MUNICH RE AMERICA CORPORATION

Annual Report For The Fiscal Year Ended December 31, 2018

(Pursuant to Section 4.04 of the
Indenture between the Company and the
holders of the Company's 7.45% Senior Notes*)

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*IN MARCH 2002 THE COMPANY DEREGISTERED THE NOTES IN ACCORDANCE WITH THE RULES AND REGULATIONS OF THE SECURITIES AND EXCHANGE ACT OF 1934. THIS FINANCIAL REPORT IS NOT FILED WITH THE SECURITIES AND EXCHANGE COMMISSION.

March 29, 2019

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Unless indicated otherwise, all financial data presented herein are derived from or based on Munich Re America Corporation's consolidated financial statements prepared in accordance with accounting principles generally accepted in the United States of America ("GAAP"). Statutory data, where specifically identified as such, is presented on a combined basis for Munich Reinsurance America, Inc., American Alternative Insurance Corporation, and The Princeton Excess and Surplus Lines Insurance Company. (These companies together are the "insurance subsidiaries"). The statutory data are derived from statutory financial statements. Such statutory financial statements are prepared in accordance with statutory accounting principles, which differ from GAAP.

Business

The Company and Munich Reinsurance America, Inc.

Munich Re America Corporation (the "Company"), is the holding company for various reinsurance and insurance entities which provide reinsurance, insurance and related services to insurance companies, commercial businesses, government agencies, and self-insurers in the United States. The Company is one of the largest property and casualty reinsurers in the United States according to the Reinsurance Association of America, based on combined statutory gross premiums written by the insurance subsidiaries of $5,505.0 million in 2018. The Company's principal subsidiary, Munich Reinsurance America, Inc., a Delaware insurance company founded in 1917, primarily underwrites property and casualty reinsurance. Other subsidiaries of the Company are American Alternative Insurance Corporation, which writes primary insurance business on an admitted basis ("AAIC") and The Princeton Excess and Surplus Lines Insurance Company, which writes insurance coverage on a non-admitted basis ("Princeton E&S"). The Company had total assets of $23,472.5 million and stockholder's equity of $3,292.1 million at December 31, 2018. The Company and its subsidiaries employed 964 persons as of December 31, 2018.

The Company is a subsidiary of Münchener Rückversicherungs-Gesellschaft Aktiengesellschaft in München ("Munich Re"), a company organized under the laws of Germany. Munich Re is the world's largest reinsurance company, based on 2017 net premiums written, according to *Standard & Poor's.* The Munich Re Group, led by Munich Re, includes primary insurance operations under the ERGO Insurance Group, reinsurance subsidiaries, branches, service companies and liaison offices serving corporate clients with over 43,000 employees throughout the world.

Our Strategy

Our strategy is to achieve the full potential of the U.S. property-casualty market through underwriting excellence and sustainable profitable growth over the course of the market cycle. The strategy seeks to increase its profitability through direct and broker reinsurance as well as primary insurance by:

- employing a client-centric approach to develop reinsurance solutions that leverage Munich Re's expertise and risk appetite;
- developing closer broker relationships to support clients' needs;
- building a dominant presence in niche primary insurance segments.

Our business model consists of two business segments, Reinsurance Division and Specialty Markets, a business unit within Munich Re Specialty Insurance. The reinsurance segment is comprised of (i) Client Management, responsible for managing client and broker relationships; (ii) National Clients Underwriting, which focuses on property and casualty underwriting for large national clients; (iii) Regional Client Underwriting, which underwrites property and casualty business for regional clients, including facultative business, on a direct basis and through reinsurance intermediaries; and (iv) Specialty Lines business (credit, ocean marine and professional liability) written directly and through reinsurance intermediaries. Specialty Markets focuses on 1) Alternative Market entities including large self-insurers, captives, risk retention groups, governmental entities, and pools, and 2) Insurance Programs where licensed program administrators underwrite the individual policies within a program and the programs are underwritten on a on a portfolio basis. The insurance is provided usually through AAIC, Princeton E&S, or other affiliate insurers. A variety of reinsurance and insurance products and solutions are provided by Specialty Markets to these client groups.

Other Products and Services

The Company offers a full range of property and casualty insurance coverage including property, general liability, professional liability, umbrella, commercial multi-peril, workers' compensation, auto liability and physical damage, surety, marine, construction, and errors and omissions, through its subsidiaries AAIC and Princeton E&S.

In 2017, Munich Re announced its intention to reorganize the life and health lines of business. As a result, Munich Reinsurance America Inc. is terminating its activity in Medical Excess, HMO Reinsurance and the Health Program reinsurance.

Risk Factors

In the course of conducting its business operations, the Company could be exposed to a variety of risks. Some of the significant risks that could affect the Company's business, financial condition or results of operations are as follows:

Adequacy of loss reserves. The Company regularly establishes reserves to cover its estimated liabilities for losses and loss adjustment expenses for both reported and unreported claims. These reserves do not represent an exact calculation of liabilities. Rather, these reserves are management's estimates of the cost to settle and administer claims. These expectations are based on facts and circumstances known at the time, predictions of future events, estimates of future trends in the severity and frequency of claims, and judicial theories of liability and inflation. The establishment of appropriate reserves is an inherently uncertain process, and the Company cannot be sure that ultimate losses and related expenses will not materially exceed the Company's reserves. To the extent that reserves prove to be inadequate in the future, the Company would have to increase its reserves and incur a charge to earnings in the period such reserves are increased, which could have a material and adverse impact on our financial condition and results.

Accumulation of event losses. The Company is exposed to large event losses that may accumulate across the portfolio. Examples of event losses include natural catastrophes, terrorism, pandemic, and cyber security breaches.

Market Volatility and Changes in Interest Rates. Financial market volatility, such as has occurred in the past, resulting in a negative economic impact may adversely affect our investment portfolio which primarily consists of fixed income securities (such as corporate debt securities and U.S. government securities). The fair value of securities in the investment portfolio may fluctuate depending on general economic and market conditions or events related to a particular issuer of securities. In addition, the Company's fixed income investments are subject to risks of loss upon default and price volatility in reaction to changes in interest rates. These factors could cause us to realize less than expected returns on invested assets, sell investments for a loss or write off or write down investments. These changes in the fair value of securities in the investment portfolio are reflected in the consolidated financial statements and, therefore, could affect the Company's financial condition or results.

