the substantive and timing requirements of the Covered Agreement. Additionally, in late 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., which will extend the benefits of the Covered Agreement to the U.K. after Brexit. 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." An insurer so designated by FSOC will be subject to Federal Reserve supervision and heightened prudential standards. As of December 31, 2018, there are no longer any non-bank financial firms, including insurance groups, designated as systemically significant. In November 2017, the U.S. Department of Treasury issued a report recommending certain changes to FSOC’s process for designating non-bank financial companies as systemically significant in order to make the designation process more rigorous, clear and transparent. To date, the FSOC has not updated its rules to reflect these recommendations.

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 impacts of the Dodd-Frank Act, its implementing regulations and potential amendments to the Dodd-Frank Act on the U.S. insurance industry are 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 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. Certain of our U.K. subsidiaries are authorized by the PRA to effect and carry out contracts of insurance (which includes reinsurance) in the U.K. and are regulated by both the PRA and the FCA for prudential and conduct of business matters respectively.

Our Lloyd's managing agency is regulated by the PRA, FCA and 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, 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.

An insurance company with authorization to write insurance business in the U.K. may currently provide cross-border services in the other member states of the European Economic Area (“EEA”), a group including member states of the European Union (“EU”) in addition to Switzerland, Norway, Liechtenstein and Iceland. These rights may be restricted or modified depending on the United Kingdom’s planned withdrawal from the EU and/or EEA-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. Lloyd’s applies a capital adequacy test to all Lloyd’s syndicates, including our syndicate, that is based on Solvency II principles. 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. However, we have received a waiver from the PRA, subject to conditions, with respect to the PRA's supervision of our group, which waives the requirement on us to maintain a group solvency capital requirement as calculated under Solvency II rules. The Covered Agreement also prohibits any EU supervisor 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 recently enacted EU General Data Protection Regulation (“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. GDPR is extraterritorial in that it applies to all businesses in the EU and any business outside the EU that process EU personal data of individuals in the EU. Moreover, there are significant fines associated with non-compliance. In particular, as the European member states reframe their national legislation to prepare for and harmonize with the GDPR, we will need to monitor our compliance with all relevant member states' laws and regulations, including where permitted derogations from the GDPR are introduced. The introduction of the GDPR, and any resultant changes in EU member states’ national laws and regulations, may increase our compliance obligations and may necessitate the review and implementation of policies and processes relating to our collection and use of data, and may require us to change our business practices regarding these matters.

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 operating units can gain a competitive advantage by responding quickly to changing market conditions. Our operating units establish their own pricing practices based upon a Company-wide philosophy to price products with the intent of making an underwriting profit.

Competition for the Insurance business within the United States comes from other specialty insurers, regional carriers, large national multi-line companies and reinsurers. Our specialty operating units compete with excess and surplus insurers as well as standard carriers. Other regional units compete with mutual and other regional stock companies as well as national carriers. Additionally, direct writers of property casualty insurance compete with our regional units by writing insurance through their salaried employees, generally at a lower acquisition cost than through independent agents such as those used by the Company. Our Insurance operations 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 the 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.

Employees

As of January 31, 2019, we employed 7,448 individuals. Of this number, our subsidiaries employed 7,310 persons and the remaining persons were employed at the parent company.

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 operating units 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 operating units. 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.wrberkley.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 market share. As a result, premium rates have increased at a modest pace for certain lines of business, while they have decreased in others. 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 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 have pressured premium rates in certain areas and could harm our ability to maintain or increase our profitability and premium volume.

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 and diversified financial services 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 increasing consolidation, which may further increase competition.

Some of our competitors, particularly in the Reinsurance business, have greater financial and/or marketing resources than we do. These competitors within the reinsurance segment 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.

Over the past several years, increased supply has led to significant competition in our business. Our E&S operating units have also encountered competition from admitted companies seeking to increase market share. Although insurance prices have generally increased for most lines of business since 2011, the rate of increase declined in more recent years before beginning to modestly accelerate again. Loss costs have also increased over that period of time. With the low level of interest rates available, current price levels for certain lines of business remain below the prices required for us to achieve our long-term return objectives. We expect to continue to face strong competition in these and our other lines of business and, as a result, pressure on pricing and policy terms and conditions.

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.

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 $12.0 billion as of December 31, 2018. 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.

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 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; and
- claims relating to unanticipated consequences of current or new technologies, including cyber security related risks; and 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 $105 million in 2018, $184 million in 2017, and $105 million in 2016. 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, as well as terrorist and other man-made activities, including drilling, mining and other industrial accidents, cyber events or terrorist activities. The incidence and severity of catastrophes are inherently unpredictable. 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.

Changing climate conditions may increase the frequency and 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 increasing the frequency and severity of catastrophic weather events, such as hurricanes, tornadoes, 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 2015 ("TRIPRA"), for up to 82% of our 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 2018 earned premiums, our aggregate deductible under TRIPRA during 2019 is approximately $969 million. TRIPRA is currently in effect through December 31, 2020. In addition, the coverage provided under TRIPRA does not apply to reinsurance that we write.

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;
- 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. The potential impact of the Dodd-Frank Act, as amended by the recent Economic Growth Act, on the U.S. insurance business is not clear. Our business could be affected by changes, whether as a result of the Dodd-Frank Act or otherwise, 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.

Although state regulation is the primary form of regulation of insurance and reinsurance in the United States, in addition to the changes brought about by the Dodd-Frank Act, Congress has considered various proposals relating to the creation of an optional federal charter and repeal of the insurance company antitrust exemption from the McCarran-Ferguson Act. We may be subject to potentially increased federal oversight as a financial institution. In addition, the current 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 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 EU 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. If our compliance with Solvency II 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 international operations expose us to investment, political 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, Africa and Australia expose us to increased investment, political 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.

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

The 2016 U.K. referendum on its membership in the EU resulted in a majority of U.K. voters voting in favor of the U.K. leaving the EU (“Brexit”). On March 29, 2017, the U.K. government formally notified the European Council of the U.K.’s intention to withdraw from the EU. The member withdrawal provisions in the EU treaty provide that the U.K. and the EU will negotiate a withdrawal agreement by March 29, 2019 (unless such deadline is extended by unanimous vote of the EU member states). As part of the sequenced approach to the talks set out by the EU, sufficient progress needs to be made on the withdrawal arrangements before any talks on a future trade deal between the EU and the U.K. can begin. In November 2018, the U.K. and EU announced agreement on a draft text of a withdrawal agreement, which would include the application of transitional provisions under which EU law would broadly remain in force in the U.K. until the end of 2020. However, there is uncertainty as to whether the withdrawal agreement, which is subject to approval of the U.K. Parliament and has been rejected in its current form, will actually be entered. In the absence of such an agreement, there would be no transitional provisions and a "hard" Brexit would occur on March 29, 2019, unless the U.K. Government were to revoke its withdrawal notice or if the two year period to reach agreement were extended.

Depending on the terms of the withdrawal, the U.K. could lose access to the single EU market and to free trade deals with several countries that already have agreements with the EU. Such a decline in trade 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. Brexit could also lead to legal uncertainty and differing laws and regulations between the U.K. and the EU. 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 operating units, 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. 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, 2018, the amount due from our reinsurers was approximately $1,932 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, and Moody's, 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 and Moody's. 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.

If our ratings are reduced from their current levels by A.M. Best, Standard & Poor's or Moody's, 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 claims-paying and 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. 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.

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 protect sensitive personal and our proprietary information, whether owing to breaches of our own systems or those of our vendors, could result in significant monetary and reputational damages. These increased risks, and expanding regulatory requirements regarding data security, 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 things, reducing the U.S. corporate income tax rate to 21%, repealing the corporate alternative minimum tax, limiting the deductibility of business interest expense, introducing a base erosion and anti-avoidance tax aimed at cross-border deductible payments to related foreign persons, moving closer to a territorial system of taxing earnings generated through foreign subsidiaries and imposing a one-time deemed repatriation tax on certain post-1986 undistributed earnings of foreign subsidiaries. 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. Although we believe that the changes introduced by the Act should generally benefit us, we are unable to predict the ultimate impact of the Act and its implementing regulations. In addition, 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.

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, 2018, our investment in fixed maturity securities was approximately $13.6 billion, or 73.5% 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 (28.9%); corporate securities (30.3%); asset-backed securities (17.9%); mortgage-backed securities (11.8%) and foreign government (5.9%).

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 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 the continued low inflation, 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, 2018, our investment in these assets was approximately $4.1 billion, or 22.1%, of our investment portfolio, including cash and cash equivalents.

Merger and arbitrage trading securities were $452.6 million, or 2.4% of our investment portfolio, including cash and cash equivalents at December 31, 2018. 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 $2.7 billion, or 14.4% of our investment portfolio, including cash and cash equivalents, at December 31, 2018. We also invest in aviation and rail equipment funds, credit-related funds and energy and other investment funds. The values of these investments are subject to fluctuations 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 Purchasing Our Securities

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 will depend on the surplus and future earnings of these subsidiaries. During 2019, the maximum amount of dividends that can be paid without regulatory approval is approximately $1.1 billion. 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, 2018, the Company had aggregate office space of 4,074,969 square feet, of which 1,153,563 were owned and 2,921,406 were leased.

Rental expense for the Company's operations was approximately $45,778,000, $52,925,000 and $47,453,000 for 2018, 2017 and 2016, respectively. Future minimum lease payments, without provision for sublease income, are $46,592,000 in 2019, $43,504,000 in 2020 and $180,126,000 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

The common stock of the Company is traded on the New York Stock Exchange under the symbol "WRB".

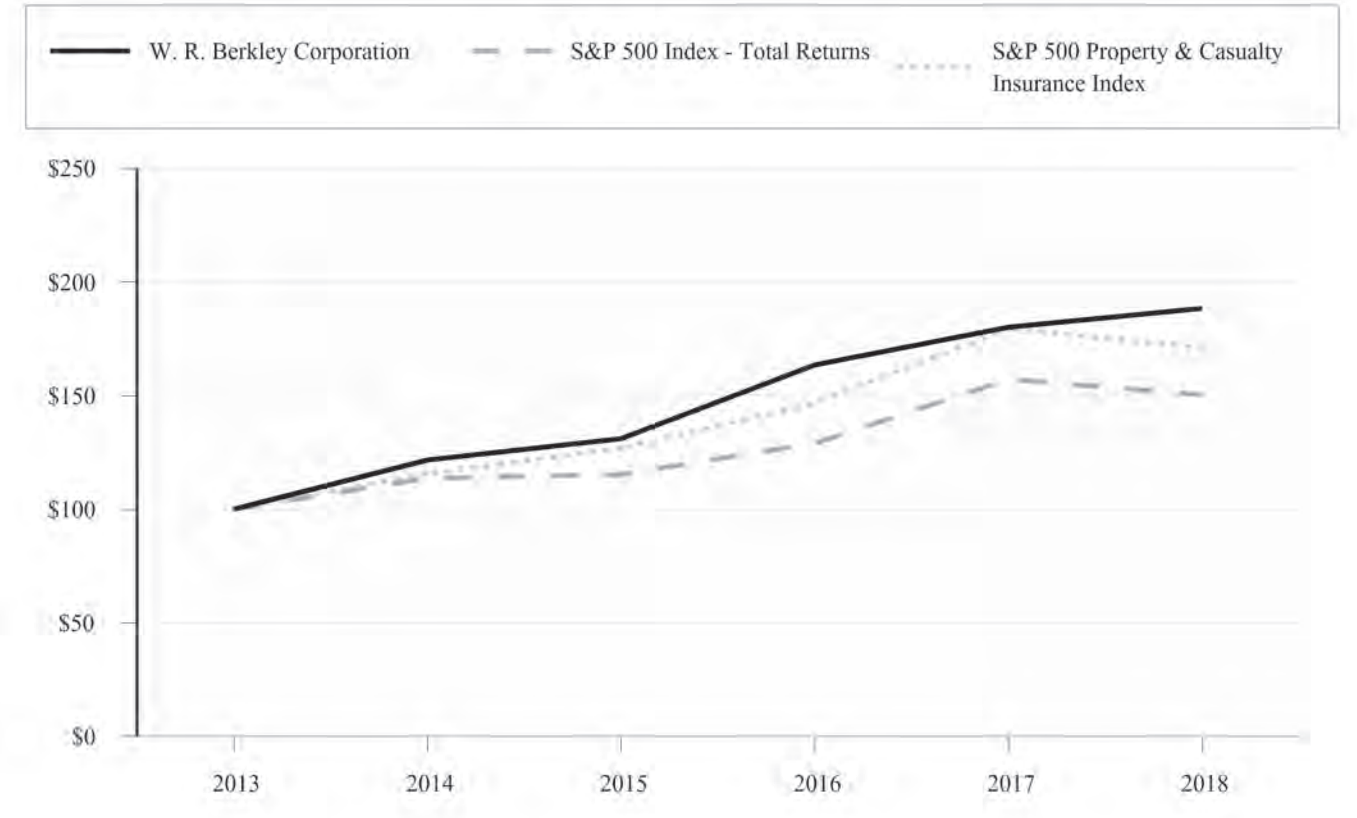
In 2018, the Board declared regular quarterly cash dividends of $0.14 per share in first quarter, and $0.15 per share in each of the remaining three quarters, plus three additional special dividends of $0.50 per share each. Subject to availability, the Board currently expects to continue such regular quarterly cash dividends.

The approximate number of record holders of the common stock on February 19, 2019 was 323.

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, 2014, with dividends reinvested.



The S&P 500® Property and Casualty Insurance Index consists of Allstate Corporation, Chubb, Ltd., Cincinnati Financial Corporation, Progressive Corporation, and The Travelers Companies, Inc.

		2013	2014	2015	2016	2017	2018
W. R. Berkley Corporation	Cum $	100.00	121.61	131.05	163.48	180.12	188.43
S&P 500 Index - Total Returns	Cum $	100.00	113.69	115.26	129.05	157.22	150.32
S&P 500 Property and Casualty Insurance Index	Cum $	100.00	115.74	126.77	146.68	179.52	171.10

Set forth below is a summary of the shares repurchased by the Company during the fourth quarter of 2018 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 2018	—	—	—	9,167,997
November 2018	—	—	—	9,167,997
December 2018	256,600	69.96	256,600	8,911,397

ITEM 6. SELECTED FINANCIAL DATA

	Year Ended December 31,				
(In thousands, except per share data)	**2018**	**2017**	**2016**	**2015**	**2014**
Net premiums written	$ 6,433,227	$ 6,260,508	$ 6,423,913	$ 6,189,515	$ 5,996,947
Net premiums earned	6,371,505	6,311,419	6,293,348	6,040,609	5,744,418
Net investment income	674,235	575,788	564,163	512,645	600,885
Net realized and unrealized gains on investments	154,488	335,858	267,005	92,324	254,852
Revenues from non-insurance businesses	372,985	326,165	390,348	421,102	410,022
Insurance service fees	117,757	134,729	138,944	139,440	117,443
Total revenues	7,691,651	7,684,764	7,654,184	7,206,457	7,128,928
Interest expense	157,185	147,297	140,896	130,946	128,174
Income before income taxes	812,094	772,770	896,438	732,030	952,196
Income tax expense	(163,028)	(219,433)	(292,953)	(227,923)	(302,593)
Noncontrolling interests	(8,317)	(4,243)	(1,569)	(413)	(719)
Net income to common stockholders	640,749	549,094	601,916	503,694	648,884
Data per common share:					
Net income per basic share	5.06	4.40	4.91	4.06	5.07
Net income per diluted share	5.00	4.26	4.68	3.87	4.86
Common stockholders' equity	44.57	44.53	41.65	37.31	36.21
Cash dividends declared	2.09	1.55	1.51	0.47	1.43
Weighted average shares outstanding:					
Basic	126,699	124,843	122,651	124,040	127,874
Diluted	128,264	129,018	128,553	130,189	133,652
Investments	$ 17,723,089	$ 17,450,508	$ 16,649,792	$ 15,351,467	$ 15,591,824
Total assets	24,895,977	24,299,917	23,364,844	21,730,967	21,716,691
Reserves for losses and loss expenses	11,966,448	11,670,408	11,197,195	10,669,150	10,369,701
Senior notes and other debt	1,882,028	1,769,052	1,760,595	1,844,621	2,115,527
Subordinated debentures	907,491	728,218	727,630	340,320	340,060
Common stockholders' equity	5,437,851	5,411,344	5,047,208	4,600,246	4,589,945

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 business segments of the property and casualty business: Insurance and Reinsurance. 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 and 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 operating units to capitalize on various business opportunities. Over the years, the Company has formed numerous new operating units 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 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, although recently interest rates have increased.

The Company also invests in equity securities, merger arbitrage securities, investment funds (including energy related 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.

Through the second quarter of 2018, the Company used the Argentine peso (“ARS”) as its functional currency for its business in Argentina and translated the financial statements of its Argentine operations into U.S. dollars ("USD"). Exchange rate movements through the second quarter of 2018 between the ARS and USD had been recorded as a currency translation gain or loss, which is a component of AOCI. Based on recent ARS inflation rate movements, the Company concluded that, effective July 1, 2018, the Argentine economy is considered highly inflationary under GAAP. This conclusion required the Company to change the functional currency of its Argentine operations to USD commencing July 1, 2018, and accordingly, the Company recognized foreign exchange gains and losses in earnings for any transactions in the Argentine operations that are not USD denominated.

Effective January 1, 2018, the Company adopted new accounting standards including ASU 2014-09, Revenue from Customers, ASU 2016-01, Financial Instruments and ASU 2018-02, Reporting Comprehensive Income. Refer to Note 1 in the financial statements for further information on the accounting guidance and impact of its adoption on the Company's results and financial position.

On February 21, 2019, the Company announced that its Board of Directors approved a 3-for-2 common stock split to be paid in the form of a stock dividend to holders of record on March 14, 2019. The additional shares are expected to be issued on April 2, 2019.

Critical Accounting Estimates

The following presents a discussion of accounting policies and estimates relating to reserves for losses and loss expenses, assumed 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 operating unit. 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 operating unit.

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 operating unit. 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 2018:

(In thousands)	**Frequency (+/-)**		
Severity (+/-)	**1%**	**5%**	**10%**
1%	$ 78,922	$ 237,553	$ 435,840
5%	237,553	402,465	608,606
10%	435,840	608,606	824,563

Our net reserves for losses and loss expenses of approximately $10.2 billion as of December 31, 2018 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 $1.6 billion, or 15%, of the Company's net loss reserves as of December 31, 2018 relate to the Reinsurance segment. There is a higher degree of uncertainty and greater variability regarding estimates of assumed loss reserves because those 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 extended. Management considers the impact of delayed reporting in its selection of assumed loss development factors.

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, 2018 and 2017:

(In thousands)	2018	2017
Insurance	$ 8,675,042	$ 8,341,622
Reinsurance	1,573,841	1,715,292
Net reserves for losses and loss expenses	10,248,883	10,056,914
Ceded reserves for losses and loss expenses	1,717,565	1,613,494
Gross reserves for losses and loss expenses	$ 11,966,448	$ 11,670,408

Following is a summary of the Company's net reserves for losses and loss expenses by major line of business as of December 31, 2018 and 2017:

(In thousands)	Reported Case Reserves	Incurred But Not Reported	Total
December 31, 2018			
Other liability	$ 1,307,068	$ 2,359,978	$ 3,667,046
Workers' compensation (1)	1,570,200	1,262,627	2,832,827
Professional liability	306,018	659,595	965,613
Commercial automobile	365,253	290,218	655,471
Short-tail lines (2)	294,122	259,963	554,085
Total Insurance	3,842,661	4,832,381	8,675,042
Reinsurance (1)	872,068	701,773	1,573,841
Total	$ 4,714,729	$ 5,534,154	$ 10,248,883
December 31, 2017			
Other liability	$ 1,261,957	$ 2,189,596	$ 3,451,553
Workers' compensation (1)	1,543,379	1,242,501	2,785,880
Professional liability	295,269	618,107	913,376
Commercial automobile	364,900	269,942	634,842
Short-tail lines (2)	297,777	258,194	555,971
Total Insurance	3,763,282	4,578,340	8,341,622
Reinsurance (1)	919,497	795,795	1,715,292
Total	$ 4,682,779	$ 5,374,135	$ 10,056,914

(1) Reserves for excess and assumed workers' compensation business are net of an aggregate net discount of $563 million and $591 million as of December 31, 2018 and 2017, 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.

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)	2018	2017	2016
(Increase) decrease in prior year loss reserves	$ (6,831)	$ 5,165	$ 29,904
Increase in prior year earned premiums	45,638	32,162	29,000
Net favorable prior year development	$ 38,807	$ 37,327	$ 58,904

Favorable prior year development (net of additional and return premiums) was $39 million in 2018.

Insurance - Reserves for the Insurance segment developed favorably by $43 million in 2018. The favorable development was primarily attributable to workers' compensation business, partially offset by unfavorable development for professional liability business.

For workers' compensation, the favorable development was spread across many accident years, including prior to 2009, but was most significant in accident years 2015 through 2017. The favorable workers' compensation development reflects a continuation during 2018 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. Reported workers' compensation losses in 2018 continued to be better than our expectations at most of our operating units, and were below the assumptions underlying our previous reserve estimates.