Credit risk. The Company is exposed to loss from the failure of counterparties to meet their financial obligations to the Company, or the failure to meet them in a timely fashion. The Company is exposed to credit risks on both sides of the balance sheet. In addition to the credit risks of the investment portfolio, the Company is exposed to losses on receivables from transactions with clients or on the business we cede externally through reinsurance or retrocession. The Company is also exposed to losses through the active assumption of credit risk from the writing of surety and political risk business.

Competition. We compete in the United States reinsurance and insurance markets. These markets are highly competitive with no single competitor dominating any of the principal markets in which we operate. Competition in the markets in which we engage is based on many factors, including the perceived overall financial strength of the reinsurer, premiums charged, contract terms and conditions, services offered, speed of claims payment and reputation and experience. Our competitors include independent reinsurance companies, subsidiaries or affiliates of established worldwide insurance companies, some of which have greater financial resources than we do, and the capital markets.

Risks related to Regulation. Munich Reinsurance America, Inc. is domiciled in Delaware and licensed to transact insurance or reinsurance business in all fifty states and the District of Columbia. AAIC is also domiciled in Delaware and is licensed to transact insurance or reinsurance business in all fifty states and the District of Columbia. Princeton E&S is licensed as a domestic surplus lines insurer in its state of domicile, Delaware, and is eligible to

write insurance on a non-admitted basis in all other states. The Delaware Insurance Department ("the Insurance Department") is the domiciliary regulator for the insurance subsidiaries.

The regulation and supervision to which we are subject relate primarily to licensing requirements, the standards of solvency that must be met and maintained, the nature of and limitations on investments, restrictions on the size of risks which may be insured, deposits of securities for the benefit of ceding companies, methods of accounting, periodic examinations of the financial condition and affairs of the insurance subsidiaries, and the form and content of financial statements required to be filed with state insurance regulators. In general, such regulation is for the protection of the ceding companies and, ultimately, their policyholders, rather than security holders. As writers of direct insurance, the Company's insurance subsidiaries (AAIC and Princeton E&S) are also subject to substantial laws and regulations with respect to their coverages and operations. Additionally the Company is subject to changing cybersecurity requirements at both the state and federal level. Management believes that the insurance subsidiaries are in material compliance with all applicable laws and regulations pertaining to their business and operations.

New Regulatory Initiatives. Although, in the United States, the business of insurance is regulated by state insurance authorities, the federal government has increased its involvement in the insurance regulatory framework in recent years. Current and proposed federal measures that may significantly affect the Company's business and the market as a whole include federal regulation of insurance companies, systemic risk regulation, federal terrorism insurance, tort reform, natural catastrophes, corporate governance, data breach, cyber security, health care reform including changes in the Affordable Care Act, medical malpractice reform and patients' rights, privacy, international trade, and the taxation of insurance companies. We cannot predict what impact, if any, these or other new initiatives or legislation will have on us.

Systemic Risk Regulation. The Financial Stability Oversight Council ("FSOC") created pursuant to the Dodd-Frank Wall Street Reform and Consumer Protection Act ("Act") is charged with the responsibility for identifying systemically risky financial institutions, including nonbank (e.g., insurance and reinsurance) financial organizations. If designated as systemically significant by the FSOC, these companies will be subject to enhanced prudential regulation, including increased capitalization requirements. For insurers/reinsurers, such designation carries the threat of dual regulation at both the federal and state levels.

The FSOC has adopted rules and guidance that govern the process for determining whether or not an insurer/reinsurer presents a systemic risk. The proposed guidance establishes a three stage procedure that progressively screens out companies which, based on various financial metrics and risk characteristics, are unlikely to threaten the nation's overall financial stability if such companies were to suffer financial impairment. As an example, stage one criteria would eliminate financial institutions that have less than $50 billion in consolidated assets. Further, institutions that meet the $50 billion threshold would have to exceed at least one of the additional secondary thresholds applicable to (1) credit default swaps outstanding; (2) derivative liabilities; (3) loans and bonds outstanding; (4) asset/equity leverage, or (5) short term debt.

Application of the FSOC quantitative thresholds to the Munich Re U.S. based operations indicates that these operations should be excluded from further consideration as presenting a systemic risk. However, it should be noted that the FSOC also is permitted to apply more subjective qualitative standards when making its systemic risk determinations.

Flood Reform. The National Flood Insurance Program ("NFIP") is scheduled to expire on May 31, 2019. Since September 30, 2017, the NFIP has been reauthorized ten times on a short-term basis. There is strong bipartisan support for the reauthorization of the NFIP, although it is not clear whether the reauthorization can be a long-term reauthorization and whether it can include reforms that require resilience incentives or risk adequate pricing for NFIP risks. It also is possible that the reauthorization statute will not grant to FEMA the authority to renew reinsurance protection for tis NFIP risks; however, we believe that, given the performance of FEMA's reinsurers in the aftermath of 2017 flood events in the US, Congress will authorize FEMA to continue to purchase reinsurance.

Group Capital Requirements. Group capital requirements continue to be a focus of regulators, both in the United States and internationally. In the United States, the National Association of Insurance Commissioners ("NAIC") is moving forward with the development of a group capital calculation. This group capital calculation will be based on the aggregation of the RBC calculations for each legal entity within an insurance group. The NAIC has not finalized details of this group capital calculation, including whether subsidiaries/subgroups of non-U.S. insurance groups will be subject to the group capital calculation.

Separately, the Federal Reserve Board of Governors ("Fed") is working to develop a group capital standard that would apply to Systematically Important Financial Institutions ("SIFIs") and thrifts that are subject to supervision by the Fed under Dodd-Frank. While we do not anticipate that we will be subject to regulation by the Fed, the Fed's work to develop a capital standard could influence regulation of insurers in the U.S.

Internationally, the International Association of Insurance Supervisors ("IAIS") continues to work to develop a group capital standard for internationally active insurance groups. We are monitoring the IAIS's progress and working with Munich Re to develop and disseminate the group position regarding the IAIS work streams.