For professional liability business, adverse development was primarily related to unexpected large directors and officers ("D&O") liability losses at one of our U.S. operating units, as well as lawyers professional liability losses at another operating unit. The adverse development stemmed primarily from accident years 2015 and 2016, and was driven by a higher frequency of large losses than we had experienced in previous years.

Reinsurance - Reserves for the Reinsurance segment developed unfavorably by $4 million in 2018. The unfavorable development was primarily due to U.S. casualty facultative business from accident years 2009 and prior related to construction projects, and was largely offset by favorable development on assumed excess of loss workers' compensation business.

Favorable prior year development (net of additional and return premiums) was $37 million in 2017.

Insurance - Reserves for the Insurance segment developed favorably by $68 million in 2017. The favorable development was primarily attributable to workers' compensation business, and was partially offset by unfavorable development for professional liability business.

For workers' compensation, the favorable development was related to both primary and excess business and was spread across many accident years, including those prior to 2008, but was most significant in accident years 2014 through 2016. The favorable workers' compensation development reflects a continuation during 2017 of the generally benign loss cost trends experienced in recent years, particularly the favorable claim frequency trends (i.e. number of reported claims per unit of exposure). Reported workers' compensation losses in 2017 continued to be better than our expectations at most of our operating units, and were below the assumptions underlying our previous reserve estimates. The favorable severity trends were also impacted by our continued investment in medical case management services and the higher usage of preferred provider networks. The long term trend of declining workers' compensation frequency can be attributed to improved workplace safety.

For professional liability business, adverse development was primarily related to unexpected large D&O liability losses at one of our U.S. operating units, and large professional indemnity and D&O losses in the U.K. The adverse development stemmed mainly from accident years 2013 through 2016 in the U.S. and 2011 through 2016 in the U.K.

Reinsurance - Reserves for the Reinsurance segment developed unfavorably by $31 million in 2017. This adverse development was due to reserve strengthening associated with claims impacted by the change in the Ogden discount rate in the U.K., as well as adverse development on the U.S. facultative casualty excess of loss business. The Ogden rate is the discount rate used to calculate lump-sum bodily injury payouts in the U.K., and was reduced by the U.K. Ministry of Justice from +2.5% to -0.75% in 2017; the adverse development mostly related to U.K. motor bodily injury claims which we reinsured on an excess of loss basis in accident years 2012 through 2016. The adverse development on U.S. facultative casualty business was due to construction related risks in accident years 2008 and prior.

Favorable prior year development (net of additional and return premiums) was $59 million in 2016.

Insurance - Reserves for the Insurance segment developed favorably by $53 million in 2016. The favorable development was primarily related to workers' compensation business, and was partially offset by unfavorable development for medical professional liability business.

For workers' compensation, the favorable development was related to both primary and excess business and to many accident years, including those prior to 2007. During 2016, reported workers' compensation losses continued to be better than our expectations at most of our operating units. Loss frequency and severity trends continued to be better than the assumptions underlying our previous reserve estimates. Loss severity trends also benefited from our continued investment in medical case management services and from our preferred provider networks. The long term trend of declining workers' compensation frequency can be attributed to improved workplace safety.

For medical professional liability business, unfavorable development was primarily related to a class of business that has been discontinued. The adverse development for that business stemmed mainly from accident years 2010 through 2015.

Reinsurance - Reserves for the Reinsurance segment developed favorably by $6 million in 2016. The favorable development was primarily related to direct facultative reinsurance business and to accident years 2008 through 2014.

Reserve Discount. The Company discounts its liabilities for certain workers' compensation reserves. The amount of workers' compensation reserves that were discounted was $1,793 million and $1,855 million at December 31, 2018 and December 31, 2017, respectively. The aggregate net discount for those reserves, after reflecting the effects of ceded reinsurance, was $563 million and $591 million at December 31, 2018 and 2017, respectively. At December 31, 2018, discount rates by year ranged from 2.0% to 6.5%, with a weighted average discount rate of 3.8%.

Substantially all discounted workers' compensation reserves (97% of total discounted reserves at December 31, 2018) 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, 2018), 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 $41 million and $56 million at December 31, 2018 and 2017, 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.

Other-Than-Temporary Impairments (OTTI) of Investments. The cost of securities is adjusted where appropriate to include a provision for decline in value which is considered to be other-than-temporary. An other-than-temporary decline is considered to occur in investments where there has been a sustained reduction in fair value and where the Company does not expect the fair value to recover prior to the time of sale or maturity.

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.

Fixed Maturity Securities – For securities that we intend to sell or, more likely than not, would be required to sell, a decline in value below amortized cost is considered to be OTTI. The amount of OTTI is equal to the difference between amortized cost and fair value at the balance sheet date. For securities that we do not intend to sell or expect to be required to sell, a decline in value below amortized cost is considered to be an OTTI if we do not expect to recover the entire amortized cost basis of a security (i.e., the present value of cash flows expected to be collected is less than the amortized cost basis of the security).

The portion of the decline in value considered to be a credit loss (i.e., the difference between the present value of cash flows expected to be collected and the amortized cost basis of the security) is recognized in earnings. The portion of the decline in value not considered to be a credit loss (i.e., the difference in the present value of cash flows expected to be collected and the fair value of the security) is recognized in other comprehensive income.

Impairment assessments for structured securities, including mortgage-backed securities and asset-backed securities, collateralized debt obligations and corporate debt, are generally evaluated based on the performance of the underlying collateral under various economic and default scenarios that may 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. If an OTTI determination is made, a discounted cash flow analysis is used to ascertain the amount of the credit impairment.

The following table provides a summary of fixed maturity securities in an unrealized loss position as of December 31, 2018:

($ in thousands)	**Number of Securities**	**Aggregate Fair Value**	**Unrealized Loss**
Unrealized loss less than 20% of amortized cost	1,068	$ 7,823,120	$ 201,258
Unrealized loss of 20% or greater of amortized cost:			
Less than twelve months	6	14,553	6,435
Twelve months and longer	4	23,837	7,870
Total	1,078	$ 7,861,510	$ 215,563

A summary of the Company's non-investment grade fixed maturity securities that were in an unrealized loss position at December 31, 2018 is presented in the table below.

($ in thousands)	**Number of Securities**	**Aggregate Fair Value**	**Unrealized Loss**
Foreign government	13	$ 140,854	$ 21,411
Corporate	13	120,078	13,111
Asset-backed securities	5	14,662	2,593
Mortgage-backed securities	5	8,741	69
Total	36	$ 284,335	$ 37,184

The Company has evaluated its fixed maturity securities in an unrealized loss position and believes the unrealized loss is 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 and does not consider any of these securities to be OTTI. For the year ended December 31, 2018, OTTI for fixed maturity securities recognized in earnings were $5.7 million. For the year ended December 31, 2017, there were no OTTI for fixed maturity securities.

Loans Receivable – The Company monitors the performance of its loans receivable, including current market conditions for each loan and the ability to collect principal and interest. For loans where the Company determines it is probable that the contractual terms will not be met, an analysis is performed and a valuation reserve is established, if necessary, with a charge to earnings. Loans receivable are reported net of a valuation reserve of $3 million for both December 31, 2018 and 2017.

The Company monitors the performance of its loans receivable and assesses the ability of each 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. Loans receivable with a potential for default are further assessed using discounted cash flow analysis and comparable cost and sales methodologies, if appropriate.

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, 2018:

(In thousands)	Carrying Value	Percent of Total
Pricing source:		
Independent pricing services	$ 13,351,637	98.7%
Syndicate manager	34,304	0.3
Directly by the Company based on:		
Observable data	142,137	1.0
Cash flow model	99	—
Total	$ 13,528,177	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, 2018, 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, 2018 and 2017

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, 2018 and 2017. 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)	2018	2017
Insurance		
Gross premiums written	$ 7,157,370	$ 6,869,831
Net premiums written	5,952,861	5,715,871
Net premiums earned	5,864,981	5,706,443
Loss ratio	61.8%	61.6%
Expense ratio	32.5	32.9
GAAP combined ratio	94.3	94.5
Reinsurance		
Gross premiums written	$ 545,124	$ 607,132
Net premiums written	480,366	544,637
Net premiums earned	506,524	604,976
Loss ratio	68.7%	80.2%
Expense ratio	37.7	37.4
GAAP combined ratio	106.4	117.6
Consolidated		
Gross premiums written	$ 7,702,494	$ 7,476,963
Net premiums written	6,433,227	6,260,508
Net premiums earned	6,371,505	6,311,419
Loss ratio	62.4%	63.4%
Expense ratio	32.9	33.3
GAAP combined ratio	95.3	96.7

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, 2018 and 2017.

(In thousands, except per share data)	2018	2017
Net income to common stockholders	$ 640,749	$ 549,094
Weighted average diluted shares	128,264	129,018
Net income per diluted share	$ 5.00	$ 4.26

The Company reported net income of $641 million in 2018 compared to $549 million in 2017. The 17% increase in net income was primarily due to an after-tax increase in net investment income of $79 million, mainly driven by growth in the fixed maturity security portfolio, higher interest rates and an increase in investment funds, an after-tax increase in underwriting income of $72 million, a $34 million increase in after-tax foreign currency gains, an after-tax increase in non-insurance businesses of $6 million, and a $60 million decrease in tax expense primarily due to the reduction of the federal corporate tax rate from 35% to 21%, partially offset by a decrease in after-tax net investment gains of $145 million, an after-tax increase in interest expense of $8 million, an after-tax reduction in insurance service fee income of $4 million, and an after-tax increase in corporate expenses of $2 million. The number of weighted average diluted shares decreased slightly primarily due to share repurchases.

Premiums. Gross premiums written were $7,702 million in 2018, an increase of 3% from $7,477 million in 2017. The increase was due to an increase in the Insurance segment of $287 million, partially offset by a decrease in the Reinsurance segment of $62 million. Approximately 78% of policies expiring in 2018 were renewed and 79% of policies expiring in 2017 were renewed.

Average renewal premium rates (adjusted for change in exposures) increased 2.5% in 2018, 0.9% in 2017 and 0.3% in 2016.

A summary of gross premiums written in 2018 compared with 2017 by line of business within each business segment follows:

- Insurance gross premiums increased 4% to $7,157 million in 2018 from $6,870 million in 2017. Gross premiums increased $156 million (7%) for other liability, $87 million (12%) for professional liability, $64 million (4%) for short-tail lines and $54 million (7%) for commercial auto, and decreased $74 million (4%) for workers' compensation.
- Reinsurance gross premiums decreased 10% to $545 million in 2018 from $607 million in 2017. Gross premiums written decreased $38 million (19%) for property lines and decreased $24 million (6%) for casualty lines.

Net premiums written were $6,433 million in 2018, an increase of 3% from $6,261 million in 2017. Ceded reinsurance premiums as a percentage of gross written premiums were 17% and 16% in 2018 and 2017, respectively.

Premiums earned increased 1% to $6,372 million in 2018 from $6,311 million in 2017. 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 2018 are related to business written during both 2018 and 2017. Audit premiums were $192 million in 2018 compared with $172 million in 2017.

Net Investment Income. Following is a summary of net investment income for the years ended December 31, 2018 and 2017:

	Amount		Average Annualized Yield	
(In thousands)	**2018**	**2017**	**2018**	**2017**
Fixed maturity securities, including cash and cash equivalents and loans receivable	$ 519,269	$ 473,101	3.6%	3.3%
Investment funds	109,349	68,169	8.8	5.7
Arbitrage trading account	28,157	19,145	4.7	3.6
Real estate	18,591	19,975	1.0	1.5
Equity securities	3,230	2,350	1.4	1.1
Gross investment income	678,596	582,740	3.7	3.3
Investment expenses	(4,361)	(6,952)	—	—
Total	$ 674,235	$ 575,788	3.7%	3.3%

Net investment income increased 17% to $674 million in 2018 from $576 million in 2017 primarily due to an increase in income from fixed maturity securities of $46 million, a $41 million increase in investment funds, a $9 million increase in arbitrage trading account and a decrease in investment expenses of $2 million, partially offset by a decrease in real estate of $1 million. Investment funds are reported on a one quarter lag. The average annualized yield for fixed maturity securities was 3.6% in 2018 and 3.3% in 2017; accordingly, the increase in fixed maturity securities income was mainly the result of a larger investment portfolio and higher interest rates. The effective duration of the fixed maturity portfolio was 2.8 years at December 31, 2018, down from 3.0 years at December 31, 2017. The Company has maintained a shortened duration of its fixed maturity security portfolio. This has reduced the potential impact of mark-to-market adjustments on the portfolio and positioned the Company to take advantage of rising interest rates. Average invested assets, at cost (including cash and cash equivalents), were $18.4 billion in 2018 and $17.5 billion in 2017.

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 were $118 million in 2018 and $135 million in 2017. The decrease is primarily due to the sale of a third party administration business in third quarter of 2018.

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. Effective January 1, 2018, the Company adopted new accounting guidance that requires all equity investments with readily determinable fair values to be measured at fair value with changes in the fair value recognized through net income (other than those equity securities accounted for under the equity method of accounting or those that result in consolidation of the investee). Net realized and unrealized gains on investments were $154 million in 2018 compared with $336 million in 2017. In 2018, the gains reflected net realized gains on investment sales of $480 million reduced by a change in unrealized gains on equity securities of $320 million as well as $6 million in OTTI. In 2017, realized gains were primarily related to the sale of an investment in an office building located in Washington, D.C. and the sale of shares of a publicly traded common stock.

Other-Than-Temporary Impairments. The cost of securities is adjusted when appropriate to include a provision for a decline in value that is considered to be other-than-temporary. In 2018, there was $6 million other-than-temporary impairments. There was no other-than-temporary impairments in 2017.

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 increased to $373 million in 2018 from $326 million in 2017, primarily due to the purchase of a business in the second half of 2018 and revenues from a textile business purchased in March 2017.

Losses and Loss Expenses. Losses and loss expenses decreased to $3,975 million in 2018 from $4,002 million in 2017. The consolidated loss ratio was 62.4% in 2018 and 63.4% in 2017. Catastrophe losses, net of reinsurance recoveries and reinstatement premiums, were $105 million in 2018 compared with $184 million in 2017. The more significant 2017 catastrophe losses largely related to hurricanes Harvey, Irma, and Maria, along with two earthquakes in Mexico. Favorable prior year reserve development (net of premium offsets) was $39 million in 2018 compared with $37 million in 2017. The loss ratio excluding catastrophe losses and prior year reserve development increased 0.2 points to 61.3% in 2018 from 61.1% in 2017.

A summary of loss ratios in 2018 compared with 2017 by business segment follows:

- Insurance - The loss ratio of 61.8% in 2018 was 0.2 points higher than the loss ratio of 61.6% in 2017. Catastrophe losses were $76 million in 2018 compared with $107 million in 2017. Favorable prior year reserve development was $43 million in 2018 compared with $68 million in 2017. The loss ratio excluding catastrophe losses and prior year reserve development increased 0.3 points to 61.2% in 2018 from 60.9% in 2017.

- Reinsurance - The loss ratio of 68.7% in 2018 was 11.5 points lower than the loss ratio of 80.2% in 2017. Catastrophe losses were $29 million in 2018 compared with $77 million in 2017. Adverse prior year reserve development was $4 million in 2018 compared with adverse prior year reserve development $31 million in 2017. Adverse prior year development in 2017 was largely due to the impact of the change in Ogden discount rate in the U.K. and adverse development related to the U.S. facultative excess of loss business. The loss ratio excluding catastrophe losses and prior year reserve development decreased 0.2 points to 62.1% in 2018 from 62.3% in 2017.

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

(In thousands)	**2018**	**2017**
Policy acquisition and insurance operating expenses	$ 2,098,881	$ 2,101,024
Insurance service expenses	118,357	129,776
Net foreign currency (gains) losses	(27,067)	15,267
Other costs and expenses	193,050	190,865
Total	$ 2,383,221	$ 2,436,932

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 remained flat and net premiums earned increased 1% from 2017. The expense ratio (policy acquisition and insurance operating expenses expressed as a percentage of premiums earned) was 32.9% in 2018 and 33.3% in 2017.

Service expenses, which represent the costs associated with the fee-based businesses, decreased 9% to $118 million in 2018 from $130 million in 2017. The decrease is primarily due to the sale of a third party administration business in third quarter of 2018.

Net foreign currency (gains) losses result from transactions denominated in a currency other than an operating unit's functional currency. Net foreign currency gains were $27 million in 2018 compared to losses of $15 million in 2017, resulting from the strengthening U.S. dollar and the change of functional currency for the Company's Argentine operations to the U.S. dollar as of July 1, 2018. The Argentine economy was determined to be highly inflationary under GAAP requiring the change in functional currency beginning with the third quarter of 2018.

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 $193 million in 2018 from $191 million in 2017.

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 $364 million in 2018 compared to $325 million in 2017. The increase mainly relates to a new business purchased in the second half of 2018 as well as the textile business purchased in March 2017.

Interest Expense. Interest expense was $157 million in 2018 compared with $147 million in 2017. In March 2018, the Company issued $175 million aggregate principal amount of 5.70% subordinated debentures due 2058, and in April 2018, the Company issued another $10 million principal amount of such debentures. Additionally in 2018, the Company issued subsidiary debt of $116 million, which was primarily attributable to a non-recourse mortgage loan on a real estate property in Florida.

Income Taxes. The effective income tax rate was 20% in 2018 compared to 28% in 2017. The decrease in the effective tax rate in 2018 from 2017 was primarily due to the Tax Cuts and Jobs Act of 2017, which reduced the federal corporate tax rate from 35% to 21%.

The Company has not provided U.S. deferred income taxes on the undistributed earnings of approximately $70 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, 2017 and 2016

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, 2017 and 2016. 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)	2017	2016
Insurance		
Gross premiums written	$ 6,869,831	$ 6,795,506
Net premiums written	5,715,871	5,743,620
Net premiums earned	5,706,443	5,618,842
Loss ratio	61.6%	61.0%
Expense ratio	32.9	32.5
GAAP combined ratio	94.5	93.5
Reinsurance		
Gross premiums written	$ 607,132	$ 748,195
Net premiums written	544,637	680,293
Net premiums earned	604,976	674,506
Loss ratio	80.2%	61.6%
Expense ratio	37.4	39.0
GAAP combined ratio	117.6	100.6
Consolidated		
Gross premiums written	$ 7,476,963	$ 7,543,701
Net premiums written	6,260,508	6,423,913
Net premiums earned	6,311,419	6,293,348
Loss ratio	63.4%	61.1%
Expense ratio	33.3	33.2
GAAP combined ratio	96.7	94.3

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, 2017 and 2016.

(In thousands, except per share data)	2017	2016
Net income to common stockholders	$ 549,094	$ 601,916
Weighted average diluted shares	129,018	128,553
Net income per diluted share	$ 4.26	$ 4.68

The Company reported net income of $549 million in 2017 compared to $602 million in 2016. The 9% decrease in net income was primarily due to a decrease in after-tax underwriting income of $98 million (mainly driven by increased catastrophe losses from hurricanes Harvey, Irma, and Maria, two earthquakes in Mexico, and wildfires in California), an after-tax increase of $18 million in net foreign currency losses, an after-tax decrease in income from non-insurance businesses of $9 million, an increase in after-tax interest expense of $4 million, and an increase in after-tax other expenses of $7 million, partially offset by an increase in after-tax net investment gains of $45 million, a net benefit from tax reform of $21 million, an increase in after-tax net investment income of $8 million, an after-tax increase of $3 million in service fee income and an increase in income from other various sources of $6 million. The number of weighted average diluted shares remained relatively unchanged for 2017 and 2016.

Premiums. Gross premiums written were $7,477 million in 2017, a decrease of 1% from $7,544 million in 2016. The decrease was due to a decrease in the Reinsurance segment of $141 million, partially offset by an increase in the Insurance segment of $74 million. Approximately 79% of policies expiring in 2017 were renewed and 77% of policies expiring in 2016 were renewed.

Average renewal premium rates (adjusted for change in exposures) increased 0.9% in 2017, 0.3% in 2016 and 1.2% in 2015. However, overall loss costs are also increasing, and current market price levels for certain lines of business remain below the prices required for the Company to achieve its long-term return objectives.

A summary of gross premiums written in 2017 compared with 2016 by line of business within each business segment follows:

- Insurance gross premiums increased 1% to $6,870 million in 2017 from $6,796 million in 2016. Gross premiums increased $40 million (6%) for commercial auto, $37 million (5%) for professional liability, $6 million (less than 1%) for other liability, and $4 million (less than 1%) for short-tail lines, partially offset by a decrease of $13 million (1%) for workers' compensation.
- Reinsurance gross premiums decreased 19% to $607 million in 2017 from $748 million in 2016. Gross premiums written decreased $108 million (35%) for property lines and decreased $33 million (7%) for casualty lines.

Net premiums written were $6,261 million in 2017, a decrease of 3% from $6,424 million in 2016. Ceded reinsurance premiums as a percentage of gross written premiums were 16% in 2017 and 15% in 2016.

Premiums earned increased less than 1% to $6,311 million in 2017 from $6,293 million in 2016. 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 2017 are related to business written during both 2017 and 2016. Audit premiums were $172 million in 2017 compared with $156 million in 2016.

Net Investment Income. Following is a summary of net investment income for the years ended December 31, 2017 and 2016:

	Amount		Average Annualized Yield	
(In thousands)	**2017**	**2016**	**2017**	**2016**
Fixed maturity securities, including cash and cash equivalents and loans receivable	$ 473,101	$ 444,247	3.3%	3.2%
Investment funds	68,169	99,301	5.7	8.1
Real estate	19,975	7,054	1.5	0.7
Arbitrage trading account	19,145	18,693	3.6	4.8
Equity securities available for sale	2,350	4,028	1.1	2.1
Gross investment income	582,740	573,323	3.3	3.4
Investment expenses	(6,952)	(9,160)	—	—
Total	$ 575,788	$ 564,163	3.3%	3.4%

Net investment income increased 2% to $576 million in 2017 from $564 million in 2016 primarily due to an increase in income from fixed maturity securities of $29 million, as well as real estate of $13 million and a decrease in investment expenses of $2 million, partially offset by a decrease in investment funds of $31 million. Investment funds are reported on a one quarter lag. The average annualized yield for fixed maturity securities was 3.3% in 2017 and 3.2% in 2016; accordingly the increase in fixed maturity securities income was mainly the result of a larger investment portfolio. The effective duration of the fixed maturity portfolio was 3.0 years at December 31, 2017, down from 3.1 years at December 31, 2016. Average invested assets, at cost (including cash and cash equivalents), were $17.5 billion in 2017 and $16.7 billion in 2016.

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 were $135 million in 2017 and $139 million in 2016.

Net Realized Gains on Investment Sales. 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 gains on investment sales were $336 million in 2017 compared with $285 million in 2016. In 2017, realized gains were primarily related to the sale of an investment in an office building located in Washington, D.C. and the sale of some shares of a publicly traded common stock. In 2016, realized gains were primarily related to the sale of Aero Precision Industries and the sale of some shares of a publicly traded common stock.

Other-Than-Temporary Impairments. The cost of securities is adjusted where appropriate to include a provision for a decline in value that is considered to be other-than-temporary. There were no other-than-temporary impairments in 2017 as compared to $18 million in 2016 primarily related to common stocks.

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 decreased to $326 million in 2017 from $390 million in 2016, primarily due to the sale of Aero Precision Industries in August 2016, partially offset by revenues from the textile business purchased in March 2017.

Losses and Loss Expenses. Losses and loss expenses increased to $4,002 million in 2017 from $3,846 million in 2016. The consolidated loss ratio was 63.4% in 2017 and 61.1% in 2016. Catastrophe losses, net of reinsurance recoveries and reinstatement premiums, were $184 million in 2017 compared with $105 million in 2016, an increase of 1.2 loss ratio points. Favorable prior year reserve development (net of premium offsets) was $37 million in 2017 compared with $59 million in 2016, a difference of 0.3 loss ratio points (see "- Critical Accounting Estimates - Reserves for Losses and Loss Expenses"). The loss ratio excluding catastrophe losses and prior year reserve development increased 0.8 points to 61.1% in 2017 from 60.3% in 2016.

A summary of loss ratios in 2017 compared with 2016 by business segment follows:

- Insurance - The loss ratio of 61.6% in 2017 was 0.6 points higher than the loss ratio of 61.0% in 2016. Catastrophe losses were $107 million in 2017 compared with $89 million in 2016, an increase of 0.4 loss ratio points. Favorable prior year reserve development was $68 million in 2017 compared with $53 million in 2016, a decrease of 0.3 loss ratio points. The loss ratio excluding catastrophe losses and prior year reserve development increased 0.5 points to 60.9% in 2017 from 60.4% in 2016.
- Reinsurance - The loss ratio of 80.2% in 2017 was 18.6 points higher than the loss ratio of 61.6% in 2016. Catastrophe losses were $77 million in 2017 compared with $16 million in 2016, an increase of 10.3 loss ratio points. Adverse prior year reserve development was $31 million in 2017 compared with favorable prior year reserve development of $6 million in 2016, a difference of 6.0 loss ratio points. Adverse prior year development in 2017 was largely due to the impact of the change in Ogden discount rate in the U.K. and adverse development related to the U.S. facultative excess of loss business. The loss ratio excluding catastrophe losses and prior year reserve development increased 2.3 points to 62.3% in 2017 from 60.0% in 2016.

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

(In thousands)	**2017**	**2016**
Policy acquisition and insurance operating expenses	$ 2,101,024	$ 2,089,203
Insurance service expenses	129,776	138,908
Net foreign currency losses (gains)	15,267	(11,904)
Other costs and expenses	190,865	179,412
Total	$ 2,436,932	$ 2,395,619

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 less than 1% compared with the increase in net premiums earned of less than 1%. The expense ratio (policy acquisition and insurance operating expenses expressed as a percentage of premiums earned) was 33.3% in 2017 and 33.2% in 2016.

Insurance service expenses, which represent the costs associated with the fee-based businesses, decreased 7% to $130 million from $139 million in 2016.

Net foreign currency (gains) losses result from transactions denominated in a currency other than an operating unit’s functional currency. Net foreign currency losses were $15 million in 2017 compared to gains of $12 million in 2016.

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 $191 million in 2017 from $179 million in 2016 primarily because of startup costs for new business ventures.

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 $325 million in 2017 compared to $375 million in 2016. The decline mainly relates to the sale of Aero Precision Industries in August 2016, partially offset by expenses from the textile business purchased in March 2017.

Interest Expense. Interest expense was $147 million in 2017 compared with $141 million in 2016. During 2016, the Company repaid $83 million of debt mainly in connection with the sale of Aero Precision Industries. In February 2016, the company issued $110 million of 5.9% subordinated debentures maturing in 2056, and in May 2016, the Company issued $290 million of 5.75% subordinated debentures maturing in 2056. During 2017, one of the Company's non-insurance subsidiaries issued $7 million of debt.

Income Taxes. The effective income tax rate was 28% in 2017 compared to 33% in 2016. The lower tax rate in 2017 was due, in part, to tax reform (the Tax Cuts and Jobs Act of 2017) as well as the new requirement under U.S. GAAP in 2017 to recognize tax benefits for stock compensation in income tax expense. The effective income tax rate differs from the federal income tax rate of 35% primarily because of tax-exempt investment income and previously mentioned additional 2017 tax impacts.

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 2.8 years and 3.0 years at December 31, 2018 and 2017, respectively. The Company's investment portfolio and investment-related assets as of December 31, 2018 were as follows:

($ in thousands)	Carrying Value	Percent of Total
Fixed maturity securities:		
U.S. government and government agencies	$ 702,240	3.8%
State and municipal:		
Special revenue	2,425,868	13.1
Pre-refunded (1)	430,169	2.3
Local general obligation	425,337	2.3
State general obligation	384,706	2.1
Corporate backed	274,409	1.5
Total state and municipal	3,940,489	21.3
Mortgage-backed securities:		
Agency	920,496	5.0
Commercial	342,666	1.8
Residential-Prime	303,229	1.6
Residential-Alt A	38,899	0.2
Total mortgage-backed securities	1,605,290	8.6
Asset-backed securities	2,438,747	13.2
Corporate:		
Industrial	2,257,821	12.2
Financial	1,463,922	7.9
Utilities	329,175	1.8
Other	60,393	0.3
Total corporate	4,111,311	22.2
Foreign government	808,735	4.4
Total fixed maturity securities	13,606,812	73.5
Equity securities available for sale:		
Preferred stocks	180,814	1.0
Common stocks	98,192	0.5
Total equity securities available for sale	279,006	1.5
Real estate	1,957,092	10.5
Investment funds	1,332,818	7.2
Cash and cash equivalents	817,602	4.4
Arbitrage trading account	452,548	2.4
Loans receivable	94,813	0.5
Total investments	$ 18,540,691	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 sector.

Investment Funds. At December 31, 2018, the carrying value of investment funds was $1,333 million, including investments in real estate funds of $642 million, energy funds of $75 million, and other funds of $616 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, 2018, real estate properties in operation included a long-term ground lease in Washington D.C., a hotel in Memphis, Tennessee, two office complexes in New York City, office buildings in West Palm Beach and Palm Beach, Florida, and an office building in London. In addition, there is a mixed-use project in Washington D.C. 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, had an amortized cost of $95 million and an aggregate fair value of $97 million at December 31, 2018. The amortized cost of loans receivable is net of a valuation allowance of $3 million as of December 31, 2018. Loans receivable include real estate loans of $62 million that are secured by commercial real estate located primarily in New York. Real estate loans receivable generally earn interest at floating LIBOR-based interest rates and have maturities (inclusive of extension options) through August 2025. Loans receivable include commercial loans of $33 million that are secured by business assets and have fixed interest rates and varying maturities not exceeding 10 years.

Liquidity and Capital Resources

Cash Flow. Cash flow provided from operating activities decreased to $620 million in 2018 from $711 million in 2017, primarily due to the timing of loss and loss expense payments, certain long-term incentive plan payments and 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 one year 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 income 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 78% invested in cash, cash equivalents and marketable fixed maturity securities as of December 31, 2018. 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, 2018, the Company had senior notes, subordinated debentures and other debt outstanding with a carrying value of $2,790 million and a face amount of $2,826 million. The maturities of the outstanding debt are $447 million in 2019, $315 million in 2020, $427 million in 2022, $102 million in 2028, $250 million in 2037, $350 million in 2044, $350 million in 2053, $400 million in 2056 and $185 million in 2058.

In March 2018, the Company issued $175 million aggregate principal amount of 5.70% subordinated debentures due 2058, and in April 2018, the Company issued another $10 million principal amount of such debentures. Additionally in 2018, the Company issued subsidiary debt of $116 million, which was primarily attributable to a non-recourse mortgage loan on a real estate property in Florida.

Equity. The Company repurchased 357,600, 731,003 and 2,395,892 shares of its common stock in 2018, 2017 and 2016, respectively. The aggregate cost of the repurchases was $25 million in 2018, $48 million in 2017 and $132 million in 2016. In 2018, the Board declared regular quarterly cash dividends of $0.14 per share in first quarter, and $0.15 per share in each of the remaining three quarters, plus three additional special dividends of $0.50 per share each. At December 31, 2018, total common stockholders' equity was $5.4 billion, common shares outstanding were 121,995,760 and stockholders' equity per outstanding share was $44.57.

Total Capital. Total capitalization (equity, debt and subordinated debentures) was $8.2 billion at December 31, 2018. The percentage of the Company's capital attributable to senior notes, subordinated debentures and other debt was 34% at December 31, 2018 and 32% at December 31, 2017.

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, 2018, the Company had a gross deferred tax asset (net of valuation allowance) of $370 million (which primarily relates to loss and loss expense reserves and unearned premium reserves) and a gross deferred tax liability of $334 million (which primarily relates to deferred policy acquisition costs and investment funds). 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 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 it 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, 2019: The Company’s property per risk reinsurance generally covers losses between $2.5 million and $60 million. The Company’s catastrophe excess of loss reinsurance program provides protection for net losses between $15 million and $395 million for the majority of business written by its U.S. Insurance segment operating units and Lloyd's Syndicate, excluding offshore energy. 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, 2019 provides protection for losses between $5 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 $1.5 million and up to $101.5 million. For losses involving two or more claimants for primary workers’ compensation business, coverage is generally in place for losses between $5 million and $270 million. For excess workers’ compensation business, such coverage is generally in place for losses between $25 million and $545 million.
- 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 operating unit, the Company purchases specific additional reinsurance to supplement the above programs.

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 claims made 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, 2018:

	Year Ended December 31,		
(In thousands)	**2018**	**2017**	**2016**
Earned premiums	$ 1,236,049	$ 1,161,936	$ 1,099,462
Losses and loss expenses	829,742	601,769	707,336

Ceded earned premiums increased 6.4% in 2018 to $1,236 million. The ceded losses and loss expenses ratio increased 15 points to 67% in 2018 from 52% in 2017.

The following table presents the credit quality of amounts due from reinsurers as of December 31, 2018. 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:		
Lloyd’s of London	A+	$ 215,370
Munich Re	AA-	164,131
Alleghany Group	A+	150,438
Swiss Re	AA-	150,280
Partner Re	A+	103,837
Berkshire Hathaway	AA+	87,314
Axis Capital	A+	85,377
Hannover Re Group	AA-	77,351
Everest Re	A+	62,113
Korean Re	A	52,746
Renaissance Re	A+	39,944
Liberty Mutual	A	32,118
Qatar Re	A	27,731
Chubb Limited	AA	24,628
Arch Capital Group	A+	21,260
Other reinsurers:		
Rated A- or better		161,251
Secured (2)		109,143
All Others		18,911
Subtotal		1,583,943
Residual markets pools (3)		348,348
Total		$ 1,932,291

(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, 2018:

(In thousands) Estimated Payments By Periods	2019	2020	2021	2022	2023	Thereafter
Gross reserves for losses	$ 3,137,565	$ 2,154,391	$ 1,609,899	$ 1,161,065	$ 848,536	$ 3,637,803
Operating lease obligations	46,592	43,504	39,061	34,444	30,881	75,740
Purchase obligations	87,976	46,676	39,191	39,200	37,869	—
Subordinated debentures	—	—	—	—	—	935,000
Debt maturities	447,433	315,461	—	426,503	—	701,750
Interest payments	155,391	124,616	108,491	105,163	85,647	2,253,250
Other long-term liabilities	3,617	3,317	2,972	2,627	2,362	26,608
Total	$ 3,878,574	$ 2,687,965	$ 1,799,614	$ 1,769,002	$ 1,005,295	$ 7,630,151

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, 2018. 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, 2018, the Company had commitments to invest up to $270.2 million and $253.4 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 $3 million as of December 31, 2018. 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 2.8 years and 3.0 years at December 31, 2018 and 2017, respectively.

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, 2018:

($ in thousands)	Effective Duration (Years)	Fair Value
State and municipal	3.7	$ 3,952,038
Mortgage-backed securities	3.7	1,606,549
Corporate	3.4	4,111,311
U.S. government and government agencies	2.7	702,240
Foreign government	2.1	808,735
Loans receivable	1.0	97,073
Asset-backed securities	1.0	2,438,747
Cash and cash equivalents	—	817,602
Total	2.8	$ 14,534,295

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, 2018 would be as follows:

(In thousands) Change in interest rates:	Estimated Fair Value	Change in Fair Value
300 basis point rise	$13,284,688	$ (1,249,608)
200 basis point rise	13,689,482	(844,814)
100 basis point rise	14,101,454	(432,842)
Base scenario	14,534,295	—
100 basis point decline	14,912,897	378,601
200 basis point decline	15,291,638	757,342
300 basis point decline	15,449,791	915,495

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, 2018 and 2017, 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, 2018, 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, 2018 and 2017, and the results of its operations and its cash flows for each of the years in the three‑year period ended December 31, 2018, 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, 2018, 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 22, 2019 expressed an unqualified opinion on the effectiveness of the Company's internal control over financial reporting.

Change in Accounting Principle

As discussed in Note 1 to the consolidated financial statements, the Company has changed its method of accounting for equity investments measured at fair value with changes in the fair value recognized through net income (other than those accounted for under equity method of accounting or those that result in consolidation of the investee) effective January 1, 2018 due to the adoption of ASU 2016-01, Financial Instruments.

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.

/S/ KPMG LLP

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

New York, New York
February 22, 2019

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

(In thousands, except per share data)	Year Ended December 31, 2018	2017	2016
REVENUES:			
Net premiums written	$ 6,433,227	$ 6,260,508	$ 6,423,913
Change in net unearned premiums	(61,722)	50,911	(130,565)
Net premiums earned	6,371,505	6,311,419	6,293,348
Net investment income	674,235	575,788	564,163
Net realized and unrealized gains on investments:			
Net realized and unrealized gains before OTTI	160,175	335,858	285,119
Other-than-temporary impairments ("OTTI")	(5,687)	—	(18,114)
Net realized and unrealized gains on investments	154,488	335,858	267,005
Revenues from non-insurance businesses	372,985	326,165	390,348
Insurance service fees	117,757	134,729	138,944
Other income	681	805	376
Total revenues	7,691,651	7,684,764	7,654,184
OPERATING COSTS AND EXPENSES:			
Losses and loss expenses	3,974,702	4,002,348	3,845,800
Other operating costs and expenses	2,383,221	2,436,932	2,395,619
Expenses from non-insurance businesses	364,449	325,417	375,431
Interest expense	157,185	147,297	140,896
Total operating costs and expenses	6,879,557	6,911,994	6,757,746
Income before income taxes	812,094	772,770	896,438
Income tax expense	(163,028)	(219,433)	(292,953)
Net income before noncontrolling interests	649,066	553,337	603,485
Noncontrolling interests	(8,317)	(4,243)	(1,569)
Net income to common stockholders	$ 640,749	$ 549,094	$ 601,916
NET INCOME PER SHARE:			
Basic	$ 5.06	$ 4.40	$ 4.91
Diluted	$ 5.00	$ 4.26	$ 4.68

See accompanying notes to consolidated financial statements.

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

	Year Ended December 31,		
(In thousands)	**2018**	**2017**	**2016**
Net income before noncontrolling interests	$ 649,066	$ 553,337	$ 603,485
Other comprehensive (loss) gain:			
Change in unrealized translation adjustments	(112,099)	64,706	(124,193)
Change in unrealized investment (losses) gains, net of taxes	(252,327)	(51,752)	246,518
Other comprehensive (loss) gain	(364,426)	12,954	122,325
Comprehensive income	284,640	566,291	725,810
Comprehensive income to the noncontrolling interest	(8,271)	(4,262)	(1,510)
Comprehensive income to common stockholders	$ 276,369	$ 562,029	$ 724,300

See accompanying notes to consolidated financial statements.

W. R. BERKLEY CORPORATION AND SUBSIDIARIES

CONSOLIDATED BALANCE SHEETS

(In thousands, except share data)	December 31, 2018	December 31, 2017
Assets		
Investments:		
Fixed maturity securities	$ 13,606,812	$ 13,551,250
Investment funds	1,332,818	1,155,677
Real estate	1,957,092	1,469,601
Arbitrage trading account	452,548	617,649
Equity securities	279,006	576,647
Loans receivable	94,813	79,684
Total investments	17,723,089	17,450,508
Cash and cash equivalents	817,602	950,471
Premiums and fees receivable	1,807,762	1,773,844
Due from reinsurers	1,932,291	1,783,200
Deferred policy acquisition costs	497,629	507,549
Prepaid reinsurance premiums	498,880	472,009
Trading account receivable from brokers and clearing organizations	347,228	189,280
Property, furniture and equipment	416,372	422,960
Goodwill	173,037	178,945
Accrued investment income	144,481	136,597
Current federal and foreign income taxes	703	—
Deferred federal and foreign income taxes	35,490	—
Other assets	501,413	434,554
Total assets	$ 24,895,977	$ 24,299,917
Liabilities and Equity		
Liabilities:		
Reserves for losses and loss expenses	$ 11,966,448	$ 11,670,408
Unearned premiums	3,359,991	3,290,180
Due to reinsurers	256,917	246,460
Trading account securities sold but not yet purchased	38,120	64,358
Current federal and foreign income taxes	—	11,327
Deferred federal and foreign income taxes	—	86,764
Other liabilities	1,005,184	981,987
Senior notes and other debt	1,882,028	1,769,052
Subordinated debentures	907,491	728,218
Total liabilities	19,416,179	18,848,754
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 500,000,000 shares, issued and outstanding, net of treasury shares, 121,995,760 and 121,514,852 shares, respectively	47,024	47,024
Additional paid-in capital	1,063,144	1,048,283
Retained earnings	7,558,619	6,956,882
Accumulated other comprehensive (loss) income	(510,470)	68,541
Treasury stock, at cost, 113,122,158 and 113,603,066 shares, respectively	(2,720,466)	(2,709,386)
Total common stockholders' equity	5,437,851	5,411,344
Noncontrolling interests	41,947	39,819
Total equity	5,479,798	5,451,163
Total liabilities and equity	$ 24,895,977	$ 24,299,917

See accompanying notes to consolidated financial statements.