Investment Limitations. The Delaware Insurance Code contains rules governing the types and amounts of investments that are permissible for a Delaware insurer, including the insurance subsidiaries. These rules are designed to ensure the safety and liquidity of the insurer's investment portfolio.

Risk Based Capital. The Insurance Department has a risk based capital ("RBC") standard for property and casualty insurance (and reinsurance) companies which measures the amount of capital appropriate for a property and casualty insurance company to support its overall business operations in light of its size and risk profile. At December 31, 2018, Munich Reinsurance America, Inc.'s RBC ratio was 298.6%, compared to 341.2% at December 31, 2017. An RBC ratio in excess of 200% generally requires no regulatory action. AAIC's and Princeton E&S's RBC ratios were also in excess of 200% at December 31, 2018 and 2017.

Dividends. Because the operations of the Company are conducted primarily through its insurance subsidiaries, the Company is dependent upon management service agreements and dividends from the insurance subsidiaries to meet its debt service obligations. The payment of dividends to the Company by the insurance subsidiaries is subject to limitations imposed by the Insurance Department of the State of Delaware (the "Insurance Department"), including the requirement that dividends be paid from available unassigned funds, as set forth in the most recent annual statement of the insurer. Based on these limitations, Munich Reinsurance America, Inc. cannot pay dividends in 2019 without the prior approval of the Insurance Department.

Statutory Financial Condition Examinations. As part of its general regulatory oversight process, the Insurance Department usually conducts financial condition examinations of domiciled insurers and reinsurers every three to five years, or at such other times as is deemed appropriate by the Insurance Commissioner. In 2017, the Insurance Department completed the regularly scheduled financial condition examination of the Company's insurance subsidiaries for the financial period 2013 through 2016. The Insurance Department's final examination reports were received in 2018, with no adverse findings.

Insurance Regulatory Information System Ratios. The National Association of Insurance Commissioners annually calculates thirteen financial ratios to assist state insurance departments in monitoring the financial condition of insurance companies. Results are compared against a "usual range" of results for each ratio, established by the NAIC. In 2018 Munich Reinsurance America, Inc. had four ratios outside of the usual range. The two-year overall operating ratio was 108.0% compared to the usual range of 100% or less. The change in adjusted policyholders' surplus was negative 14.0% compared to the usual range of a decline of 10.0% and an increase of 25.0%. The adjusted liabilities to liquid assets ratio was 111.0% compared to the usual range of 100% or less. The estimated current reserve deficiency to policyholders' surplus was 39.0% compared to the usual range of 25.0%. The results in these four ratios is generally attributable to the significant property catastrophe losses incurred in 2018 and 2017. Management believes the results of these ratios do not indicate a trend and are not an indication of financial concern.

Collateralization Requirements. Ceding companies may, at times, require reinsurers to collateralize their obligations. The Company's policy against generally providing collateral to support its reinsurance transactions could detract from the Company's ability to compete for some clients' business.

Changing Climate Conditions. Global climate change has added, and will continue to add, to the unpredictability, frequency and severity of natural disasters (including, but not limited to, hurricanes, tornadoes, freezes, other storms and fires) in certain parts of the world. In response to these changes, a number of legal and regulatory measures as well as social initiatives have been introduced in an effort to reduce greenhouse gas and other carbon emissions which may be chief contributors to global climate change. We cannot predict the impact that changing climate conditions, if any, will have on our results of operations or our financial condition. Moreover, we cannot predict how legal, regulatory and social responses to concerns about global climate change will impact our business.

Information Systems. Our business is dependent upon the successful functioning and security of our global information systems and those of our business partners. Among other things, we rely on these systems to interact with clients and producers, to perform actuarial and other modeling functions, to underwrite business, to prepare contracts and process premiums, to process claims and make claims payments, and to prepare internal and external financial statements and information. A significant failure of these systems, whether because of a breakdown, natural disaster or a cyber-attack on these systems, could significantly impair our ability to perform such functions on a timely basis. If sustained or repeated, such a business interruption, system failure or service denial could have a material adverse effect on our business. While security and IT controls, along with other preventative measures, reduce the risk of cyber incidents and protect our information technology, they may be insufficient to prevent cyber-attacks and/or other security breaches to our computer systems. In addition, a security breach of our computer systems could damage our reputation or result in material liabilities. The Company views the threat of cyber security incidents as increasing.

Data Protection and Cyber Security Regulation. We are subject to U.S. and foreign laws and regulations that require financial institutions and other businesses to protect the security and confidentiality of personal information and provide notice of their practices relating to the collection and disclosure of personal information. We also are subject to laws and regulations requiring notification to affected individuals and regulators of security breaches. In addition, we must comply with laws and regulations regarding the cross-border transfer of information. In October 2017, the NAIC adopted the Insurance Data Security Model Law, which would require insurers, insurance producers and other entities required to be licensed under state insurance laws to develop and maintain a written information security program, conduct risk assessments, oversee the data security practices of third-party service providers and other related requirements. The model law has been adopted in SC, OH and MI and has been proposed for legislation in LA, MD, NV, RI and VT. It is not clear whether or not, or in what form, the Insurance Data Security Model Law will be adopted by states in which we have licensed insurers and other licensed subsidiaries.

Effective March 1, 2017, the NYDFS promulgated a cybersecurity regulation requiring covered financial services institutions to implement a cybersecurity program designed to protect information systems. The regulation imposes specific technical safeguards as well as governance, risk assessment, monitoring and testing, third party service provider incident response and reporting and other requirements. The regulation sets forth transitional periods for compliance with different sections of the regulation through early 2019. Requirements under the NYDFS' cybersecurity regulation are similar to those under the NAIC Insurance Data Security Model Law.

Significant other comprehensive privacy laws have been enacted, most notably the California Consumer Privacy Act ("CCPA"), which may affect our use of data and could affect our operations and subject us to fines and actions for noncompliance.