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

(In thousands)	Year Ended December 31, 2018	2017	2016
COMMON STOCK:			
Beginning and end of period	$ 47,024	$ 47,024	$ 47,024
ADDITIONAL PAID IN CAPITAL:			
Beginning of period	$ 1,048,283	$ 1,037,446	$ 1,005,455
Restricted stock units issued	(19,547)	(27,959)	(3,594)
Restricted stock units expensed	34,408	38,796	35,585
End of period	$ 1,063,144	$ 1,048,283	$ 1,037,446
RETAINED EARNINGS:			
Beginning of period	$ 6,956,882	$ 6,595,987	$ 6,178,070
Cumulative effect adjustment resulting from changes in accounting principles	215,939	—	—
Net income to common stockholders	640,749	549,094	601,916
Dividends	(254,951)	(188,199)	(183,999)
End of period	$ 7,558,619	$ 6,956,882	$ 6,595,987
ACCUMULATED OTHER COMPREHENSIVE (LOSS) INCOME:			
Unrealized investment (losses) gains:			
Beginning of period	$ 375,421	$ 427,154	$ 180,695
Cumulative effect adjustment resulting from changes in accounting principles	(214,539)	—	—
Unrealized (losses) gains on securities not other-than-temporarily impaired	(252,241)	(52,628)	246,872
Unrealized (losses) gains on other-than-temporarily impaired securities	(132)	895	(413)
End of period	(91,491)	375,421	427,154
Currency translation adjustments:			
Beginning of period	(306,880)	(371,586)	(247,393)
Net change in period	(112,099)	64,706	(124,193)
End of period	(418,979)	(306,880)	(371,586)
Total accumulated other comprehensive (loss) income	$ (510,470)	$ 68,541	$ 55,568
TREASURY STOCK:			
Beginning of period	$ (2,709,386)	$ (2,688,817)	$ (2,563,605)
Stock exercised/vested	12,981	26,511	6,495
Stock issued	689	727	685
Stock repurchased	(24,750)	(47,807)	(132,392)
End of period	$ (2,720,466)	$ (2,709,386)	$ (2,688,817)
NONCONTROLLING INTERESTS:			
Beginning of period	$ 39,819	$ 33,926	$ 32,962
(Distributions) contributions	(6,143)	1,631	(546)
Net income	8,317	4,243	1,569
Other comprehensive (loss) income, net of tax	(46)	19	(59)
End of period	$ 41,947	$ 39,819	$ 33,926

See accompanying notes to consolidated financial statements.

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

(In thousands)	Year Ended December 31, 2018	2017	2016
CASH FROM OPERATING ACTIVITIES:			
Net income to common stockholders	$ 640,749	$ 549,094	$ 601,916
Adjustments to reconcile net income to net cash from operating activities:			
Net realized and unrealized gains on investments	(154,488)	(335,858)	(267,005)
Depreciation and amortization	131,108	112,956	86,051
Noncontrolling interests	8,317	4,243	1,569
Investment funds	(109,349)	(69,333)	(99,301)
Stock incentive plans	36,591	40,490	37,174
Change in:			
Arbitrage trading account	(19,093)	(4,896)	(10,633)
Premiums and fees receivable	(43,813)	(67,752)	(60,403)
Reinsurance accounts	(165,287)	(66,542)	(235,455)
Deferred policy acquisition costs	7,788	30,343	(25,912)
Current income taxes	(11,950)	25,859	42,632
Deferred income taxes	(74,761)	(16,893)	9,012
Reserves for losses and loss expenses	339,015	438,530	572,196
Unearned premiums	84,142	4,160	149,683
Other	(48,770)	66,482	46,852
Net cash from operating activities	620,199	710,883	848,376
CASH FLOWS USED IN INVESTING ACTIVITIES:			
Proceeds from sale of fixed maturity securities	3,525,149	4,035,162	2,440,310
Proceeds from sale of equity securities	497,989	195,270	143,042
(Contributions) distributions from investment funds	(79,635)	247,404	142,601
Proceeds from maturities and prepayments of fixed maturity securities	2,676,455	3,556,744	2,189,365
Purchase of fixed maturity securities	(6,677,753)	(7,940,957)	(5,541,202)
Purchase of equity securities	(85,610)	(27,522)	(202,736)
Real estate purchased	(514,064)	(236,039)	(299,123)
Change in loans receivable	(13,204)	27,135	166,327
Net additions to property, furniture and equipment	(49,860)	(115,719)	(50,829)
Change in balances due from security brokers	4,262	(4,372)	20,992
Cash received in connection with business disposition	8,664	—	250,216
Payment for business purchased, net of cash acquired	(6,637)	(70,570)	(53,451)
Net cash used in investing activities	(714,244)	(333,464)	(794,488)
CASH FLOWS USED IN FINANCING ACTIVITIES:			
Net proceeds from issuance of debt	294,562	6,983	388,769
Repayment of senior notes and other debt	(4,524)	(20)	(75,487)
Cash dividends to common stockholders	(254,951)	(188,199)	(183,999)
Purchase of common treasury shares	(24,750)	(47,807)	(132,392)
Other, net	(17,740)	(6,043)	(3,823)
Net cash used in financing activities	(7,403)	(235,086)	(6,932)
Net impact on cash due to change in foreign exchange rates	(31,421)	12,853	(15,302)
Net (decrease) increase in cash and cash equivalents	(132,869)	155,186	31,654
Cash and cash equivalents at beginning of year	950,471	795,285	763,631
Cash and cash equivalents at end of year	$ 817,602	$ 950,471	$ 795,285

See accompanying notes to consolidated financial statements.

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

For the years ended December 31, 2018, 2017 and 2016

(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 2017 and 2016 financial statements to conform to the presentation of the 2018 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, other-than-temporary impairments, loss and loss expense reserves 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.

Audit premiums are recognized when they are reliably determinable. The change in accruals for earned but unbilled audit premiums (decreased) increased net premiums written and premiums earned by $(4) million, $8 million and $8 million in 2018, 2017 and 2016, 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. (See *(Q) Recent accounting pronouncements*.)

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 Company monitors the performance of its loans receivable and establishes an allowance for loan losses for loans where the Company determines it is probable that the contractual terms will not be met, with a corresponding charge to earnings. For loans that are evaluated individually and deemed to be impaired, the Company establishes a specific allowance based on a discounted cash flow analysis and comparable cost and sales methodologies, if appropriate. Individual loans that are not considered impaired and smaller-balance homogeneous loans are evaluated collectively and a general allowance is established if it is considered probable that a loss has been incurred.

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.

The cost of securities is adjusted where appropriate to include a provision for a decline in value which is considered to be other than temporary. An other-than-temporary decline is considered to occur in investments where there has been a sustained reduction in fair value and where the Company does not expect to recover the cost basis of the investment prior to the time of sale or maturity.

For fixed maturity securities that the Company intends to sell or, more likely than not, would be required to sell, a decline in value below amortized cost is considered to be an other-than-temporary impairment (“OTTI”). The amount of OTTI is equal to the difference between amortized cost and fair value at the balance sheet date. For fixed maturity securities that the Company does not intend to sell or believes that it is more likely than not it would not be required to sell, a decline in value below amortized cost is considered to be an OTTI if the Company does not expect to recover the entire amortized cost basis of a security (i.e., the present value of cash flows expected to be collected is less than the amortized cost basis of the security). The portion of the decline in value considered to be a credit loss (i.e., the difference between the present value of cash flows expected to be collected and the amortized cost basis of the security) is recognized in earnings. The portion of the decline in value not considered to be a credit loss (i.e., the difference in the present value of cash flows expected to be collected and the fair value of the security) is recognized in other comprehensive income.

Impairment assessments for structured securities, including mortgage-backed securities and asset-backed securities, collateralized debt obligations and corporate debt, are generally evaluated based on the performance of the underlying collateral under various economic and default scenarios that may 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. If an OTTI determination is made, a discounted cash flow analysis is used to ascertain the amount of the credit impairment.

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 4,926,521 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 reserves for estimated uncollectible reinsurance.

(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 $45 million and $47 million at December 31, 2018 and 2017, 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 $54 million, $50 million and $47 million for 2018, 2017 and 2016, 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, 2018 indicated that there were no material impairment losses related to goodwill and other intangible assets. Intangible assets of $104 million and $107 million are included in other assets as of December 31, 2018 and 2017, 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 $155 million, $145 million and $137 million in 2018, 2017 and 2016, respectively. Income taxes paid were $186 million, $207 million and $232 million in 2018, 2017 and 2016, 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:

In May 2014, the Financial Accounting Standards Board ("FASB") issued ASU 2014-09, Revenue from Customers. ASU 2014-09 clarifies the principles for recognizing revenue. While insurance contracts are not within the scope of this updated guidance, the Company’s insurance service fee revenue and non-insurance business revenue are subject to this updated guidance. The updated guidance requires an entity to recognize revenue as performance obligations are met, in order to reflect the transfer of promised goods or services to customers in an amount that reflects the consideration the entity is entitled to receive for those goods or services. The updated guidance, as amended by ASU 2015-14, was effective for public business entities for annual and interim reporting periods beginning after December 15, 2017. The Company adopted this guidance on January 1, 2018 on a prospective basis. The impact of applying this guidance prospectively was a cumulative effect adjustment that increased retained earnings, a component of stockholders' equity, by $1 million after-tax.

In January 2016, the FASB issued ASU 2016-01, Financial Instruments. ASU 2016-01 amends the accounting guidance for financial instruments to require all equity investments with readily determinable fair values to be measured at fair value with changes in the fair value recognized in net income (other than those accounted for under equity method of accounting or those that result in consolidation of the investee). The updated guidance was effective for public business entities for annual reporting periods beginning after December 15, 2017 and interim periods within those years. The Company adopted this updated guidance on January 1, 2018 on a prospective basis. The impact of applying this guidance prospectively was a cumulative effect adjustment that increased retained earnings and decreased accumulated other comprehensive income ("AOCI") by offsetting amounts of $291 million, resulting in no net impact to total stockholders' equity. Following the adoption, the Company reports changes in fair value related to equity securities within net realized and unrealized gains on investments.

In February 2018, the FASB issued ASU 2018-02, Reporting Comprehensive Income, which amends previous guidance to allow a reclassification to retained earnings for stranded tax effects resulting from the Tax Cuts and Jobs Act of 2017 (the “Tax Act”). The amount of the reclassification includes the effect of the change in the U.S. federal corporate income tax rate on the gross deferred tax amounts and related valuation allowances, if any, at the date of the enactment of the Tax Act related to items in AOCI. The updated guidance was effective for reporting periods beginning after December 15, 2018, and was eligible for early adoption. The Company adopted this updated guidance on January 1, 2018. The impact of applying this guidance was a cumulative effect adjustment that decreased retained earnings and increased AOCI by offsetting amounts of $76 million, resulting in no net impact to total stockholders' equity.

All other accounting and reporting standards that became effective in 2018 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:

In February 2016, the FASB issued ASU 2016-02, Leases, which amends the accounting and disclosure guidance for leases. This guidance retains the two classifications of a lease, as either an operating or finance lease, both of which will require lessees to recognize a right-of-use asset and a lease liability for leases with terms of more than 12 months. The right-of-use asset and the lease liability will be determined based upon the present value of cash flows. Finance leases will reflect the financial arrangement by recognizing interest expense on the lease liability separately from the amortization expense of the right-of-use asset. Operating leases will recognize lease expense (with no separate recognition of interest expense) on a straight-line basis over the term of the lease. The accounting by lessors is not significantly changed by the updated guidance. The updated guidance is effective for reporting periods beginning after December 15, 2018, and can be adopted prospectively or requires that the earliest comparative period presented include the measurement and recognition of existing leases with an adjustment to equity as if the updated guidance had always been applied. The Company will adopt the new guidance prospectively as of January 1, 2019. The Company does not expect the adoption of this guidance will have a material impact on its results of operations, financial position and liquidity. The adoption of this guidance will result in the recognition of an offsetting right-of-use asset and lease liability which will be less than 1% of total assets and approximately 1% of total liabilities.

In June 2016, the FASB issued ASU 2016-13, Financial Instruments - Credit Losses, which amends the accounting guidance for credit losses on financial instruments. The updated guidance amends the current other-than-temporary impairment model for available-for-sale debt securities by requiring the recognition of impairments relating to credit losses through an allowance account and limits the amount of credit loss to the difference between a security’s amortized cost basis and its fair value. This guidance also applies a new current expected credit loss model for determining credit-related impairments for financial instruments measured at amortized cost. The updated guidance is effective for reporting periods beginning after December 15, 2019. The Company will not be able to determine the impact the adoption of this guidance will have on its results of operations, financial position or liquidity until the year the guidance becomes effective.

All other 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 Statement of Comprehensive (Loss) Income

The following tables present the components of the changes in accumulated other comprehensive (loss) income ("AOCI") as of and for the years ended December 31, 2018 and 2017:

(In thousands)							
December 31, 2018		Unrealized investment (losses) gains			Currency translation adjustments		Accumulated other comprehensive (loss) income
Changes in AOCI							
Beginning of period	$	375,421		$	(306,880)	$	68,541
Cumulative effect adjustment resulting from changes in accounting principles		(214,539)			—		(214,539)
Restated beginning of period		160,882			(306,880)		(145,998)
Other comprehensive loss before reclassifications		(246,535)			(112,099)		(358,634)
Amounts reclassified from AOCI		(5,792)			—		(5,792)
Other comprehensive loss		(252,327)			(112,099)		(364,426)
Unrealized investment loss related to non-controlling interest		(46)			—		(46)
Ending balance	$	(91,491)		$	(418,979)	$	(510,470)
Amounts reclassified from AOCI							
Pre-tax	$	(7,332)	(1)	$	—	$	(7,332)
Tax effect		1,540	(2)		—		1,540
After-tax amounts reclassified	$	(5,792)		$	—	$	(5,792)
Other comprehensive loss							
Pre-tax	$	(302,737)		$	(112,099)	$	(414,836)
Tax effect		50,410			—		50,410
Other comprehensive loss	$	(252,327)		$	(112,099)	$	(364,426)

(In thousands)							
December 31, 2017		Unrealized investment gains (losses)			Currency translation adjustments		Accumulated other comprehensive income (loss)
Changes in AOCI							
Beginning of period	$	427,154		$	(371,586)	$	55,568
Other comprehensive income before reclassifications		63,567			64,706		128,273
Amounts reclassified from AOCI		(115,319)			—		(115,319)
Other comprehensive (loss) income		(51,752)			64,706		12,954
Unrealized investment gain related to non-controlling interest		19			—		19
Ending balance	$	375,421		$	(306,880)	$	68,541
Amounts reclassified from AOCI							
Pre-tax	$	(177,414)	(1)	$	—	$	(177,414)
Tax effect		62,095	(2)		—		62,095
After-tax amounts reclassified	$	(115,319)		$	—	$	(115,319)
Other comprehensive income (loss)							
Pre-tax	$	(69,425)		$	64,706	$	(4,719)
Tax effect		17,673			—		17,673
Other comprehensive income (loss)	$	(51,752)		$	64,706	$	12,954

(1) Net realized and unrealized gains on investments 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, 2018 and 2017, investments in fixed maturity securities were as follows:

(In thousands)	Amortized Cost	Gross Unrealized Gains	Gross Unrealized Losses	Fair Value	Carrying Value
December 31, 2018					
Held to maturity:					
State and municipal	$ 67,891	$ 11,549	$ —	$ 79,440	$ 67,891
Residential mortgage-backed	10,744	1,259	—	12,003	10,744
Total held to maturity	78,635	12,808	—	91,443	78,635
Available for sale:					
U.S. government and government agency	697,931	9,219	(4,910)	702,240	702,240
State and municipal:					
Special revenue	2,396,089	30,507	(19,790)	2,406,806	2,406,806
State general obligation	335,626	11,951	(1,103)	346,474	346,474
Pre-refunded	408,141	16,568	(30)	424,679	424,679
Corporate backed	272,440	4,319	(2,350)	274,409	274,409
Local general obligation	403,219	18,350	(1,339)	420,230	420,230
Total state and municipal	3,815,515	81,695	(24,612)	3,872,598	3,872,598
Mortgage-backed securities:					
Residential (1)	1,264,376	7,729	(20,225)	1,251,880	1,251,880
Commercial	345,070	1,304	(3,708)	342,666	342,666
Total mortgage-backed securities	1,609,446	9,033	(23,933)	1,594,546	1,594,546
Asset-backed securities	2,462,303	10,131	(33,687)	2,438,747	2,438,747
Corporate:					
Industrial	2,295,778	15,355	(53,312)	2,257,821	2,257,821
Financial	1,502,427	7,178	(45,683)	1,463,922	1,463,922
Utilities	330,326	2,997	(4,148)	329,175	329,175
Other	60,238	322	(167)	60,393	60,393
Total corporate	4,188,769	25,852	(103,310)	4,111,311	4,111,311
Foreign government	822,093	11,753	(25,111)	808,735	808,735
Total available for sale	13,596,057	147,683	(215,563)	13,528,177	13,528,177
Total investments in fixed maturity securities	$ 13,674,692	$ 160,491	$ (215,563)	$ 13,619,620	$ 13,606,812

(In thousands)	Amortized Cost	Gross Unrealized Gains	Gross Unrealized Losses	Fair Value	Carrying Value
December 31, 2017					
Held to maturity:					
State and municipal	$ 65,882	$ 14,499	$ —	$ 80,381	$ 65,882
Residential mortgage-backed	13,450	1,227	—	14,677	13,450
Total held to maturity	79,332	15,726	—	95,058	79,332
Available for sale:					
U.S. government and government agency	372,748	8,824	(3,832)	377,740	377,740
State and municipal:					
Special revenue	2,663,245	53,512	(10,027)	2,706,730	2,706,730
State general obligation	439,358	16,087	(711)	454,734	454,734
Pre-refunded	436,241	22,701	(9)	458,933	458,933
Corporate backed	375,268	10,059	(860)	384,467	384,467
Local general obligation	417,955	23,242	(967)	440,230	440,230
Total state and municipal	4,332,067	125,601	(12,574)	4,445,094	4,445,094
Mortgage-backed securities:					
Residential (1)	1,043,629	9,304	(13,547)	1,039,386	1,039,386
Commercial	261,652	1,521	(2,628)	260,545	260,545
Total mortgage-backed securities	1,305,281	10,825	(16,175)	1,299,931	1,299,931
Asset-backed securities	2,111,132	11,024	(10,612)	2,111,544	2,111,544
Corporate:					
Industrial	2,574,400	52,210	(7,718)	2,618,892	2,618,892
Financial	1,402,161	37,744	(5,138)	1,434,767	1,434,767
Utilities	284,886	11,316	(1,248)	294,954	294,954
Other	40,560	5	(66)	40,499	40,499
Total corporate	4,302,007	101,275	(14,170)	4,389,112	4,389,112
Foreign government	819,345	32,018	(2,866)	848,497	848,497
Total available for sale	13,242,580	289,567	(60,229)	13,471,918	13,471,918
Total investments in fixed maturity securities	$ 13,321,912	$ 305,293	$ (60,229)	$ 13,566,976	$ 13,551,250

(1) Gross unrealized (losses) gains for mortgage-backed securities include ($55,090) and $76,467 as of December 31, 2018 and 2017, respectively, related to the non-credit portion of OTTI recognized in other comprehensive income.

The amortized cost and fair value of fixed maturity securities at December 31, 2018, 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	Fair Value
Due in one year or less	$ 935,354	$ 935,894
Due after one year through five years	4,666,934	4,669,502
Due after five years through ten years	3,037,450	3,045,868
Due after ten years	3,414,764	3,361,807
Mortgage-backed securities	1,620,190	1,606,549
Total	$ 13,674,692	$ 13,619,620

At December 31, 2018 and 2017, 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, 2018, investments with a carrying value of $1,700 million were on deposit in custodial or trust accounts, of which $1,332 million was on deposit with insurance regulators, $328 million was on deposit in support of the Company's underwriting activities at Lloyd's, $37 million was on deposit as security for reinsurance clients and $3 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, 2018 and 2017, investments in equity securities were as follows:

(In thousands)	Cost	Gross Unrealized (1) Gains	Gross Unrealized (1) Losses	Fair Value	Carrying Value
December 31, 2018					
Common stocks	$ 113,576	$ 4,335	$ (19,719)	$ 98,192	$ 98,192
Preferred stocks	115,201	72,364	(6,751)	180,814	180,814
Total	$ 228,777	$ 76,699	$ (26,470)	$ 279,006	$ 279,006
December 31, 2017					
Common stocks	$ 81,855	$ 272,309	$ (1,960)	$ 352,204	$ 352,204
Preferred stocks	124,150	102,890	(2,597)	224,443	224,443
Total	$ 206,005	$ 375,199	$ (4,557)	$ 576,647	$ 576,647

(1) Effective January 1, 2018, the Company adopted new accounting guidance that requires all equity investments with readily determinable fair values (subject to certain exceptions) to be measured at fair value, with changes in the fair value recognized through net income within net realized and unrealized gains on investments. Refer to Note 1 for additional information.

(5) Arbitrage Trading Account

At December 31, 2018 and 2017, the fair value and carrying value of the arbitrage trading account were $453 million and $618 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, call options and swap contracts in order to mitigate the impact of potential changes in market conditions on the merger arbitrage trading account. These options and contracts are reported at fair value. As of December 31, 2018, the fair value of long option contracts outstanding was $37 thousand (notional amount of $18.4 million) and the fair value of short option contracts outstanding was $58 thousand (notional amount of $11.6 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)	2018	2017	2016
Investment income earned on:			
Fixed maturity securities, including cash and cash equivalents and loans receivable	$ 519,269	$ 473,101	$ 444,247
Investment funds	109,349	68,169	99,301
Arbitrage trading account	28,157	19,145	18,693
Real estate	18,591	19,975	7,054
Equity securities	3,230	2,350	4,028
Gross investment income	678,596	582,740	573,323
Investment expense	(4,361)	(6,952)	(9,160)
Net investment income	$ 674,235	$ 575,788	$ 564,163

(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 $270.2 million as of December 31, 2018.