Tax Issues. On December 22, 2017, the Tax Cuts and Jobs Act (the "Act" or "tax reform") was enacted into law and included a broad range of tax reform proposals affecting businesses, including reducing the corporate income tax rate from 35% to 21% and changing business deductions and international tax provisions. There were also substantial changes to tax loss discounting, which will be phased in over eight years, proration of interest and dividend income received, and the repeal of the alternative minimum tax. Many of the new tax provisions significantly differ from current tax law. The tax accounting impact of the Act was recorded in 2017 and significantly increased tax expense for the year.

The Act also introduced a new minimum tax, known as the base erosion and anti-abuse tax ("BEAT"), on international payments as a means to reduce the ability of multi-national companies to erode the U.S. tax base through deductible related-party payments. The Company is subject to the BEAT in 2018 and has terminated several related party reinsurance programs with its foreign affiliates to minimize its BEAT liability.

Legal Proceedings

The Company is involved in non-claim litigation incidental to its business principally related to insurance company insolvencies or liquidation proceedings in the ordinary course of business. Also, in the ordinary course of business, the Company is sometimes involved in adversarial proceedings incidental to its insurance and reinsurance business. The amounts at risk in these proceedings are taken into account in setting loss reserves. Based upon its familiarity with or review and analysis of such matters, the Company believes that none of the pending litigation matters will have a material adverse effect on the consolidated financial statements of the Company. However, no assurance can be given as to the ultimate outcome of any such litigation matters.

Operating Controls

Forecasting and Results Monitoring. To establish appropriate loss ratios for future periods, the Company first quantifies the condition of the current portfolio. Then the Company considers the impact of market conditions to establish prudent loss ratios for the prospective period. The intent is to establish loss reserves which are sufficient in aggregate to fund future claim payments and to avoid the need for future reserve increases after the end of the period.

Once the planning process is complete, the Company begins a rigorous results monitoring process to ensure that assumptions employed in building plan figures hold true. The key metrics that are monitored over the course of the year include: effective rate change on primary and reinsurance renewals; adherence to pricing guidelines; mix of business (including concentration levels in special risk areas); commission levels; and premium production. The Company also compares pricing ultimate loss ratio assumptions to reserving ultimate loss ratio assumptions for the current and previous underwriting years. In addition, the Company reviews its largest client groups to ensure that the relationships are yielding results that are consistent with the Company's strategy. The focus is on maintaining appropriate underwriting standards and sustainable profitability.

To ensure that prior year reserves are adequate, the Company frequently monitors the emergence of actual reported and paid losses as compared to projected amounts. If actual paid and reported figures are higher or lower than the amounts expected, then this information may be an indicator that loss reserves may need to be adjusted. This information is used to supplement the formal reserve reviews conducted by the Company's actuarial staff. The objective is to continuously have an adequate reserve position and integrity in the balance sheet at the close of each financial period.

The Company believes the planning and results monitoring process addresses many of the inherent risks associated with the property and casualty reinsurance product. Specifically, the reinsurance product is priced and sold using estimates of the ultimate costs to be incurred by the reinsurance company. The final costs are only known in hindsight. To ensure that financial statements are appropriately stated, the Company must continually re-examine the assumptions and data leading to the estimates of these ultimate costs. This estimation process is particularly difficult for reinsurance providers given the complexity of many factors involved, including: lengthy reporting and settlement lags associated with liability cases and evolving judicial decisions which can expand liability for reinsurers.

Aggregate Controls. The Company closely manages and monitors its aggregations. Risk management aggregation budgets have been established for natural catastrophe, terrorism, professional liability, political risk, worker's compensation losses resulting from natural perils, trade credit and multiple cyber security risk scenarios. Additional risk concentration exposures are continually being evaluated. The Company works closely with the Corporate Underwriting unit of Munich Re to establish global aggregation budgets, and usage is monitored on a quarterly basis. The Company also uses group expertise in addition to industry accumulation risk modeling tools to price and model the Company's natural peril, terrorism and pandemic exposures.

Underwriting Audit Process. The Company has an extensive internal underwriting audit process and works closely with the Corporate Underwriting unit of Munich Re in order to monitor adherence to underwriting and pricing guidelines and maintain best practices. Supplementing the on-site audit process is an individual account review of hand-selected programs as needed.

Enterprise Risk Management ("ERM"). Risk Management is a key part of our corporate management. Its purpose is to safeguard the Company's financial strength, enable the Company to meet its obligations to clients and create sustained value for our shareholder. The Integrated Risk Management ("IRM") Division's role is to

implement the group-wide ERM framework locally through the coordination of decentralized risk management processes into the group framework. Risk governance is overseen by a Risk Management Committee which reports into the Board. Risk topics considered by the Risk Management Committee include the full scope of risk that would be faced by the enterprise including: underwriting, market, credit, operational, liquidity, strategic, and reputational. IT and Cyber Security Risks are regularly discussed with the Board and Risk Management Committee. The members of the Risk Management Committee include specialists from the Company's insurance and reinsurance areas as well as representatives from corporate functions. The scope of Risk Management activities overseen by IRM includes identification, measurement, risk strategy development, risk control, and disclosure.

The ERM framework balances regulatory and rating agency requirements with business objectives and culture. The Company utilizes the group-wide internal control system ("ICS") for managing operational risks across all risk dimensions. The ICS satisfies group management needs as well as local regulatory requirements of the Model Audit Rule and links risks, processes and relevant risk controls. The ICS ensures that appropriate internal controls are set up and maintained for operational, compliance, and financial risks enabling us to ensure that financial reporting is reliable and our published financial statements are correct.

In addition to the risk management activities listed above, Munich Reinsurance America, Inc. follows a group-wide liability driven investment process and closely manages and monitors its investment risks within tolerances and limits established at Munich Re as part of an overall Asset Liability Management framework.

In response to the dynamic changing threat environment and regulatory changes the Company has strengthened its controls to manage cyber security risks. A number of IT tools have been implemented to allow the organization to prevent and detect cyber incidents. Additionally, Munich Reinsurance America, Inc. has developed and tested processes and procedures to manage cyber incidents when they occur.

Selected Financial Information of the Company

Set forth below are five years of selected financial information derived from the audited consolidated financial statements and related notes of the Company. For additional information, see the Consolidated Financial Statements of the Company, and the related notes thereto included elsewhere in this report.