Investment funds consist of the following:

	Carrying Value as of December 31,		Income (Losses)		
(In thousands)	2018	2017	2018	2017	2016
Real estate	$ 642,137	$ 606,995	$ 61,453	$ 45,068	$ 50,415
Energy	75,213	82,882	645	(15,764)	19,747
Other funds	615,468	465,800	47,251	38,865	29,139
Total	$ 1,332,818	$ 1,155,677	$ 109,349	$ 68,169	$ 99,301

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.

(8) Real Estate

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

	As of December 31,	
(In thousands)	2018	2017
Properties in operation	$ 1,279,584	$ 451,691
Properties under development	677,508	1,017,910
Total	$ 1,957,092	$ 1,469,601

In 2018, properties in operation included a long-term ground lease in Washington, D.C., a hotel in Memphis, Tennessee, two office complexes in New York City, office buildings in West Palm Beach and Palm Beach, Florida, and an office building in London, U.K. The office building in London, previously under development, transferred to properties in operation in 2018. Properties in operation are net of accumulated depreciation and amortization of $44,340,000 and $25,646,000 as of December 31, 2018 and 2017, respectively. Related depreciation expense was $20,644,000 and $9,212,000 for the years ended December 31, 2018 and 2017, respectively. Future minimum rental income expected on operating leases relating to properties in operation is $61,458,048 in 2019, $62,141,471 in 2020, $61,325,176 in 2021, $61,077,419 in 2022, $54,362,011 in 2023 and $584,592,072 thereafter.

The Company borrowed $101,750,000 through a non-recourse loan secured by the West Palm Beach office building in 2018. The loan matures in November 2028 and carries a fixed interest rate of 4.21%. The carrying value does not reflect the outstanding financing, but rather is reflected in subsidiary debt referenced in Note 15, Indebtedness.

A mixed-use project in Washington, D.C. has been under development in 2017 and 2018.

(9) Loans Receivable

Loans receivable are as follows:

(In thousands)	As of December 31, 2018	2017
Amortized cost (net of valuation allowance):		
Real estate loans	$ 62,289	$ 66,057
Commercial loans	32,524	13,627
Total	$ 94,813	$ 79,684
Fair value:		
Real estate loans	$ 63,047	$ 66,917
Commercial loans	34,026	15,130
Total	$ 97,073	$ 82,047
Valuation allowance:		
Specific	$ 1,200	$ 1,200
General	2,183	2,183
Total	$ 3,383	$ 3,383

	For the Year Ended December 31, 2018	2017
Increase (decrease) in valuation allowance	$ —	$ (14)

Loans receivable in non-accrual status were $1.2 million and $4.3 million as of December 31, 2018 and 2017, respectively.

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. Loans receivable with a potential for default are further assessed using discounted cash flow analysis and comparable cost and sales methodologies, if appropriate.

The real estate loans are secured by commercial real estate primarily located in New York. These loans generally earn interest at floating LIBOR-based interest rates and have maturities (inclusive of extension options) through August 2025. The commercial loans are with small business owners who have secured the related financing with the assets of the business. Commercial loans generally earn interest on a fixed basis and have varying maturities not exceeding 10 years.

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. Based on these considerations, none of the real estate loans were considered to be impaired at December 31, 2018, and accordingly, the Company determined that a specific valuation allowance was not required.

(10) Net Realized and Unrealized Gains (Losses) on Investments

Net realized and unrealized gains (losses) on investments are as follows:

(In thousands)	2018	2017	2016
Net realized and unrealized gains (losses) on investments in earnings			
Fixed maturity securities:			
Gains	$ 26,752	$ 28,217	$ 72,215
Losses	(13,733)	(5,342)	(6,434)
Equity securities (1):			
Net realized gains on investment sales	435,150	154,539	14,201
Change in unrealized gains	(320,413)	—	—
Investment funds (2)	(212)	125,423	58,861
Real estate	27,816	12,880	7,757
Loans receivable	2,838	—	—
Other (3)	1,977	20,141	138,519
Net realized and unrealized gains on investments in earnings before OTTI	160,175	335,858	285,119
Other-than-temporary impairments (4)	(5,687)	—	(18,114)
Net realized and unrealized gains on investments in earnings	154,488	335,858	267,005
Income tax expense	(32,442)	(117,550)	(93,452)
After-tax net realized and unrealized gains on investments in earnings	$ 122,046	$ 218,308	$ 173,553
Change in unrealized investment (losses) gains of available for sales securities:			
Fixed maturity securities	$ (297,084)	$ (2,192)	$ (107,094)
Previously impaired fixed maturity securities	(132)	895	451
Equity securities available for sale (5)	—	(77,971)	465,727
Investment funds	(5,521)	9,843	12,631
Total change in unrealized investment (losses) gains	(302,737)	(69,425)	371,715
Income tax benefit (expense)	50,410	17,673	(125,315)
Noncontrolling interests	(46)	19	59
After-tax change in unrealized investment (losses) gains of available for sale securities	$ (252,373)	$ (51,733)	$ 246,459

(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) Investment funds includes a gain of $124 million from the sale of an investment in an office building located in Washington, D.C. for the year ended December 31, 2017.

(3) Other includes a gain of $135 million from the sale of Aero Precision Industries and certain related aviation services business for the year ended December 31, 2016.

(4) For the year ended December 31, 2018, OTTI related to fixed maturity securities was $6 million. There were no OTTI for the year ended December 31, 2017. For the year ended December 31, 2016, OTTI related to equity securities was $18 million.

(5) Effective January 1, 2018, the Company adopted new accounting guidance that requires all equity investments with readily determinable fair values (subject to certain exceptions) to be measured at fair value with changes in the fair value recognized in net income. The Company recorded an adjustment of $291 million to opening AOCI net of tax as a result of this guidance. Refer to Note 1 for further information.

(11) Securities in an Unrealized Loss Position

The following tables summarize all fixed maturity securities in an unrealized loss position at December 31, 2018 and 2017 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, 2018						
U.S. government and government agency	$ 195,359	$ 933	$ 130,815	$ 3,977	$ 326,174	$ 4,910
State and municipal	701,700	6,874	744,905	17,738	1,446,605	24,612
Mortgage-backed securities	334,063	2,911	712,595	21,022	1,046,658	23,933
Asset-backed securities	1,687,665	28,965	342,855	4,722	2,030,520	33,687
Corporate	1,730,513	54,181	954,763	49,129	2,685,276	103,310
Foreign government	246,273	24,197	80,004	914	326,277	25,111
Fixed maturity securities	$ 4,895,573	$ 118,061	$ 2,965,937	$ 97,502	$ 7,861,510	$ 215,563
December 31, 2017						
U.S. government and government agency	$ 92,167	$ 1,491	$ 72,055	$ 2,341	$ 164,222	$ 3,832
State and municipal	735,972	5,944	345,755	6,630	1,081,727	12,574
Mortgage-backed securities	480,435	5,110	373,956	11,065	854,391	16,175
Asset-backed securities	1,127,309	8,298	167,412	2,314	1,294,721	10,612
Corporate	1,103,747	8,224	170,858	5,946	1,274,605	14,170
Foreign government	244,139	2,615	25,824	251	269,963	2,866
Fixed maturity securities	$ 3,783,769	$ 31,682	$ 1,155,860	$ 28,547	$ 4,939,629	$ 60,229

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, 2018 is presented in the table below:

($ in thousands)	**Number of Securities**	**Aggregate Fair Value**	**Gross Unrealized Loss**
Foreign government	13	$ 140,854	$ 21,411
Corporate	13	120,078	13,111
Asset-backed securities	5	14,662	2,593
Mortgage-backed securities	5	8,741	69
Total	36	$ 284,335	$ 37,184

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

For the year ended December 31, 2018, OTTI recognized in earnings for fixed maturity securities was $6 million. For the year ended December 31, 2017, there were no OTTI on fixed maturity securities.

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 on 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 and does not consider any of these securities to be OTTI.

(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, 2018 and 2017 by level:

(In thousands)	Total	Level 1	Level 2	Level 3
December 31, 2018				
Assets:				
Fixed maturity securities available for sale:				
U.S. government and government agency	$ 702,240	$ —	$ 702,240	$ —
State and municipal	3,872,598	—	3,872,598	—
Mortgage-backed securities	1,594,546	—	1,594,546	—
Asset-backed securities	2,438,747	—	2,438,648	99
Corporate	4,111,311	—	4,111,311	—
Foreign government	808,735	—	808,735	—
Total fixed maturity securities available for sale	13,528,177	—	13,528,078	99
Equity securities:				
Common stocks	98,192	89,596	—	8,596
Preferred stocks	180,814	—	176,869	3,945
Total equity securities	279,006	89,596	176,869	12,541
Arbitrage trading account	452,548	353,335	81,905	17,308
Total	$ 14,259,731	$ 442,931	$ 13,786,852	$ 29,948
Liabilities:				
Trading account securities sold but not yet purchased	$ 38,120	$ 37,327	$ —	$ 793
December 31, 2017				
Assets:				
Fixed maturity securities available for sale:				
U.S. government and government agency	$ 377,740	$ —	$ 377,740	$ —
State and municipal	4,445,094	—	4,445,094	—
Mortgage-backed securities	1,299,931	—	1,299,931	—
Asset-backed securities	2,111,544	—	2,111,372	172
Corporate	4,389,112	—	4,389,112	—
Foreign government	848,497	—	848,497	—
Total fixed maturity securities available for sale	13,471,918	—	13,471,746	172
Equity securities:				
Common stocks	352,204	342,834	—	9,370
Preferred stocks	224,443	—	213,600	10,843
Total equity securities	576,647	342,834	213,600	20,213
Arbitrage trading account	617,649	471,420	146,229	—
Total	$ 14,666,214	$ 814,254	$ 13,831,575	$ 20,385
Liabilities:				
Trading account securities sold but not yet purchased	$ 64,358	$ 64,358	$ —	$ —

The following tables summarize changes in Level 3 assets and liabilities for the years ended December 31, 2018 and 2017:

		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, 2018									
Assets:									
Fixed maturity securities available for sale:									
Asset-backed securities	$ 172	$ (2)	$ 46	$ —	$ —	$ (117)	$ —	$ —	$ 99
Total	172	(2)	46	—	—	(117)	—	—	99
Equity securities:									
Common stocks	9,370	(548)		—	—	(227)	—	1	8,596
Preferred stocks	10,843	100	—	—		(6,998)	—	—	3,945
Total	20,213	(448)	—	—	—	(7,225)	—	1	12,541
Arbitrage trading account	—	(6)	—	—	11,523	(11)	—	5,802	17,308
Total	$ 20,385	$ (456)	$ 46	$ —	$ 11,523	$ (7,353)	$ —	$ 5,803	$ 29,948
Year ended December 31, 2017									
Assets:									
Fixed maturity securities available for sale:									
Asset-backed securities	$ 183	$ 3	$ 34	$ —	$ —	$ (48)	$ —	$ —	$ 172
Total	183	3	34	—	—	(48)	—	—	172
Equity securities:									
Common stocks	8,754	—	616	—	—	—	—	—	9,370
Preferred stocks	3,662	8	—	—	7,173	—	—	—	10,843
Total	12,416	8	616	—	7,173	—	—	—	20,213
Arbitrage trading account	—	8	—	—	—	(8)	—	—	—
Total	$ 12,599	$ 19	$ 650	$ —	$ 7,173	$ (56)	$ —	$ —	$ 20,385

For the year ended December 31, 2018, one common stock in the arbitrage trading account was transferred into Level 3 and one common stock was transferred out of Level 3. In the case of the transfer into Level 3, a publicly traded price was no longer available and in the case of the transfer out, a publicly traded price became available. For the year ended December 31, 2017, there were no transfers in or out of Level 3.

(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 operating unit. 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. 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 operating unit.

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.

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 operating unit. 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 operating units 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, an operating unit 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 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, 2018, 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, 2009 to 2017 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, 2018 exchange rate for all periods. Beginning with accident year 2012, the Company's U.K. and European insurance business is included in the Insurance segment's tables for Other Liability, Professional Liability, Commercial Automobile and Short-Tail Lines. Prior to 2012, the actuarial analysis for its U.K. and European insurance business was performed on an underwriting year basis and accident year data is not available for those years.

Insurance

Other Liability
(In thousands)

	Loss and Loss Expenses Incurred, Net of Reinsurance										As of December 31, 2018	
	For the Year Ended December 31,											
	Unaudited											
Accident Year	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	IBNR	Cumulative Number of Reported Claims
2009	$ 689,634	$ 656,788	$ 624,991	$ 599,235	$ 589,659	$ 561,784	$ 557,661	$ 553,058	$ 546,746	$ 542,568	$ 18,690	23
2010	—	612,210	615,797	592,117	590,818	577,679	574,780	573,532	571,305	566,695	26,658	23
2011	—	—	665,035	673,730	660,023	659,026	653,864	649,055	645,123	634,264	30,381	24
2012	—	—	—	693,447	702,342	703,118	709,026	713,266	723,610	718,166	47,001	24
2013	—	—	—	—	751,544	792,464	784,906	784,342	805,288	811,592	78,784	26
2014	—	—	—	—	—	847,207	848,947	847,008	851,503	864,157	128,856	26
2015	—	—	—	—	—	—	951,041	986,792	961,289	964,415	217,570	26
2016	—	—	—	—	—	—	—	1,018,454	1,011,368	1,019,749	375,609	25
2017	—	—	—	—	—	—	—	—	1,067,376	1,100,243	567,982	23
2018	—	—	—	—	—	—	—	—	—	1,104,518	837,548	18
Total										$ 8,326,367		

	Cumulative Paid Claims and Claim Adjustment Expenses, Net of Reinsurance									
	For the Year Ended December 31,									
	Unaudited									
Accident Year	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
2009	$ 44,801	$ 122,850	$ 214,498	$ 311,979	$ 385,068	$ 429,128	$ 470,830	$ 486,893	$ 500,953	$ 510,474
2010	—	45,193	128,946	248,698	336,243	417,166	461,442	491,104	508,359	525,016
2011	—	—	48,825	142,713	266,780	379,845	470,849	524,314	556,110	575,194
2012	—	—	—	58,108	158,869	299,842	417,686	513,644	580,750	622,687
2013	—	—	—	—	63,868	189,936	332,871	473,933	589,564	650,428
2014	—	—	—	—	—	79,078	191,394	338,961	481,039	595,024
2015	—	—	—	—	—	—	82,829	210,940	382,498	538,502
2016	—	—	—	—	—	—	—	69,620	209,212	390,552
2017	—	—	—	—	—	—	—	—	80,174	256,448
2018	—	—	—	—	—	—	—	—	—	87,075
Total										$ 4,751,400
Reserves for loss and loss adjustment expenses before 2009, net of reinsurance										121,405
Reserves for loss and loss adjustment expenses, net of reinsurance										$ 3,696,372

Primary Workers' Compensation
(In thousands)

	Loss and Loss Expenses Incurred, Net of Reinsurance										As of December 31, 2018	
	For the Year Ended December 31,											
	Unaudited											
Accident Year	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	IBNR	Cumulative Number of Reported Claims
2009	$ 327,537	$ 332,303	$ 326,766	$ 386,870	$ 392,158	$ 394,303	$ 392,287	$ 395,288	$ 398,994	$ 401,431	$ 10,693	43
2010	—	358,734	361,808	409,237	418,315	426,622	429,952	429,762	427,698	424,374	13,958	45
2011	—	—	419,364	442,550	454,797	470,026	472,087	474,076	475,729	471,471	17,942	46
2012	—	—	—	499,752	499,882	503,956	503,863	509,167	512,707	508,169	26,626	48
2013	—	—	—	—	551,342	547,295	546,995	543,238	547,000	542,274	35,177	53
2014	—	—	—	—	—	639,436	637,307	627,767	617,242	615,435	57,455	57
2015	—	—	—	—	—	—	712,800	690,525	650,997	641,169	83,941	58
2016	—	—	—	—	—	—	—	702,716	696,339	684,700	117,425	57
2017	—	—	—	—	—	—	—	—	762,093	733,505	191,034	57
2018	—	—	—	—	—	—	—	—	—	778,964	359,337	53
Total										$ 5,801,492		

	Cumulative Paid Claims and Claim Adjustment Expenses, Net of Reinsurance									
	For the Year Ended December 31,									
	Unaudited									
Accident Year	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
2009	$ 93,647	$ 197,736	$ 257,972	$ 297,079	$ 317,796	$ 333,793	$ 344,771	$ 352,516	$ 360,289	$ 364,712
2010	—	107,742	214,034	279,226	317,986	344,631	362,078	374,013	382,665	388,405
2011	—	—	106,157	234,694	307,873	355,909	385,759	408,304	420,945	428,811
2012	—	—	—	114,998	253,781	339,560	387,368	419,588	437,196	451,991
2013	—	—	—	—	117,502	277,538	363,028	414,160	447,894	466,580
2014	—	—	—	—	—	148,405	319,743	412,611	471,235	503,915
2015	—	—	—	—	—	—	139,320	323,744	421,734	477,541
2016	—	—	—	—	—	—	—	142,998	338,835	446,072
2017	—	—	—	—	—	—	—	—	153,456	362,299
2018	—	—	—	—	—	—	—	—	—	171,006
Total										$ 4,061,332
Reserves for loss and loss adjustment expenses before 2009, net of reinsurance										170,897
Reserves for loss and loss adjustment expenses, net of reinsurance										$ 1,911,057

Excess Workers' Compensation
(In thousands)

	Loss and Loss Expenses Incurred, Net of Reinsurance										As of December 31, 2018	
	For the Year Ended December 31,											
	Unaudited											
Accident Year	**2009**	**2010**	**2011**	**2012**	**2013**	**2014**	**2015**	**2016**	**2017**	**2018**	**IBNR**	**Cumulative Number of Reported Claims**
2009	$ 168,762	$ 153,766	$ 153,912	$ 148,223	$ 148,189	$ 138,765	$ 142,768	$ 134,716	$ 129,249	$ 130,790	$ 21,734	1
2010	—	135,639	123,497	120,272	118,712	100,331	104,732	100,065	94,986	95,374	14,497	1
2011	—	—	88,650	93,993	98,051	87,064	85,299	83,850	78,246	74,109	17,280	1
2012	—	—	—	72,366	73,230	71,780	73,653	72,441	67,878	69,361	16,293	1
2013	—	—	—	—	63,995	48,493	46,025	42,419	38,551	35,120	16,473	1
2014	—	—	—	—	—	63,465	57,558	49,478	45,758	41,671	18,448	1
2015	—	—	—	—	—	—	69,977	57,897	50,099	45,115	25,425	—
2016	—	—	—	—	—	—	—	72,657	70,281	71,404	37,500	—
2017	—	—	—	—	—	—	—	—	76,701	80,508	42,652	1
2018	—	—	—	—	—	—	—	—	—	77,820	46,840	1
Total										$ 721,272		

	Cumulative Paid Claims and Claim Adjustment Expenses, Net of Reinsurance									
	For the Year Ended December 31,									
	Unaudited									
Accident Year	**2009**	**2010**	**2011**	**2012**	**2013**	**2014**	**2015**	**2016**	**2017**	**2018**
2009	$ 5,060	$ 8,402	$ 11,037	$ 14,138	$ 20,729	$ 25,272	$ 29,150	$ 33,573	$ 37,817	$ 41,243
2010	—	2,867	4,003	5,571	8,701	9,084	11,699	14,261	18,821	22,355
2011	—	—	2,593	4,848	6,395	12,104	15,684	18,638	20,164	21,463
2012	—	—	—	1,127	6,097	9,480	11,167	13,234	15,738	17,982
2013	—	—	—	—	647	630	2,158	3,008	3,396	4,418
2014	—	—	—	—	—	358	1,729	3,354	4,175	5,808
2015	—	—	—	—	—	—	2,069	2,481	3,272	4,099
2016	—	—	—	—	—	—	—	2,498	4,783	5,573
2017	—	—	—	—	—	—	—	—	6,282	12,810
2018	—	—	—	—	—	—	—	—	—	6,141
Total										$ 141,892
Reserves for loss and loss adjustment expenses before 2009, net of reinsurance										740,877
Reserves for loss and loss adjustment expenses, net of reinsurance										$ 1,320,257

Professional Liability
(In thousands)

Accident Year	Loss and Loss Expenses Incurred, Net of Reinsurance — For the Year Ended December 31, Unaudited 2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	As of December 31, 2018 IBNR	Cumulative Number of Reported Claims
2009	$ 134,784	$ 139,091	$ 145,515	$ 148,899	$ 147,994	$ 150,452	$ 150,783	$ 153,492	$ 152,711	$ 157,451	$ 1,087	3
2010	—	147,649	165,755	179,383	177,957	176,723	172,585	174,883	177,844	182,818	1,807	4
2011	—	—	179,875	165,233	186,918	190,096	177,128	173,545	176,865	175,963	3,185	4
2012	—	—	—	238,233	241,944	264,808	250,457	238,704	245,076	243,893	9,507	7
2013	—	—	—	—	269,280	247,320	242,792	248,974	270,449	279,092	15,395	7
2014	—	—	—	—	—	253,284	246,668	259,964	243,936	239,555	19,315	8
2015	—	—	—	—	—	—	259,569	258,251	274,950	276,406	47,934	9
2016	—	—	—	—	—	—	—	310,678	324,979	361,929	90,872	10
2017	—	—	—	—	—	—	—	—	333,803	333,194	178,091	9
2018	—	—	—	—	—	—	—	—	—	335,751	260,095	9
Total										$ 2,586,052		