		Restated [4]			
	2018	2017	2016	2015	2014
	(Dollars in millions)				
Operating Data:					
Net premiums written	$ 5,271.9	$ 4,172.1	$ 3,127.5	$ 3,120.1	$ 3,260.7
Net premiums earned	5,065.5	3,502.0	3,051.3	3,104.3	3,331.2
Losses and LAE [1]	3,753.4	2,886.9	1,673.2	1,920.7	1,843.7
Underwriting expenses	1,778.3	1,128.0	970.3	1,004.7	979.1
Underwriting gain (loss) [2]	(466.2)	(512.9)	407.8	178.9	508.4
Net investment income	387.8	331.6	288.2	336.4	362.6
Net realized capital gains (losses)	(117.9)	(34.8)	83.9	67.2	123.3
Interest expense	25.2	25.5	25.7	25.7	25.7
Income (loss) before income taxes	(211.9)	(271.6)	724.6	587.6	956.7
Income taxes (benefit)	(12.2)	141.0	78.9	156.1	249.3
Net income (loss)	(199.7)	(412.6)	645.7	431.5	707.4
Other GAAP Operating Data [3]:					
Loss and LAE ratio	74.1 %	82.4 %	54.8 %	61.9 %	55.3 %
Underwriting expense ratio	35.1	32.2	31.8	32.3	29.4
Combined ratio	109.2 %	114.6 %	86.6 %	94.2 %	84.7 %
Balance Sheet Data (at end of period):					
Total investments and cash	$ 13,553.6	$ 13,605.2	$ 13,191.1	$ 13,275.9	$ 13,375.3
Reinsurance recoverables	3,855.5	5,286.6	5,418.0	5,986.0	5,555.7
Total assets	23,472.5	25,596.3	24,976.2	25,570.9	23,632.3
Loss and LAE reserves	12,335.4	12,464.3	11,661.3	12,003.6	11,560.2
Funds held under reinsurance treaties	3,111.8	4,505.5	4,474.4	4,219.3	3,240.4
Deferred underwriting revenue	1,553.6	1,644.1	1,723.8	2,052.8	2,072.4
Senior notes	331.7	331.5	339.4	339.2	339.1
Stockholder's equity	3,292.1	3,432.8	3,962.5	4,036.0	4,375.6

(1) "LAE" means loss adjustment expenses.
(2) A company's underwriting gain or loss is measured by its premiums earned, net of losses and LAE incurred and underwriting expenses.
(3) GAAP loss and LAE ratio represents the sum of losses and LAE as a percentage of net premiums earned. GAAP underwriting expense ratio represents underwriting expenses as a percentage of net premiums earned. GAAP combined ratio represents the sum of the GAAP loss and LAE ratio and GAAP underwriting expense ratio. See *"Management's Discussion and Analysis of the Company's Results of Operations and Financial Condition."*
(4) Selected financial information has been restated to reflect the retrospective presentation impacts of new accounting standard ASU 2017-07, *Presentation of Net Periodic Pension Cost and Net Periodic Postretirement Benefit Cost*. See Note 2C in the Notes to Consolidated Financial Statements.

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

Executive Overview

Munich Re America Corporation (the "Company"), is the holding company for various reinsurance and insurance entities that provide reinsurance, insurance and related services to insurance companies, commercial businesses, government agencies, and self-insurers in the United States. The Company's principal subsidiary, Munich Reinsurance America, Inc., a Delaware insurance company, primarily underwrites property and casualty reinsurance. The Company is one of the largest property and casualty reinsurers in the United States according to the Reinsurance Association of America, based on combined statutory gross premiums written by the insurance subsidiaries of $5,505.0 million in 2018. The Company had total assets of $23,472.5 million and stockholder's equity of $3,292.1 million at December 31, 2018.

The Company's strategy is to achieve the full potential of the U.S. property-casualty market through underwriting excellence and sustainable profitable growth over the course of the market cycle. Management's review of financial results focuses on its property and casualty ("P&C") business segments, comprised of its Reinsurance and Specialty Markets divisions. The underwriting results of business segments in run-off, retrocessional programs designed to protect the overall surplus of Munich Reinsurance America, Inc., health care business, and certain business written on behalf of Munich Re and its affiliated companies, are not included in the P&C results.

Revenues

Revenues are derived principally from the following:

- net premiums earned, which are gross premiums assumed from clients, earned during the accounting period, net of premiums ceded to retrocessionnaires;
- net investment income earned on invested assets;
- net realized capital gains on the sale of investments, and
- other income, which includes interest income on underwriting balances, margin income on underwriting deposit balances, and net foreign exchange gains on foreign currency-denominated assets and liabilities other than investments.

Expenses

Expenses consist predominately of the following:

- losses and loss adjustment expenses, including estimates for losses and loss adjustment expenses incurred during the period and changes in estimates from prior periods, net of those insurance losses and loss adjustment expenses ceded to retrocessionnaires and the recognition of previously recorded deferred loss benefits;
- commissions and other underwriting expenses, which consist of commissions paid to clients, in addition to operating expenses related to the production and underwriting of reinsurance, less ceding commissions received under the Company's retrocessional contracts;
- interest expense on debt obligations,
- interest on ceded funds held balances, predominantly on retrocessional programs with Munich Re, and
- other expenses, which include allowance for doubtful accounts and net foreign exchange losses on foreign currency-denominated assets and liabilities other than investments.

Results of Operations

Certain components of the Company's Results of Operations for the years ended December 31, 2017 and 2016, have been restated to reflect the reclassification of defined benefit plan costs from compensation to other expense, based on new accounting guidance. The Company's overall net income to its common stockholder for these periods was not impacted by these reclassifications. See Note 2C – Application of New Accounting Standards, *Presentation of Net Periodic Pension Cost and Net Periodic Postretirement Benefit Cost,* on F-8 for additional information.

Year Ended December 31, 2018 Compared with Year Ended December 31, 2017

Underwriting Results and Combined Ratio

A key measure of the financial success of a reinsurance company is a positive underwriting result, or an underwriting profit. A major goal of a successful reinsurance company is to produce an underwriting profit, exclusive of investment income. A company's underwriting result is measured by its premiums earned, net of losses

and LAE incurred and underwriting expenses. If underwriting is not profitable, investment income must be used to cover underwriting losses.

Combined ratio is also an industry-wide measure of a reinsurance company's profitability. Combined ratio is the sum of the loss ratio and the underwriting expense ratio. The combined ratio is calculated, on a GAAP basis, as the sum of the losses and loss adjustment expenses incurred and underwriting expenses, divided by net premiums earned. These ratios are relative measurements that describe the cost of losses and expenses for every $100 of net premiums earned. The combined ratio presents the total cost per $100 of premium production. A combined ratio below 100% demonstrates underwriting profit; a combined ratio above 100% demonstrates underwriting loss.

In addition to reviewing the overall underwriting results and ratios of the Company at a corporate, or consolidated financial statement level, management focuses on the P&C business segments in evaluating the underwriting performance of the Company. The underwriting results of business segments in run-off, retrocessional programs designed to protect the overall surplus of Munich Reinsurance America, Inc., health care business, and certain business written on behalf of Munich Re and its affiliated companies, are not included in the P&C results.

The underwriting results and combined ratios for the Company for the years ended December 31, 2018 and 2017, are as follows:

	2018	2017
	(Dollars in millions)	
Premiums earned	$ 5,065.5	$ 3,502.0
Less: Losses and LAE	3,753.4	2,886.9
Commission expense	1,531.8	891.8
Operating expense	246.5	236.2
Underwriting loss	$ (466.2)	$ (512.9)
Loss ratio	74.1 %	82.4 %
Expense ratio	35.1	32.2
Combined ratio	109.2 %	114.6 %

In 2018 the Company reported an underwriting loss of $466.2 million for the year, compared to an underwriting loss of $512.9 million in 2017. These underwriting losses are primarily the result of natural catastrophe loss events in both years.

Financial Statement Results

The Company's net loss to its common stockholder was $199.7 million for the year ended December 31, 2018, compared to net loss of $412.6 million for the same period in 2017.

Revenues

Premiums. Gross premiums written for the year ended December 31, 2018 decreased to $5,514.0 million from $5,787.2 million for 2017. This decrease is primarily attributable to lower premium writings as a result of the termination of certain business written on behalf of Munich Re and its affiliated companies, partially offset by an increase in premium writings in the Reinsurance segment.

Net premiums written by the Company's P&C business segments, which exclude certain corporate retrocessional programs, increased 34.9% to $4,781.7 million for the year ended December 31, 2018, from $3,544.8 million for the same period in 2017. The Reinsurance segment experienced a 42.2% increase in net premiums written to $3,943.8 million for the year ended December 31, 2018, from $2,772.9 million for the same period in 2017. This increase is generally attributable to an increase in new business growth in the property and casualty lines of business, in addition to growth in existing business. The Specialty Markets segment experienced an 8.6% increase in net premiums written to $837.9 million for the year ended December 31, 2018, from $771.9 million for the same period in 2017. This increase is the result of an increase in the property line of business. The increase in premiums written by the P&C segments was offset by a $137.1 million decrease in net premiums written for business not included in the P&C segments, resulting in a 26.4% increase in consolidated net premiums written to $5,271.9 million for the year ended December 31, 2018, from $4,172.1 million for the same period in 2017.

The Company's net premiums earned increased 44.6% to $5,065.5 million for the year ended December 31, 2018, from $3,502.0 million for the same period in 2017. The increase in premiums earned resulted from the increase in net premiums written, coupled with the timing of the earnings of premiums in force.

Investment Income. Net investment income increased 16.9% to $387.8 million for the year ended December 31, 2018, from $331.6 million for the same period in 2017. This increase is primarily due to higher average book yields on fixed income securities and increased income from treasury inflation-protected securities and foreign exchange forward contracts, partially offset by decreased income from other invested assets.

The Company realized net capital losses of $117.9 million for the year ended December 31, 2018, compared to net capital losses of $34.8 million for the same period in 2017. The 2018 period included net capital losses of $104.2 million on the sale of fixed income securities and write-downs of $13.7 million of investments, as the decline in fair value was considered to be other-than-temporary. The 2017 period included write-downs of $51.5 million of investments, as the decline in fair value was considered to be other-than-temporary, partially offset by net capital gains of $16.7 million recognized on the sale of fixed income securities.

Other Income. Other income decreased 7.1% to $41.7 million for the year ended December 31, 2018, from $44.9 million for the same period in 2017. This decrease was attributable to a decrease in interest income on assumed funds held, due to termination of certain business with a Munich Re branch, and a 2017 reduction in the loss reserve for a reinsurance contract accounted for as a deposit that did not recur in 2018. These decreases were partially offset by a reduction in the provision for uncollectible accounts and increased foreign exchange gains on the company's foreign currency denominated assets and liabilities.

Expenses

Losses and Loss Adjustment Expenses. Net losses and LAE incurred increased 30.0% to $3,753.4 million for the year ended December 31, 2018, from $2,886.9 million for the same period in 2017. This increase was primarily attributable to a $779.3 million increase in current accident year loss and LAE in 2018 primarily due to the increase in net premiums earned in 2018. Current accident year property catastrophe losses were $703.3 million for the year ended December 31, 2018, predominately from Hurricanes Florence and Michael, and the California wildfires, compared to $780.2 million for the year ended December 31, 2017, also from hurricanes and wildfires. Prior accident year losses and LAE were reduced by $138.1 million in 2018, compared to a $223.9 million reduction in 2017.

Reflecting the indications of the Company's ongoing monitoring of loss reserves and its in-depth annual reserve review, in 2018 the Company decreased loss and LAE reserves for prior accident years by $183.0 million, excluding the impact of certain corporate retrocessional programs with Munich Re. This decrease is predominantly attributable to the workers compensation line of business.

The decreased losses resulted in decreased cessions to various corporate retrocessional programs with Munich Re. The reserve decrease of $183.0 million, coupled with the recognition of previously deferred loss benefits, were partially offset by the reduced cessions, and resulted in an overall decrease to prior accident year losses of $138.1 million, for the year ended December 31, 2018.