Accident Year	Cumulative Paid Claims and Claim Adjustment Expenses, Net of Reinsurance — For the Year Ended December 31, Unaudited 2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
2009	$ 12,604	$ 52,583	$ 85,902	$ 117,683	$ 127,728	$ 138,876	$ 143,950	$ 144,713	$ 147,599	$ 151,499
2010	—	14,832	58,916	108,566	129,757	144,474	160,598	165,018	171,330	178,879
2011	—	—	18,779	62,442	103,097	134,608	150,840	159,014	167,286	168,874
2012	—	—	—	21,875	87,008	128,281	159,183	190,295	214,315	223,424
2013	—	—	—	—	24,232	64,030	119,552	177,343	206,655	248,520
2014	—	—	—	—	—	19,545	83,856	138,753	176,181	199,245
2015	—	—	—	—	—	—	20,478	85,561	139,952	187,767
2016	—	—	—	—	—	—	—	28,702	102,853	202,131
2017	—	—	—	—	—	—	—	—	36,733	96,814
2018	—	—	—	—	—	—	—	—	—	28,307
Total										$ 1,685,460
Reserves for loss and loss adjustment expenses before 2009, net of reinsurance										4,198
Reserves for loss and loss adjustment expenses, net of reinsurance										$ 904,790

Commercial Automobile
(In thousands)

	Loss and Loss Expenses Incurred, Net of Reinsurance										As of December 31, 2018	
	For the Year Ended December 31,											
	Unaudited											
Accident Year	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	IBNR	Cumulative Number of Reported Claims
2009	$ 362,302	$ 345,139	$ 340,967	$ 335,851	$ 337,915	$ 336,855	$ 334,652	$ 335,089	$ 334,977	$ 334,926	$ 398	39
2010	—	310,591	320,098	330,190	328,854	332,716	331,581	330,552	330,263	329,942	372	37
2011	—	—	312,224	320,898	328,269	331,694	341,362	341,162	342,052	343,524	1,232	37
2012	—	—	—	314,073	326,585	342,379	355,433	364,175	364,437	366,662	1,539	40
2013	—	—	—	—	326,789	348,513	368,318	376,569	366,976	366,565	3,013	42
2014	—	—	—	—	—	363,308	384,692	418,215	416,194	413,697	6,431	45
2015	—	—	—	—	—	—	389,101	417,403	423,601	431,857	18,247	50
2016	—	—	—	—	—	—	—	431,633	431,680	443,030	35,867	49
2017	—	—	—	—	—	—	—	—	430,352	428,601	70,289	44
2018	—	—	—	—	—	—	—	—	—	442,862	145,744	39
Total										$ 3,901,666		

	Cumulative Paid Claims and Claim Adjustment Expenses, Net of Reinsurance									
	For the Year Ended December 31,									
	Unaudited									
Accident Year	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
2009	$ 136,433	$ 209,553	$ 257,326	$ 291,925	$ 312,902	$ 328,843	$ 331,482	$ 333,143	$ 333,605	$ 333,677
2010	—	136,029	208,790	263,639	295,347	313,253	324,963	326,770	327,206	327,829
2011	—	—	135,350	211,756	262,659	296,332	321,786	333,949	338,283	340,319
2012	—	—	—	136,844	215,078	273,277	312,178	344,428	355,740	360,799
2013	—	—	—	—	142,480	218,005	266,694	322,141	343,274	353,159
2014	—	—	—	—	—	155,065	237,118	328,156	365,424	394,147
2015	—	—	—	—	—	—	159,679	265,396	325,369	370,450
2016	—	—	—	—	—	—	—	185,045	280,146	342,214
2017	—	—	—	—	—	—	—	—	180,627	267,469
2018	—	—	—	—	—	—	—	—	—	180,213
Total										$ 3,270,276
Reserves for loss and loss adjustment expenses before 2009, net of reinsurance										2,482
Reserves for loss and loss adjustment expenses, net of reinsurance										$ 633,872

Short-tail lines
(In thousands)

	Loss and Loss Expenses Incurred, Net of Reinsurance										As of December 31, 2018	
	For the Year Ended December 31,											
	Unaudited											
Accident Year	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	IBNR	Cumulative Number of Reported Claims
2009	$ 346,870	$ 335,921	$ 326,440	$ 318,111	$ 318,349	$ 314,290	$ 314,117	$ 314,010	$ 316,220	$ 317,098	$ 550	18
2010	—	385,541	370,291	358,373	355,916	346,226	346,719	346,885	346,463	346,172	833	19
2011	—	—	478,556	471,555	463,006	459,814	457,011	450,115	449,320	451,211	1,093	21
2012	—	—	—	526,312	535,500	535,885	531,729	507,646	506,705	508,565	3,083	25
2013	—	—	—	—	572,103	583,603	575,582	553,621	552,137	548,730	5,740	26
2014	—	—	—	—	—	701,335	709,832	664,303	663,282	664,350	6,562	30
2015	—	—	—	—	—	—	743,872	731,468	727,677	726,606	15,079	32
2016	—	—	—	—	—	—	—	771,416	774,514	761,891	20,857	34
2017	—	—	—	—	—	—	—	—	750,786	752,193	34,275	38
2018	—	—	—	—	—	—	—	—	—	759,340	161,107	36
Total										$ 5,836,156		

	Cumulative Paid Claims and Claim Adjustment Expenses, Net of Reinsurance									
	For the Year Ended December 31,									
	Unaudited									
Accident Year	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
2009	$ 212,521	$ 291,338	$ 304,634	$ 306,020	$ 309,916	$ 310,428	$ 311,079	$ 311,357	$ 311,655	$ 315,966
2010	—	245,036	325,156	337,686	346,768	340,210	342,918	344,102	345,085	345,106
2011	—	—	303,012	417,701	436,585	440,777	445,073	446,745	447,342	450,155
2012	—	—	—	281,456	453,157	503,364	513,733	498,506	499,446	503,738
2013	—	—	—	—	312,945	486,692	534,939	531,386	538,158	539,443
2014	—	—	—	—	—	371,194	596,829	613,621	633,020	648,373
2015	—	—	—	—	—	—	396,086	612,335	667,846	689,875
2016	—	—	—	—	—	—	—	416,144	669,029	710,618
2017	—	—	—	—	—	—	—	—	444,407	688,821
2018	—	—	—	—	—	—	—	—	—	415,206
Total										$ 5,307,301
Reserves for loss and loss adjustment expenses before 2009, net of reinsurance										2,362
Reserves for loss and loss adjustment expenses, net of reinsurance										$ 531,217

Reinsurance

Casualty
(In thousands)

	Loss and Loss Expenses Incurred, Net of Reinsurance										As of December 31, 2018
	For the Year Ended December 31,										
	Unaudited										
Accident Year	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	IBNR
2009	$ 334,804	$ 328,321	$ 327,236	$ 309,228	$ 301,495	$ 293,275	$ 282,411	$ 288,115	$ 281,592	$ 279,372	$ 17,086
2010	—	290,285	298,300	288,141	276,234	265,771	254,550	251,308	249,062	248,145	18,428
2011	—	—	290,635	309,621	304,409	299,628	306,911	303,867	295,576	292,162	21,264
2012	—	—	—	331,603	335,661	331,006	324,014	332,932	335,636	333,889	25,536
2013	—	—	—	—	319,159	270,221	273,528	283,580	292,447	298,061	33,269
2014	—	—	—	—	—	320,250	320,176	319,855	331,836	326,251	49,301
2015	—	—	—	—	—	—	259,609	232,203	231,020	253,264	30,511
2016	—	—	—	—	—	—	—	241,282	253,450	246,235	62,140
2017	—	—	—	—	—	—	—	—	231,826	221,820	122,752
2018	—	—	—	—	—	—	—	—	—	221,945	184,317
Total										$ 2,721,144	

	Cumulative Paid Claims and Claim Adjustment Expenses, Net of Reinsurance									
	For the Year Ended December 31,									
	Unaudited									
Accident Year	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
2009	$ 21,332	$ 53,636	$ 85,761	$ 124,030	$ 155,124	$ 181,946	$ 196,775	$ 211,143	$ 221,141	$ 228,990
2010	—	17,964	45,626	77,191	106,381	129,041	149,322	165,027	180,544	190,295
2011	—	—	17,876	52,365	97,702	134,285	168,244	191,864	207,692	220,011
2012	—	—	—	22,390	62,198	111,928	151,635	186,483	219,106	240,926
2013	—	—	—	—	28,920	63,849	109,202	143,268	177,101	204,820
2014	—	—	—	—	—	21,306	69,134	116,266	155,764	198,993
2015	—	—	—	—	—	—	17,865	48,593	91,548	141,834
2016	—	—	—	—	—	—	—	19,923	61,930	100,587
2017	—	—	—	—	—	—	—	—	16,493	40,338
2018	—	—	—	—	—	—	—	—	—	11,152
Total										$ 1,577,946
Reserves for loss and loss adjustment expenses before 2009, net of reinsurance										369,801
Reserves for loss and loss adjustment expenses, net of reinsurance										$ 1,512,999

Property
(In thousands)

	Loss and Loss Expenses Incurred, Net of Reinsurance										As of December 31, 2018
	For the Year Ended December 31,										
	Unaudited										
Accident Year	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	IBNR
2009	$ 48,029	$ 43,193	$ 42,352	$ 38,711	$ 38,124	$ 37,505	$ 36,913	$ 36,263	$ 35,293	$ 35,763	$ —
2010	—	58,576	55,647	52,561	51,448	51,500	50,971	50,871	50,699	50,932	201
2011	—	—	95,217	87,970	85,118	86,544	85,006	84,739	84,471	84,882	314
2012	—	—	—	103,744	94,720	86,426	85,451	83,925	83,938	84,875	626
2013	—	—	—	—	141,298	112,590	114,063	111,915	112,555	111,876	1,192
2014	—	—	—	—	—	112,987	96,668	97,363	100,148	99,410	1,739
2015	—	—	—	—	—	—	127,039	117,582	131,777	130,452	4,367
2016	—	—	—	—	—	—	—	167,989	174,562	181,858	11,130
2017	—	—	—	—	—	—	—	—	206,604	200,535	24,102
2018	—	—	—	—	—	—	—	—	—	108,281	40,135
Total										$ 1,088,864	

	Cumulative Paid Claims and Claim Adjustment Expenses, Net of Reinsurance									
	For the Year Ended December 31,									
	Unaudited									
Accident Year	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
2009	$ 9,766	$ 21,945	$ 28,226	$ 29,444	$ 31,248	$ 31,238	$ 32,540	$ 34,759	$ 34,027	$ 35,158
2010	—	23,654	37,739	42,413	43,898	44,824	46,419	49,048	49,303	50,053
2011	—	—	31,478	58,875	73,359	76,010	78,577	81,780	82,322	83,401
2012	—	—	—	15,675	51,774	64,238	70,672	77,540	79,099	81,808
2013	—	—	—	—	36,609	74,602	92,646	101,553	104,333	106,051
2014	—	—	—	—	—	38,919	67,000	82,329	88,507	91,646
2015	—	—	—	—	—	—	53,498	89,228	109,187	118,686
2016	—	—	—	—	—	—	—	78,969	133,653	157,622
2017	—	—	—	—	—	—	—	—	72,157	141,458
2018	—	—	—	—	—	—	—	—	—	34,125
Total										$ 900,008
Reserves for loss and loss adjustment expenses before 2009, net of reinsurance										776
Reserves for loss and loss adjustment expenses, net of reinsurance										$ 189,632

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

(In thousands)		December 31, 2018
Undiscounted reserves for loss and loss expenses, net of reinsurance:		
Other liability	$	3,696,372
Primary workers' compensation		1,911,057
Excess workers' compensation		1,320,257
Professional liability		904,790
Commercial automobile		633,872
Short-tail lines		531,217
Other		111,779
Insurance		9,109,344
Casualty		1,512,999
Property		189,632
Reinsurance		1,702,631
Total undiscounted reserves for loss and loss expenses, net of reinsurance	$	10,811,975

(In thousands)		December 31, 2018
Due from reinsurers on unpaid claims:		
Other liability	$	451,073
Primary workers' compensation		374,805
Excess workers' compensation		37,405
Professional liability		344,958
Commercial automobile		15,405
Short-tail lines		293,376
Other		34,260
Insurance		1,551,282
Casualty		116,782
Property		49,501
Reinsurance		166,283
Total due from reinsurers on unpaid claims	$	1,717,565

(In thousands)	December 31, 2018
Loss reserve discount:	
Other liability	$ —
Primary workers' compensation	—
Excess workers' compensation	(434,302)
Professional liability	—
Commercial automobile	—
Short-tail lines	—
Other	—
Insurance	(434,302)
Casualty	(128,790)
Property	—
Reinsurance	(128,790)
Total loss reserve discount	$ (563,092)
Total gross reserves for loss and loss expenses	$ 11,966,448

The following is supplementary information regarding average historical claims duration as of December 31, 2018:

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	8.0%	14.4%	18.4%	16.8%	13.8%	8.2%	5.9%	3.0%	2.8%	1.8%
Primary workers' compensation	22.5%	27.6%	15.6%	9.4%	5.9%	4.0%	2.8%	1.9%	1.6%	1.1%
Excess workers' compensation	3.8%	3.3%	2.7%	3.1%	3.0%	3.3%	2.7%	3.3%	3.5%	2.6%
Professional liability	8.7%	22.7%	22.3%	16.6%	9.4%	9.1%	3.5%	1.6%	4.3%	2.5%
Commercial automobile	39.7%	21.6%	15.6%	10.7%	6.8%	3.5%	1.0%	0.4%	0.2%	—%
Short-tail lines	59.6%	29.8%	5.8%	1.6%	0.1%	0.3%	0.4%	0.3%	—%	1.4%

Reinsurance

Average Annual Percentage Payout of Incurred Claims by Age, Net of Reinsurance

Years	1	2	3	4	5	6	7	8	9	10
Casualty	7.2%	12.5%	14.6%	13.3%	11.2%	9.0%	5.9%	5.2%	3.8%	2.8%
Property	35.3%	32.3%	14.8%	5.5%	3.9%	2.0%	3.2%	2.7%	—%	3.2%

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

(In thousands)	2018	2017	2016
Net reserves at beginning of year	$ 10,056,914	$ 9,590,265	$ 9,244,872
Net provision for losses and loss expenses:			
Claims occurring during the current year (1)	3,926,489	3,963,543	3,826,620
Increase (decrease) in estimates for claims occurring in prior years (2)	6,831	(5,165)	(29,904)
Loss reserve discount accretion	41,382	43,970	49,084
Total	3,974,702	4,002,348	3,845,800
Net payments for claims:			
Current year	964,808	1,027,405	1,052,452
Prior year	2,700,077	2,562,550	2,401,722
Total	3,664,885	3,589,955	3,454,174
Foreign currency translation	(117,848)	54,256	(46,233)
Net reserves at end of year	10,248,883	10,056,914	9,590,265
Ceded reserve at end of year	1,717,565	1,613,494	1,606,930
Gross reserves at end of year	$ 11,966,448	$ 11,670,408	$ 11,197,195

(1) Claims occurring during the current year are net of loss reserve discounts of $24,381,000, $22,064,000 and $18,929,000 in 2018, 2017, and 2016, respectively.

(2) The increase (decrease) 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 $3,738,000, $32,132,000 and $59,175,000 in 2018, 2017 and 2016, respectively.

Favorable prior year development (net of additional and return premiums) was $39 million in 2018.

Insurance - Reserves for the Insurance segment developed favorably by $43 million in 2018. The favorable development was primarily attributable to workers' compensation business, partially offset by unfavorable development for professional liability business.

For workers' compensation, the favorable development was spread across many accident years, including prior to 2009, but was most significant in accident years 2015 through 2017. The favorable workers' compensation development reflects a continuation during 2018 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. Reported workers' compensation losses in 2018 continued to be better than our expectations at most of our operating units, and were below the assumptions underlying our previous reserve estimates.

For professional liability business, adverse development was primarily related to unexpected large directors and officers (“D&O”) liability losses at one of our U.S. operating units, as well as lawyers professional liability losses at another operating unit. The adverse development stemmed primarily from accident years 2015 and 2016, and was driven by a higher frequency of large losses than we had experienced in previous years.

Reinsurance - Reserves for the Reinsurance segment developed unfavorably by $4 million in 2018. The unfavorable development was primarily due to U.S. casualty facultative business from accident years 2009 and prior related to construction projects, and was largely offset by favorable development on assumed excess of loss workers compensation business.

Favorable prior year development (net of additional and return premiums) was $37 million in 2017.

Insurance - Reserves for the Insurance segment developed favorably by $68 million in 2017. The favorable development was primarily attributable to workers' compensation business, and was partially offset by unfavorable development for professional liability business.

For workers' compensation, the favorable development was related to both primary and excess business and was spread across many accident years, including those prior to 2008, but was most significant in accident years 2014 through 2016. The favorable workers' compensation development reflects a continuation during 2017 of the generally benign loss cost trends experienced in recent years, particularly the favorable claim frequency trends (i.e. number of reported claims per unit of exposure). Reported workers' compensation losses in 2017 continued to be better than our expectations at most of our operating units, and were below the assumptions underlying our previous reserve estimates. The favorable severity trends were also impacted by our continued investment in medical case management services and the higher usage of preferred provider networks. The long term trend of declining workers' compensation frequency can be attributed to improved workplace safety.

For professional liability business, adverse development was primarily related to unexpected large D&O liability losses at one of our U.S. operating units, and large professional indemnity and D&O losses in the U.K. The adverse development stemmed mainly from accident years 2013 through 2016 in the U.S. and 2011 through 2016 in the U.K.

Reinsurance - Reserves for the Reinsurance segment developed unfavorably by $31 million in 2017. This adverse development was due to reserve strengthening associated with claims impacted by the change in the Ogden discount rate in the U.K., as well as adverse development on the U.S. facultative casualty excess of loss business. The Ogden rate is the discount rate used to calculate lump-sum bodily injury payouts in the U.K., and was reduced by the U.K. Ministry of Justice from +2.5% to -0.75% in 2017; the adverse development mostly related to U.K. motor bodily injury claims which we reinsured on an excess of loss basis in accident years 2012 through 2016. The adverse development on U.S. facultative casualty business was due to construction related risks in accident years 2008 and prior.

Favorable prior year development (net of additional and return premiums) was $59 million in 2016.

Insurance - Reserves for the Insurance segment developed favorably by $53 million in 2016. The favorable development was primarily related to workers' compensation business, and was partially offset by unfavorable development for medical professional liability business.

For workers' compensation, the favorable development was related to both primary and excess business and to many accident years, including those prior to 2007. During 2016, reported workers' compensation losses continued to be better than our expectations at most of our operating units. Loss frequency and severity trends continued to be better than the assumptions underlying our previous reserve estimates. Loss severity trends also benefited from our continued investment in medical case management services and from our preferred provider networks. The long term trend of declining workers' compensation frequency can be attributed to improved workplace safety.

For medical professional liability business, unfavorable development was primarily related to a class of business that has been discontinued. The adverse development for that business stemmed mainly from accident years 2010 through 2015.

Reinsurance - Reserves for the Reinsurance segment developed favorably by $6 million in 2016. The favorable development was primarily related to direct facultative reinsurance business and to accident years 2008 through 2014.

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 $28 million at December 31, 2018 and $30 million at December 31, 2017. 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 $1,793 million and $1,855 million at December 31, 2018 and 2017, respectively. The aggregate net discount for those reserves, after reflecting the effects of ceded reinsurance, was $563 million and $591 million at

December 31, 2018 and 2017, respectively. At December 31, 2018, discount rates by year ranged from 2.0% to 6.5%, with a weighted average discount rate of 3.8%.

Substantially all discounted workers' compensation reserves (97% of total discounted reserves at December 31, 2018) 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, 2018), 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) Reinsurance

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 operating unit, the Company purchases specific additional reinsurance to supplement the above programs.

The following is a summary of reinsurance financial information:

(In thousands)	2018	2017	2016
Written premiums:			
Direct	$ 6,973,216	$ 6,726,029	$ 6,647,600
Assumed	729,278	750,934	896,101
Ceded	(1,269,267)	(1,216,455)	(1,119,788)
Total net written premiums	$ 6,433,227	$ 6,260,508	$ 6,423,913
Earned premiums:			
Direct	$ 6,851,795	$ 6,661,046	$ 6,492,240
Assumed	755,759	812,309	900,570
Ceded	(1,236,049)	(1,161,936)	(1,099,462)
Total net earned premiums	$ 6,371,505	$ 6,311,419	$ 6,293,348
Ceded losses and loss expenses incurred	$ 829,742	$ 601,769	$ 707,336
Ceded commission earned	$ 268,037	$ 241,983	$ 201,957

The Company reinsures a portion of its exposures principally to reduce its net liability on individual risks and to protect against catastrophic losses. Estimated amounts due from reinsurers are reported net of reserves for uncollectible reinsurance of $946,965, $1,010,000 and $1,049,000 as of December 31, 2018, 2017 and 2016, respectively.