The 2017 period was also impacted by decreased loss and LAE reserves and reductions in losses ceded to corporate retrocessional programs with Munich Re. (See Year Ended December 31, 2017, Compared with Year Ended December 31, 2016 – *Losses and Loss Adjustment Expenses*.)

Underwriting Expense. Underwriting expense, consisting of commission expense plus operating expenses related to underwriting activities, increased 57.7% to $1,778.3 million for the year ended December 31, 2018, from $1,128.0 million for the same period in 2017. This increase was due to a 71.8% increase in commission expense to $1,531.8 million for the year ended December 31, 2018, from $891.8 million for the same period in 2017. The increase in commission expense is primarily due to increased premium writings in the Reinsurance segment. The increase in commission expense was combined with a 4.4% increase in operating expense to $246.5 million for the year ended December 31, 2018, from $236.2 million for the year ended December 31, 2017.

Interest Expense on Ceded Funds Held Balances. Interest expense on funds held under reinsurance treaties decreased 79.8% to $9.5 million for the year ended December 31, 2018, from $47.0 million for the same period in 2017. This decrease was primarily attributable to the termination of certain business with Munich Re and the

settlement of the funds held balances thereon, combined with a decrease in the interest on the fund balance for the variable quota share program with Munich Re.

Other Expense. Other expense decreased to $22.6 million for the year ended December 31, 2018, from $27.9 million for the same period in 2017. This decrease was primarily the result of decreased foreign exchange losses on foreign currency denominated assets and liabilities, coupled with 2017 expenses that did not recur in 2018 related to the reduction in loss reserves for ceded reinsurance contracts accounted for as deposits, and losses recognized on the repurchase of Senior Notes. These decreases were partially offset by increased defined benefit plan costs.

Federal and Foreign Income Taxes. A Federal and foreign income taxes benefit of $12.2 million was recognized for the year ended December 31, 2018, compared to an expense of $141.0 million for the year ended December 31, 2017. The expected tax expense at the 21% statutory rate on pretax loss of $211.9 million in the 2018 period was a benefit of $44.5 million. This tax benefit was reduced by a $25.6 increase in the valuation allowance on deferred tax assets and $10.8 of the new base erosion and anti-abuse tax ("BEAT"). In the 2017 period, the expected tax expense at the 35% statutory rate on pretax loss of $271.6 million was a benefit of $95.1 million. The 2017 tax expense included a $254.1 million impact from the enactment of the Tax Cuts and Jobs Act, predominantly from the remeasurement of deferred assets and liabilities at the new corporate rate of 21%. Additionally in 2017, tax expense was reduced by $32.5 million, for tax benefits related to affiliated reinsurance.

Year Ended December 31, 2017 Compared with Year Ended December 31, 2016

Underwriting Results and Combined Ratio

The underwriting results and combined ratios for the Company for the years ended December 31, 2017 and 2016, are as follows:

	2017	2016
	(Dollars in millions)	
Premiums earned	$ 3,502.0	$ 3,051.3
Less: Losses and LAE	2,886.9	1,673.2
Commission expense	891.8	730.9
Operating expense	236.2	239.4
Underwriting gain (loss)	$ (512.9)	$ 407.8
Loss ratio	82.4 %	54.8 %
Expense ratio	32.2	31.8
Combined ratio	114.6 %	86.6 %

In 2017 the Company reported an underwriting loss of $512.9 million for the year, compared to an underwriting gain of $407.8 million in 2016, primarily resulting from a $1,213.7 million increase in losses and LAE, partially offset by a $450.7 million increase in premiums earned.

Financial Statement Results

The Company's net loss to its common stockholder was $412.6 million for the year ended December 31, 2017, compared to net income of $645.7 million for the same period in 2016. This decrease is primarily the result of net catastrophe losses from Hurricanes Harvey, Irma and Maria and the California wildfires.

Revenues

Premiums. Gross premiums written for the year ended December 31, 2017 increased to $5,787.2 million from $5,289.0 million for 2016. This increase is primarily attributable to increases in premium writings in the Reinsurance segment, partially offset by decreases in the segments not included in the P&C results.

Net premiums written by the Company's P&C business segments, which exclude certain corporate retrocessional programs, increased 49.1% to $3,544.8 million for the year ended December 31, 2017, from $2,377.8 million for the same period in 2016. The Reinsurance segment experienced a 64.6% increase in net premiums written to $2,772.9 million for the year ended December 31, 2017, from $1,684.4 million for the same period in 2016. This increase is

generally attributable to an increase in new business growth in the property and casualty lines of business. The Specialty Markets segment experienced an 11.3% increase in net premiums written to $771.9 million for the year ended December 31, 2017 from $693.4 million for the same period in 2016. This increase is the result of increases in the property and casualty lines of business. The increase in premiums written by the P&C segments was offset by a $122.4 million decrease in net premiums written for business not included in the P&C segments, resulting in a 33.4% increase in consolidated net premiums written to $4,172.1 million for the year ended December 31, 2017, from $3,127.5 million for the same period in 2016.

The Company's net premiums earned increased 14.8% to $3,502.0 million for the year ended December 31, 2017, from $3,051.3 million for the same period in 2016. The increase in premiums earned resulted from the increase in net premiums written, offset by the timing of the earnings of premiums in force.

Investment Income. Net investment income increased 15.1% to $331.6 million for the year ended December 31, 2017, from $288.2 million for the same period in 2016. This increase is primarily due to higher average book yields, increased income from infrastructure investments, increased income from treasury inflation-protected securities, and decreased losses from fixed income futures.

The Company realized net capital losses of $34.8 million for the year ended December 31, 2017, compared to net capital gains of $83.9 million for the same period in 2016. The 2017 period included write-downs of $51.5 million of investments, as the decline in fair value was considered to be other-than-temporary, partially offset by net capital gains of $16.7 million recognized on the sale of fixed income securities. The 2016 period included net capital gains of $84.0 million recognized on the sale of fixed income securities and other available-for-sale investments, offset by write-downs of $0.1 million of fixed income securities, related to the dissolution of a minor subsidiary.