The following table presents the amounts due from reinsurers as of December 31, 2018:

(In thousands)

Lloyd’s of London	$ 215,370
Munich Re	164,131
Alleghany Group	150,438
Swiss Re	150,280
Partner Re	103,837
Berkshire Hathaway	87,314
Axis Capital	85,377
Hannover Re Group	77,351
Everest Re	62,113
Korean Re	52,746
Renaissance Re	39,944
Liberty Mutual	32,118
Qatar Re GRP	27,731
Chubb Limited	24,628
Arch Capital Group	21,260
Other reinsurers less than $20,000	289,305
Subtotal	1,583,943
Residual market pools	348,348
Total	$ 1,932,291

(15) Indebtedness

Indebtedness consisted of the following as of December 31, 2018 (the difference between the face value and the carrying value is unamortized discount and debt issuance costs):

			Carrying Value	
(In thousands)	**Interest Rate**	**Face Value**	**2018**	**2017**
Senior notes due on:				
August 15, 2019	6.15%	$ 140,651	$ 140,568	$ 140,434
September 15, 2019	7.375%	300,000	299,816	299,562
September 15, 2020	5.375%	300,000	299,420	299,083
January 1, 2022	8.7%	76,503	76,273	76,210
March 15, 2022	4.625%	350,000	348,670	348,252
February 15, 2037	6.25%	250,000	248,006	247,896
August 1, 2044	4.75%	350,000	345,283	345,099
Subsidiary debt (1) (2)	Various	123,992	123,992	12,516
Total senior notes and other debt		$ 1,891,146	$ 1,882,028	$ 1,769,052
Subordinated debentures due on:				
April 30, 2053	5.625%	$ 350,000	$ 341,097	$ 340,838
March 1, 2056	5.9%	110,000	106,159	106,055
June 1, 2056	5.75%	290,000	281,551	281,325
March 30, 2058	5.70%	185,000	178,684	—
Total subordinated debentures		$ 935,000	$ 907,491	$ 728,218

(1) Subsidiary debt is due as follows: $7 million in 2019, $15 million in 2020, and $102 million in 2028.

(2) Includes non-recourse loan in the amount of $102 million secured by an office building. See Note 8, Real Estate, for more details.

(16) Income Taxes

Income tax expense (benefit) consists of:

(In thousands)	Current Expense (Benefit)	Deferred Expense (Benefit)	Total
December 31, 2018			
Domestic	$ 188,712	$ (63,134)	$ 125,578
Foreign	13,963	23,487	37,450
Total expense (benefit)	$ 202,675	$ (39,647)	$ 163,028
December 31, 2017			
Domestic	$ 225,694	$ (27,601)	$ 198,093
Foreign	8,803	12,537	21,340
Total expense (benefit)	$ 234,497	$ (15,064)	$ 219,433
December 31, 2016			
Domestic	$ 259,539	$ 3,355	$ 262,894
Foreign	23,634	6,425	30,059
Total expense	$ 283,173	$ 9,780	$ 292,953

Income before income taxes from domestic operations was $755 million, $797 million and $837 million for the years ended December 31, 2018, 2017 and 2016, respectively. Income (loss) before income taxes from foreign operations was $57 million, ($25) million and $59 million for the years ended December 31, 2018, 2017 and 2016, respectively.

A reconciliation of the income tax expense and the amounts computed by applying the Federal and foreign income tax rate of 21% for 2018 and 35% for 2017 and 2016 to pre-tax income are as follows:

(In thousands)	2018	2017	2016
Computed “expected” tax expense	$ 170,540	$ 270,470	$ 313,753
Tax-exempt investment income	(18,833)	(37,209)	(37,379)
Change in valuation allowance	18,576	11,161	1,420
Impact of foreign tax rates	7,683	3,508	1,984
State and local taxes	3,901	1,644	7,748
Impact of change in U.S. tax rate	(10,950)	(30,531)	—
Other, net	(7,889)	390	5,427
Total expense	$ 163,028	$ 219,433	$ 292,953

At December 31, 2018 and 2017, 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)	2018	2017
Deferred tax asset:		
Loss reserve discounting	$ 130,513	$ 70,206
Unearned premiums	112,190	110,854
Net operating losses	37,463	33,043
Other-than-temporary impairments	9,910	8,204
Employee compensation plans	56,027	59,037
Other	58,809	49,346
Gross deferred tax asset	404,912	330,690
Less valuation allowance	(35,195)	(16,619)
Deferred tax asset	369,717	314,071
Deferred tax liability:		
Amortization of intangibles	13,641	12,826
Loss reserve discounting - transition rule	41,088	—
Deferred policy acquisition costs	99,293	100,020
Unrealized investment gains	35,430	151,162
Property, furniture and equipment	39,239	31,865
Investment funds	51,712	41,104
Other	53,824	63,858
Deferred tax liability	334,227	400,835
Net deferred tax (asset) liability	$ (35,490)	$ 86,764

The Company had a current tax receivable of $0.7 million and a payable of $11.3 million at December 31, 2018 and 2017, respectively. At December 31, 2018, the Company had foreign net operating loss carryforwards of $8.8 million that expire beginning in 2027, and an additional $181.0 million that have no expiration date. At December 31, 2018, the Company had a valuation allowance of $35.2 million, as compared to $16.6 million at December 31, 2017. 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 has closed for the Company’s U.S. Federal tax returns through December 31, 2013.

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") was enacted on December 22, 2017. The Tax Act provides for a reduction of the U.S. corporate income tax rate from 35% to 21% effective January 1, 2018. In 2018, the Company reported a net tax rate reduction benefit in the amount of $11.0 million. Additionally, the U.S. tax law requires insurance reserves to be discounted for tax purposes. The Tax Act modified this computation. At the end of 2018, the IRS issued revised discount factors to be applied to the 2017 reserves. This increased the beginning of year 2018 deferred tax asset for loss reserve discounting by $47 million. Under the related transition rule, a deferred tax liability was established which will be included in taxable income over eight years beginning in 2018.

The Tax Act included a global intangible low-taxed income tax ("GILTI"). The Company has made an accounting policy election to treat any GILTI taxes as a current period expense when incurred (the "period cost method"). The 2018 tax provision includes a GILTI tax of $2.8 million as a current tax expense.

The Company has not provided U.S. deferred income taxes on the undistributed earnings of approximately $70 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 2019, the maximum amount of dividends that can be paid by BIC without such approval is approximately $1.1 billion.

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

(In thousands)	2018	2017	2016
Net income	$ 1,099,953	$ 698,862	$ 702,830
Statutory capital and surplus	$ 5,587,930	$ 5,479,603	$ 5,493,044

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 discount non-tabular 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 $282 million at December 31, 2018.

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, 2018, BIC's Total Adjusted Capital of $5.306 billion was 384% 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:

	2018	2017	2016
Basic	126,698,927	124,843,240	122,650,997
Diluted	128,263,558	129,017,613	128,552,838

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 4,926,521 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).

	2018	2017	2016
Balance, beginning of year	121,514,852	121,193,599	123,307,837
Shares issued	838,508	1,052,256	281,654
Shares repurchased	(357,600)	(731,003)	(2,395,892)
Balance, end of year	121,995,760	121,514,852	121,193,599

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, 2018 and 2017:

	2018		2017	
(In thousands)	Carrying Value	Fair Value	Carrying Value	Fair Value
Assets:				
Fixed maturity securities	$ 13,606,812	$ 13,619,620	$ 13,551,250	$ 13,566,976
Equity securities	279,006	279,006	576,647	576,647
Arbitrage trading account	452,548	452,548	617,649	617,649
Loans receivable	94,813	97,073	79,684	82,047
Cash and cash equivalents	817,602	817,602	950,471	950,471
Trading accounts receivable from brokers and clearing organizations	347,228	347,228	189,280	189,280
Liabilities:				
Due to broker	20,144	20,144	15,920	15,920
Trading account securities sold but not yet purchased	38,120	38,120	64,358	64,358
Subordinated debentures	907,491	840,002	728,218	769,060
Senior notes and other debt	1,882,028	1,968,996	1,769,052	1,945,313

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) Lease Obligations

The Company and its subsidiaries use office space and equipment under leases expiring at various dates. These leases are considered operating leases for financial reporting purposes. Some of these leases have options to extend the length of the leases and contain clauses for cost of living, operating expense and real estate tax adjustments. Future minimum lease payments, without provision for sublease income, are: $46,592,000 in 2019; $43,504,000 in 2020; $39,061,000 in 2021; $34,444,000 in 2022, $30,881,000 in 2023 and $75,740,000 thereafter. Rental expense was $45,778,000, $52,925,000, and $47,453,000 for 2018, 2017, and 2016 respectively.

(21) 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, 2018, the Company had commitments to invest up to $270.2 million and $253.4 million in certain investment funds and real estate construction projects, respectively.

(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, 2018:

	2018	2017	2016
RSUs granted and unvested at beginning of period:	3,477,981	4,862,098	4,158,325
Granted	760,032	855,984	1,000,559
Vested	(600,169)	(1,993,507)	(77,250)
Canceled	(263,411)	(246,594)	(219,536)
RSUs granted and unvested at end of period:	3,374,433	3,477,981	4,862,098

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, 2018, 4,709,318 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, 2018:

(In thousands)	2018	2017	2016
Unearned compensation at beginning of year	$ 122,910	$ 115,965	$ 103,538
RSUs granted, net of cancellations	52,204	52,897	52,697
RSUs expensed	(34,408)	(38,796)	(35,585)
RSUs forfeitures	(11,037)	(7,156)	(4,685)
Unearned compensation at end of year	$ 129,669	$ 122,910	$ 115,965

(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 subsidiary’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 $42 million, $42 million and $39 million in 2018, 2017 and 2016, 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, 2018:

	Units Outstanding	Maximum Value	Inception to date earned through December 31, 2018 on outstanding units
2014 grant	181,750	$ 18,175,000	$ 15,328,795
2015 grant	194,750	19,475,000	15,272,295
2016 grant	217,500	21,750,000	12,371,400
2017 grant	223,250	22,325,000	7,822,680
2018 grant	222,750	22,750,000	4,316,895

The following table summarizes the LTIP expense for each of the three years ended December 31, 2018:

(In thousands)	2018	2017	2016
2011 grant	$ —	$ —	$ (82)
2013 grant	(1,124)	7,667	8,918
2014 grant	3,227	3,167	3,503
2015 grant	5,170	3,667	4,072
2016 grant	5,148	3,601	4,002
2017 grant	4,700	3,162	—
2018 grant	4,317	—	—
Total	$ 21,438	$ 21,264	$ 20,413

(24) Supplemental Financial Statement Data

Other operating costs and expenses consist of the following:

(In thousands)	2018	2017	2016
Amortization of deferred policy acquisition costs	$ 915,246	$ 1,111,489	$ 1,155,954
Insurance operating expenses	1,183,635	989,535	933,249
Insurance service expenses	118,357	129,776	138,908
Net foreign currency (gains) losses	(27,067)	15,267	(11,904)
Other costs and expenses	193,050	190,865	179,412
Total	$ 2,383,221	$ 2,436,932	$ 2,395,619

(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 - 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.

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	Investment Income	Other	Total (1)	Pre-Tax Income (Loss)	Net Income (Loss) to Common Stockholders
Year ended December 31, 2018						
Insurance	$ 5,864,981	$ 518,733	$ 72,727	$ 6,456,441	$ 856,011	$ 682,028
Reinsurance	506,524	94,291	—	600,815	62,144	50,144
Corporate, other and eliminations (2)	—	61,211	418,696	479,907	(260,549)	(213,469)
Net investment gains	—	—	154,488	154,488	154,488	122,046
Consolidated	$ 6,371,505	$ 674,235	$ 645,911	$ 7,691,651	$ 812,094	$ 640,749
Year ended December 31, 2017						
Insurance	$ 5,706,443	$ 436,178	$ 86,864	$ 6,229,485	$ 756,153	$ 535,186
Reinsurance	604,976	91,146	—	696,122	(15,276)	(5,131)
Corporate, other and eliminations (2)	—	48,464	374,835	423,299	(303,965)	(199,269)
Net investment gains	—	—	335,858	335,858	335,858	218,308
Consolidated	$ 6,311,419	$ 575,788	$ 797,557	$ 7,684,764	$ 772,770	$ 549,094
Year ended December 31, 2016						
Insurance	$ 5,618,842	$ 431,489	$ 97,879	$ 6,148,210	$ 799,139	$ 534,613
Reinsurance	674,506	102,617	—	777,123	98,277	68,400
Corporate, other and eliminations (2)	—	30,057	431,789	461,846	(267,983)	(174,650)
Net investment gains	—	—	267,005	267,005	267,005	173,553
Consolidated	$ 6,293,348	$ 564,163	$ 796,673	$ 7,654,184	$ 896,438	$ 601,916

Identifiable Assets

(In thousands)	December 31, 2018	December 31, 2017
Insurance	$ 19,634,329	$ 19,263,193
Reinsurance	2,951,115	3,169,731
Corporate, other and eliminations (2)	2,310,533	1,866,993
Consolidated	$ 24,895,977	$ 24,299,917

(1) Revenues for Insurance includes $714.2 million, $688.2 million and $733.3 million in 2018, 2017 and 2016, respectively, from foreign countries. Revenues for Reinsurance includes $228.1 million, $201.3 million and $200.5 million in 2018, 2017 and 2016, respectively, from foreign countries.

(2) 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 are as follows:

(In thousands)	2018	2017	2016
Insurance			
Other liability	$ 1,912,071	$ 1,843,826	$ 1,761,748
Workers' compensation	1,489,805	1,481,507	1,402,611
Short-tail lines	1,184,755	1,149,977	1,237,917
Commercial automobile	722,236	685,263	684,626
Professional liability	556,114	545,870	531,940
Total Insurance	5,864,981	5,706,443	5,618,842
Reinsurance			
Casualty	362,886	377,650	405,470
Property	143,638	227,326	269,036
Total Reinsurance	506,524	604,976	674,506
Total	$ 6,371,505	$ 6,311,419	$ 6,293,348

(26) Quarterly Financial Information (Unaudited)

The following is a summary of quarterly financial data:

(In thousands, except per share data)	2018			
Three months ended	March 31	June 30	September 30	December 31
Revenues	$ 1,891,247	$ 1,910,916	$ 1,937,902	$ 1,951,586
Net income	166,397	180,075	161,920	132,357
Net income per share (1)				
Basic (2)	1.32	1.42	1.28	1.04
Diluted	1.30	1.40	1.26	1.03

	2017			
Three months ended	March 31	June 30	September 30	December 31
Revenues	$ 1,870,418	$ 1,848,049	$ 2,031,342	$ 1,934,956
Net income	123,447	109,004	162,054	154,589
Net income per share (1)				
Basic (2)	1.01	0.87	1.29	1.22
Diluted	0.96	0.85	1.26	1.21

(1) Net income per share (“EPS”) in each quarter is computed using the weighted-average number of shares outstanding during that quarter, while EPS for the full year is computed using the weighted-average number of shares outstanding during the year. Thus, the sum of the four quarters EPS does not necessarily equal the full-year EPS.

(2) Basic shares outstanding includes shares held in a grantor trust.

(27) Subsequent Event

On February 21, 2019, the Company announced that its Board of Directors approved a 3-for-2 common stock split to be paid in the form of a stock dividend to holders of record on March 14, 2019. The additional shares are expected to be issued on April 2, 2019.

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, 2018, 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, 2018.

Report of Independent Registered Public Accounting Firm

To the Stockholders and 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, 2018, 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, 2018, 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, 2018 and 2017, 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, 2018, and the related notes and financial statement schedules II to VI (collectively, the "consolidated financial statements"), and our report dated February 22, 2019 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 Managements'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 22, 2019

ITEM 9B. OTHER INFORMATION

None.

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, 2018, 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, 2018, 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, 2018, 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, 2018, 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, 2018, 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, 2018, 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, 2018, and which is incorporated herein by reference.

ITEM 14. PRINCIPAL ACCOUNTING FEES AND SERVICES

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, 2018, 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.

Index to Financial Statement Schedules

(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) 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) 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 of March 31, 2003).

(4.2) Third Supplemental Indenture, dated as of August 24, 2004, between the Company and The Bank of New York, as Trustee, relating to $150,000,000 principal amount of the Company’s 6.150% Senior Notes due 2019, including form of the Notes as Exhibit A (incorporated by reference to Exhibit 4.4 of the Company’s Annual Report on Form 10-K (File No. 1-15202) filed with the Commission on March 14, 2005).

(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) Sixth Supplemental Indenture, dated as of September 14, 2009, between the Company and The Bank of New York Mellon, as Trustee, relating to $300,000,000 principal amount of the Company’s 7.375% Senior Notes due 2019, 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 February 26, 2010).

(4.5) Seventh Supplemental Indenture, dated as of September 16, 2010, between the Company and The Bank of New York Mellon, as Trustee, relating to $300,000,000 principal amount of the Company’s 5.375% Senior Notes due 2020, 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 16, 2010).

(4.6) 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).

(4.7) 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).

(4.8) Subordinated Indenture, dated as of May 2, 2013, 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 2, 2013).

(4.9) First Supplemental Indenture, dated as of May 2, 2013, between the Company and The Bank of New York Mellon, as Trustee, relating to $350,000,000 principal amount of the Company's 5.625% Subordinated Debentures due 2053, 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 May 2, 2013).

(4.10) Subordinated Indenture, dated as of March 1, 2016, 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 1, 2016).

(4.11) First Supplemental Indenture, dated as of March 1, 2016, between the Company and The Bank of New York Mellon, as Trustee, relating to $110,000,000 principal amount of the Company's 5.9% Subordinated Debentures due 2056, 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 1, 2016).

(4.12) Second Supplemental Indenture, dated as of May 25, 2016, between the Company and The Bank of New York Mellon, as Trustee, relating to $290,000,000 principal amount of the Company's 5.75% Subordinated Debentures due 2056, 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 May 25, 2016).

(4.13) 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).

(4.14) First Supplemental Indenture, dated as of March 26, 2018, between the Company and The Bank of New York Mellon, as Trustee, relating to $175,000,000 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).

(4.15) 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 2012 Stock Incentive Plan (incorporated by reference to Annex A of the Company's 2015 Proxy Statement (File No. 1-15202) filed with the Commission on April 20, 2015).

(10.2) W. R. Berkley Corporation 2018 Stock Incentive Plan (incorporated by reference to Annex A of the Company's 2018 Proxy Statement (File No. 1-15202) filed with the Commission on April 19, 2018).

(10.3) 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).

(10.4) 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).

(10.5) 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 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).

(10.7) 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).

(10.8) W. R. Berkley Corporation Deferred Compensation Plan for Officers as amended and restated November 2, 2016 (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 November 7, 2018).

(10.9) 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).

(10.10) W. R. Berkley Corporation Deferred Compensation Plan for Officers as amended and restated November 2, 2016 (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 November 7, 2018).

(10.11) W. R. Berkley Corporation Deferred Compensation Plan for Directors as amended and restated effective December 3, 2007 (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 December 19, 2007).

(10.12) W. R. Berkley Corporation Amended and Restated Annual Incentive Compensation Plan (incorporated by reference to Annex A of the Company's 2016 Proxy Statement (File No. 1-15202) filed with the Commission on April 15, 2016).

(10.13) 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).

(10.14) Form of 2014 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 12, 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) Form of 2015 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 4, 2015).

(10.17) Form of 2016 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 10, 2016).

(10.18) W. R. Berkley Corporation 2009 Directors Stock Plan (incorporated by reference to Annex B of the Company's 2015 Proxy Statement (File No. 1-15202) filed with the Commission on April 20, 2015).

(10.19) 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).

(10.20) 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).

(10.21) Form of Dividend Equivalent Rights Award 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 August 7, 2015).

(10.22) 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).

(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 22, 2019

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 22, 2019
/s/ W. Robert Berkley, Jr. W. Robert Berkley, Jr.	President, Chief Executive Officer and Director (Principal executive officer)	February 22, 2019
/s/ Christopher L. Augostini Christopher L. Augostini	Director	February 22, 2019
/s/ Ronald E. Blaylock Ronald E. Blaylock	Director	February 22, 2019
/s/ Mark E. Brockbank Mark E. Brockbank	Director	February 22, 2019
/s/ Mary C. Farrell Mary C. Farrell	Director	February 22, 2019
/s/ María Luisa Ferré María Luisa Ferré	Director	February 22, 2019
/s/ Jack H. Nusbaum Jack H. Nusbaum	Director	February 22, 2019
/s/ Leigh A. Pusey Leigh Ann Pusey	Director	February 22, 2019
/s/ Mark L. Shapiro Mark L. Shapiro	Director	February 22, 2019
/s/ Richard M. Baio Richard M. Baio	Senior Vice President, Chief Financial Officer and Treasurer (Principal financial officer and principal accounting officer)	February 22, 2019

Schedule II

W. R. Berkley Corporation
Condensed Financial Information of Registrant
Balance Sheets (Parent Company)

(In thousands)	December 31, 2018	December 31, 2017
Assets:		
Cash and cash equivalents	$ 83,950	$ 45,062
Fixed maturity securities available for sale at fair value (cost $1,317,058 and $1,059,834 at December 31, 2018 and 2017, respectively)	1,307,347	1,052,240
Loans receivable	51,544	53,019
Equity securities, at fair value (cost $3,430 in 2018 and 2017)	3,430	3,430
Investment in subsidiaries	6,786,999	7,140,108
Current federal income taxes	9,068	—
Deferred federal income taxes	66,995	—
Property, furniture and equipment at cost, less accumulated depreciation	13,391	14,421
Other assets	12,340	10,819
Total assets	$ 8,335,064	$ 8,319,099
Liabilities and stockholders' equity		
Liabilities:		
Due to subsidiaries	$ 116,125	$ 232,756
Other liabilities	115,562	128,002
Current federal income taxes	—	10,486
Deferred federal income taxes	—	51,757
Subordinated debentures	907,491	728,218
Senior notes	1,758,035	1,756,536
Total liabilities	2,897,213	2,907,755
Stockholders' equity:		
Preferred stock	—	—
Common stock	47,024	47,024
Additional paid-in capital	1,063,144	1,048,283
Retained earnings (including accumulated undistributed net income of subsidiaries of $5,068,139 and $5,073,268 at December 31, 2018 and 2017, respectively)	7,558,619	6,956,882
Accumulated other comprehensive income	(510,470)	68,541
Treasury stock, at cost	(2,720,466)	(2,709,386)
Total stockholders' equity	5,437,851	5,411,344
Total liabilities and stockholders' equity	$ 8,335,064	$ 8,319,099

See Report of Independent Registered Public Accounting Firm and note to condensed financial statements.

W. R. Berkley Corporation
Condensed Financial Information of Registrant, Continued
Statements of Income (Parent Company)

(In thousands)	Year Ended December 31, 2018	2017	2016
Management fees and investment income including dividends from subsidiaries of $639,477, $694,462 and $700,664 for the years ended December 31, 2018, 2017 and 2016, respectively	$ 697,687	$ 738,923	$ 726,742
Net investment (losses) gains	(1,685)	(4,286)	909
Other income	530	805	376
Total revenues	696,532	735,442	728,027
Operating costs and expense	191,873	182,145	171,967
Interest expense	155,082	146,929	139,216
Income before federal income taxes	349,577	406,368	416,844
Federal income taxes:			
Federal income taxes provided by subsidiaries on a separate return basis	409,439	115,597	327,520
Federal income tax expense on a consolidated return basis	(113,138)	(195,261)	(246,389)
Net expense (benefit)	296,301	(79,664)	81,131
Income before undistributed equity in net income of subsidiaries	645,878	326,704	497,975
Equity in undistributed net (loss) income of subsidiaries	(5,129)	222,390	103,941
Net income	$ 640,749	$ 549,094	$ 601,916

See Report of Independent Registered Public Accounting Firm and note to condensed financial statements.

W. R. Berkley Corporation
Condensed Financial Information of Registrant, Continued
Statements of Cash Flows (Parent Company)

(In thousands)	Year Ended December 31, 2018	2017	2016
Cash flows from operating activities:			
Net income	$ 640,749	$ 549,094	$ 601,916
Adjustments to reconcile net income to net cash from operating activities:			
Net investment losses	1,685	4,286	3,649
Depreciation and amortization	9,441	2,039	2,744
Equity in undistributed earnings of subsidiaries	5,129	(222,390)	(103,941)
Tax payments received from subsidiaries	282,084	98,313	414,386
Federal income taxes provided by subsidiaries on a separate return basis	(409,439)	(115,597)	(327,520)
Stock incentive plans	28,531	38,075	37,174
Change in:			
Federal income taxes	(77,415)	2,711	44,839
Other assets	1,348	(877)	1,772
Other liabilities	109,016	18,661	(88,282)
Accrued investment income	(2,870)	(2,818)	(2,743)
Net cash from operating activities	588,259	371,497	583,994
Cash used in investing activities:			
Proceeds from sales of fixed maturity securities	668,447	849,330	373,252
Proceeds from maturities and prepayments of fixed maturity securities	255,528	316,611	210,904
Cost of purchases of fixed maturity securities	(1,188,821)	(1,329,379)	(1,285,101)
Change in loans receivable	1,475	(29,600)	(23,419)
Investments in and advances to subsidiaries, net	(184,597)	(21,139)	11,471
Net additions to real estate, furniture & equipment	(264)	(1,055)	(3,042)
Net cash used in investing activities	(448,232)	(215,232)	(715,935)
Cash (used in) from financing activities:			
Net proceeds from issuance of senior notes	178,562	—	386,830
Repayment of senior notes	—	—	(9,353)
Purchase of common treasury shares	(24,750)	(47,807)	(132,392)
Cash dividends to common stockholders	(254,951)	(188,199)	(183,999)
Net cash (used in) from financing activities	(101,139)	(236,006)	61,086
Net increase (decrease) in cash and cash equivalents	38,888	(79,741)	(70,855)
Cash and cash equivalents at beginning of year	45,062	124,803	195,658
Cash and cash equivalents at end of year	$ 83,950	$ 45,062	$ 124,803

See Report of Independent Registered Public Accounting Firm and note to condensed financial statements.

W. R. Berkley Corporation

Condensed Financial Information of Registrant, Continued

December 31, 2018

Note to Condensed Financial Statements (Parent Company)

The accompanying condensed financial statements should be read in conjunction with the notes to consolidated financial statements included elsewhere herein. Reclassifications have been made in the 2017 and 2016 financial statements as originally reported to conform them to the presentation of the 2018 financial statements.

The Company files a consolidated federal 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, 2018, 2017 and 2016

(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, 2018									
Insurance	$ 439,945	$ 10,226,324	$ 3,131,018	$ 5,864,981	$ 518,733	$ 3,626,924	$ 811,178	$ 1,162,328	$ 5,952,861
Reinsurance	57,684	1,740,124	228,973	506,524	94,291	347,778	104,068	86,826	480,366
Corporate and adjustments	—	—	—	—	61,211	—	—	218,821	—
Total	$ 497,629	$ 11,966,448	$ 3,359,991	$ 6,371,505	$ 674,235	$ 3,974,702	$ 915,246	$ 1,467,975	$ 6,433,227
December 31, 2017									
Insurance	$ 435,967	$ 9,820,258	$ 3,039,343	$ 5,706,443	$ 436,178	$ 3,516,996	$ 929,793	$ 1,026,545	$ 5,715,871
Reinsurance	71,582	1,850,150	250,837	604,976	91,146	485,352	181,696	44,349	544,637
Corporate and adjustments	—	—	—	—	48,464	—	—	254,549	—
Total	$ 507,549	$ 11,670,408	$ 3,290,180	$ 6,311,419	$ 575,788	$ 4,002,348	$ 1,111,489	$ 1,325,443	$ 6,260,508
December 31, 2016									
Insurance	$ 442,317	$ 9,445,210	$ 2,975,060	$ 5,618,842	$ 431,489	$ 3,430,139	$ 964,064	$ 954,858	$ 5,743,620
Reinsurance	95,573	1,751,985	308,240	674,506	102,617	415,661	191,890	71,305	680,293
Corporate and adjustments	—	—	—	—	30,057	—	—	213,502	—
Total	$ 537,890	$ 11,197,195	$ 3,283,300	$ 6,293,348	$ 564,163	$ 3,845,800	$ 1,155,954	$ 1,239,665	$ 6,423,913

See Report of Independent Registered Public Accounting Firm.

Schedule IV

W. R. Berkley Corporation and Subsidiaries
Reinsurance
Years ended December 31, 2018, 2017 and 2016

(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, 2018					
Insurance	$ 6,959,830	$ 1,204,509	$ 197,540	$ 5,952,861	3.3%
Reinsurance	13,386	64,758	531,738	480,366	110.7%
Total	$ 6,973,216	$ 1,269,267	$ 729,278	$ 6,433,227	11.3%
Year ended December 31, 2017					
Insurance	$ 6,707,916	$ 1,153,960	$ 161,915	$ 5,715,871	2.8%
Reinsurance	18,113	62,495	589,019	544,637	108.1%
Total	$ 6,726,029	$ 1,216,455	$ 750,934	$ 6,260,508	12.0%
Year ended December 31, 2016					
Insurance	$ 6,634,540	$ 1,051,887	$ 160,967	$ 5,743,620	2.8%
Reinsurance	13,060	67,901	735,134	680,293	108.1%
Total	$ 6,647,600	$ 1,119,788	$ 896,101	$ 6,423,913	13.9%

See Report of Independent Registered Public Accounting Firm.

Schedule V

W. R. Berkley Corporation and Subsidiaries
Valuation and Qualifying Accounts
Years ended December 31, 2018, 2017 and 2016

(In thousands)	Opening Balance	Additions-Charged to Expense	Deduction-Amounts Written Off	Ending Balance
Year ended December 31, 2018				
Premiums and fees receivable	$ 39,926	$ 6,985	$ (7,817)	$ 39,093
Due from reinsurers	1,010	65	(128)	947
Deferred federal and foreign income taxes	16,619	18,772	(196)	35,195
Loan loss reserves	3,383	—	—	3,383
Total	$ 60,938	$ 25,822	$ (8,141)	$ 78,618
Year ended December 31, 2017				
Premiums and fees receivable	$ 26,569	$ 20,720	$ (7,363)	$ 39,926
Due from reinsurers	1,049	(29)	(10)	1,010
Deferred federal and foreign income taxes	5,457	12,663	(1,501)	16,619
Loan loss reserves	3,397	(14)	—	3,383
Total	$ 36,472	$ 33,340	$ (8,874)	$ 60,938
Year ended December 31, 2016				
Premiums and fees receivable	$ 22,524	$ 10,006	$ (5,961)	$ 26,569
Due from reinsurers	1,020	20	9	1,049
Deferred federal and foreign income taxes	4,037	1,420	—	5,457
Loan loss reserves	2,094	1,303	—	3,397
Total	$ 29,675	$ 12,749	$ (5,952)	$ 36,472

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, 2018, 2017 and 2016

(In thousands)	2018	2017	2016
Deferred policy acquisition costs	$ 497,629	$ 507,549	$ 537,890
Reserves for losses and loss expenses	11,966,448	11,670,408	11,197,195
Unearned premiums	3,359,991	3,290,180	3,283,300
Net premiums earned	6,371,505	6,311,419	6,293,348
Net investment income	674,235	575,788	564,163
Losses and loss expenses incurred:			
Current year	3,926,489	3,963,543	3,826,620
Prior years	6,831	(5,165)	(29,904)
Loss reserve discount accretion	41,382	43,970	49,084
Amortization of deferred policy acquisition costs	915,246	1,111,489	1,155,954
Paid losses and loss expenses	3,664,885	3,589,955	3,454,174
Net premiums written	6,433,227	6,260,508	6,423,913

See Report of Independent Registered Public Accounting Firm.

SERVING THOSE WHO SERVED

320 MILES WALKED

Dave from Berkley Industrial Comp completed the 320-mile Pennsylvania Hero Walk to benefit veterans.

Berkley salutes the millions of men and women who have proudly served our country though a variety of fundraising and service activities.

In addition to Dave's epic trek, a group from Union Standard spent the day cleaning headstones and performing ground maintenance at the Dallas-Fort Worth National Cemetery, which is the sixth National Cemetery to be built in Texas to meet the needs of veterans and their families. Berkley One hosted a Smooch Your Pooch photo challenge for employees across the country to pose with their dogs to raise money for K9s for Warriors, which helps pair veterans with service dogs.

"*It was humbling and such an honor to participate in the veterans' cemetery event. The weather was cold, wet and dismal, yet it couldn't compare to the hardships faced by those resting in this cemetery. We owe our freedom to men and women such as these, and this event allowed me to reflect on their sacrifice.*"

— Richard P., Director Premium Audit, Union Standard Insurance Group

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

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Michael G. Connor, *President*

RELIEF IN THE AFTERMATH OF DISASTERS

$160 BILLION

of economic impact from catastrophe-related damages in 2018.

When disasters strike, our people go beyond the business.

Each year, natural disasters affect millions of people across the globe, and Berkley team members do what they can to help others pick up the pieces. Through company-wide disaster relief fundraising efforts that are matched by the W. R. Berkley Corporation Foundation, operating unit-specific fundraisers and supply collections, and individuals lending a helping hand, the spirit of our people brings relief to those affected. Over the past 2 years, we have contributed more than $1 million to various worldwide relief organizations.

"*I am so proud to be part of the Berkley team, a compassionate and generous community of people who support the global community in times of crisis and throughout the year.*"

— Carol L., Senior Vice President, Human Resources, W. R. Berkley Corporation

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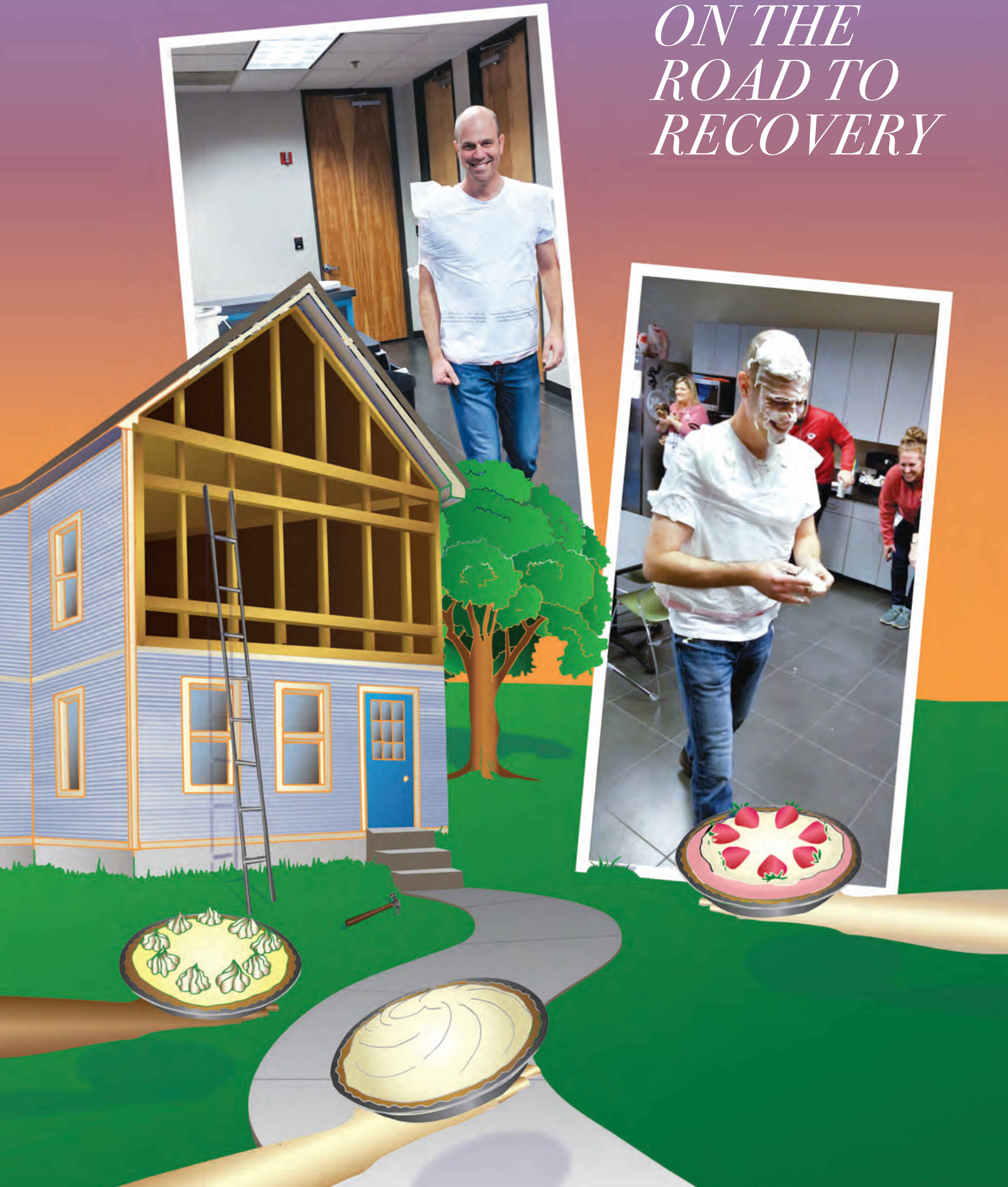
A HOME ON THE ROAD TO RECOVERY



10-RESIDENT TRANSITIONAL HOME

Employees at Intrepid Direct are raising funds to build a home for women recovering from drug and alcohol addiction.

To honor the memory of a friend and former colleague who was dedicated to helping others, business leaders took pies to the face at a fundraiser dedicated to making the dream of Emily's House a reality.

Emily's House is a planned 10-resident transitional home sponsored by Healing House in Kansas City, Missouri, focused on helping women recover from drug and alcohol addiction. Each year, Healing House provides help and healing to nearly 300 men and women in addiction recovery who are trying to transition back into society. Construction on Emily's House is underway and once it's completed, employees plan to volunteer whatever services are needed.

"Our entire organization, whether they knew Emily personally or not, came together to support a cause that was so near and dear to the hearts of many employees and of Emily's family. I'm grateful for the opportunity to contribute. It's comforting for everyone to know that Emily's spirit will live on in the help and hope that Emily's House will offer 10 women at a time."

— Jacci Z., Claims Specialist, Intrepid Direct

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OPPORTUNITIES FOR SPECIAL NEEDS INDIVIDUALS

16 PEOPLE

16 people attended a 5-hour workshop designed to help those with intellectual disabilities.

Berkley España dedicated their time to helping children and young adults with intellectual disabilities develop skills that will enable them to function at their highest level.

Fundación Prodis is a non-profit organization whose mission is to improve family, school, work and social integration of children and young adults with intellectual disabilities. The Berkley España team visited the facilities and participated in a workshop where they taught children how to make a notebook as part of their method for reading and writing skills. They are currently providing a work opportunity for a young woman who helps with electronic policy filing, mail, recording invoice data and many other tasks. Berkley España will also host a workshop that will teach Prodis students about insurance. As a gift, attendees will receive a personal accident policy for a year.

“*I am absolutely delighted to work with Paula. It has been a fantastic learning opportunity for me to discover new ways of mentoring, where I need to take into account not just her personality, but also her disability—or should I say, her possibilities! I am looking forward to continuing to work with her and to having her as my friend.*”

— Sandra O., Head of Underwriting Services, Berkley España

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COMBATTING HUNGER

128,000 MEALS

708 boxes and bags, 7,000 pounds, 2,787 items and 128,000 meals. While each Berkley company may count their donations differently, together we served thousands of hungry people in 2018.

Berkley team members support organizations that feed the hungry in their own backyards and across the globe.

Throughout our Company, we are doing our part to combat world hunger. Some contribute by preparing, delivering or serving meals to the people in our own communities through organizations like Meals on Wheels, The Banquet in South Dakota, Feed More in Virginia and Meals From the Heartland in Iowa. Many collect and donate to local food banks in Alabama, the Greater Boston Food Bank, the Foothills Food Bank in Arizona, Operation Food Search in St. Louis or the New Hampshire Food Bank. Still others provide meals for starving families in developing nations through organizations like Feed My Starving Children. The various volunteer events and food drives provide opportunities for our people to make a real difference in the lives of others, often while bonding with co-workers and local business partners.

> *“Volunteering with Feed More, our local foodbank and community kitchen, is rewarding and has afforded us the opportunity to help our community, raise awareness of Verus Underwriting Managers and strengthen our relationships with our clients.”*
>
> *— Sean W., Assistant Vice President of Marketing, Verus Underwriting Managers*

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FUNDING THE CURE

FINISHED IN 3RD PLACE

Along with her colleagues, Berkley Canada's marketing director participated in the CIBC Run for the Cure. Of the 12 Berkley employees who ran, she finished the race in 3rd place while five months pregnant and pushing her toddler son in a stroller.

Berkley Canada employees ran for the cure.

The CIBC Run for the Cure, which has partnered with the Canadian Cancer Society (CCS), is a 5k or 1k run/walk to help raise vital funds for breast cancer. It takes place in 56 locations across Canada and has become the largest single-day volunteer event in Canada to support breast cancer. Several Berkley Canada employees participated in the Toronto run, which took place in September. For those who did not participate in the actual race, Berkley Canada held a 50/50 drawing, and donated the proceeds to the Canadian Breast Cancer Foundation.

"*The CIBC Run for the Cure event was a great way to show our support for one of our colleagues who was diagnosed with breast cancer earlier in the year. It was nice to see how many people rallied behind her, whether through donations, walking or raffles. Their support is a reflection of the amazing people who work here.*"

— Daniela F., Specialty Lines Complex Claims Director, Berkley Canada

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The Annual Meeting of Stockholders of W. R. Berkley Corporation will be held at 1:00 p.m. on June 6, 2019 at the offices of W. R. Berkley Corporation, 475 Steamboat Road, Greenwich, Connecticut 06830.

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Common Stock of W. R. Berkley Corporation is traded on the New York Stock Exchange.
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“Always do right.
This will gratify some people
and astonish the rest.”
—Mark Twain—

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