Other Income. Other income increased 10.3% to $44.9 million for the year ended December 31, 2017, from $40.7 million for the same period in 2016. This increase was primarily the result of a reduction in the loss reserve for a reinsurance contract accounted for as a deposit and an increase in interest on assumed funds held balances with Munich Re branches, offset by decreased foreign exchange gains on the company's foreign currency denominated assets and liabilities.

Expenses

Losses and Loss Adjustment Expenses. Net losses and LAE incurred increased 72.5% to $2,886.9 million for the year ended December 31, 2017, from $1,673.2 million for the same period in 2016. This increase was primarily attributable to a $1,033.6 increase in current accident year losses and LAE in 2017 due to property catastrophe loss activity and the increase in net premiums earned in 2017. Current accident year property catastrophe losses were $780.2 million, predominantly from Hurricanes Harvey, Irma, and Maria and the California wildfires for the year ended December 31, 2017, compared to $148.0 million for the year ended December 31, 2016. Prior accident year losses and LAE were reduced by $223.9 million in 2017, compared to $403.7 million in 2016.

Reflecting the indications of the Company's ongoing monitoring of loss reserves and its in-depth annual reserve review, in 2017 the Company decreased loss and LAE reserves for prior accident years by $165.3 million, excluding the impact of certain corporate retrocessional programs with Munich Re. This decrease included a decrease of $133.9 million for accident years 2002 through 2016, primarily attributable to reductions to the third party liability and property lines of business, offset by increases to the auto liability and health lines. This decrease was combined with a decrease of $31.4 million for accident years 2001 and prior, where increases to reserves for other latent liabilities were offset by decreases to workers compensation and third party liability.

The decreased losses for accident years 2002 and subsequent were partially offset by reductions in losses ceded to various corporate retrocessional programs with Munich Re. The decreased losses for accident year 2001 and prior were ceded to a loss portfolio transfer agreement ("LPT") and two adverse development covers ("ADC"), also with Munich Re. The reserve decrease of $165.3 million, coupled with the net benefit from the LPT and ADCs, which includes current recognition of previously deferred loss benefits, resulted in an overall decrease to prior accident year losses of $223.9 million, for the year ended December 31, 2017.

Similar to 2017, the 2016 period was also impacted by decreased loss and LAE reserves for accident years 2002 and subsequent, but had increased loss and LAE reserves for accident years 2001 and prior.

Underwriting Expense. Underwriting expense, consisting of commission expense plus operating expenses related to underwriting activities, increased 16.3% to $1,128.0 million for the year ended December 31, 2017, from $970.3 million for the same period in 2016. This increase was due to a 22.0% increase in commission expense to $891.8 million for the year ended December 31, 2017, from $730.9 million for the same period in 2016. The increase in commission expense is primarily due to increased premium writings in the Reinsurance segment. The increase in commission expense was offset by a 1.3% decrease in operating expense to $236.2 million for the year ended December 31, 2017, from $239.4 million for the year ended December 31, 2016.

Interest Expense on Ceded Funds Held Balances. Interest expense on funds held under reinsurance treaties increased 3.3% to $47.0 million for the year ended December 31, 2017, from $45.5 million for the same period in 2016. This increase was primarily attributable to a net increase in the interest on the fund balances for the retrocessional contracts with Munich Re's branches, partially offset by a decrease in the interest on the fund balance for the variable quota share program with Munich Re.

Other Expense. Other expense increased to $27.9 million for the year ended December 31, 2017, from $24.8 million for the same period in 2016. This increase was primarily a result of a reduction in the loss reserve for a ceded reinsurance contract accounted for as a deposit and losses recognized on the repurchase of Senior Notes in 2017.

Federal and Foreign Income Taxes. Federal and foreign income taxes of $141.0 million were recognized for the year ended December 31, 2017, compared to $78.9 million for the year ended December 31, 2016. The expected tax expense at the 35% statutory rate on pretax loss of $271.6 million and pretax income of $724.6 million, in the 2017 and 2016 periods, respectively, was a benefit of $95.1 million and expense of $253.6 million, respectively. The 2017 tax expense included a $254.1 million impact from the enactment of the Tax Cuts and Jobs Act, predominantly from the remeasurement of deferred assets and liabilities at the new corporate rate of 21%. Tax expense was reduced for tax benefits related to affiliated reinsurance of $32.5 million and $125.4 million in 2017 and 2016, respectively.

Critical Accounting Policies and Estimates

The accounting policies discussed in this section are those that management considers to be the most critical to understanding the Company's financial statements. Certain accounting policies require management to make estimates that affect the amounts of assets and liabilities reported at the date of the financial statements and the amounts of revenues and expenses reported during the period. These estimates are necessarily based on numerous assumptions involving varying and potentially significant degrees of judgment and uncertainty. As such, actual results will likely differ from those estimates.

Premiums and Unearned Premiums. Premiums are earned over the terms of the related insurance policies and reinsurance contracts. Unearned premiums reserves are computed for the remaining period of coverage using pro rata methods.

Assumed reinsurance premiums are based on information provided by ceding companies. Written and earned premiums, and their related cost, which have not yet been reported to the Company are estimated and accrued. The information used in establishing these estimates is reviewed and subsequent adjustments are recorded in the period in which they are determined. On retrospectively rated contracts, estimated additional or return premiums are accrued.

Assumed reinsurance and ceded retrocessional contracts that do not both transfer significant insurance risk and result in the reasonable possibility that the Company or its retrocessionnaires may realize a significant loss from the insurance risk assumed are required to be accounted for as deposits. These contract deposits are included in other assets and other liabilities in the Consolidated Balance Sheets and are accounted for as financing transactions with interest income or expense credited or charged to the contract deposits.

Loss and Loss Adjustment Expense Reserves. The Company is required to maintain reserves to cover its estimated ultimate liability for losses and LAE with respect to reported and unreported claims incurred as of the end of each accounting period modified for current trends and estimates of expenses for investigating and settling claims (net of estimated related salvage and subrogation claims).

It is the Company's policy to discount all workers' compensation claims on reported and unreported losses at a rate permitted by the Commissioner of Insurance of the State of Delaware. Claims related to accident years prior to

2007 are discounted using an interest rate of 4.5%. Claims related to accident years 2007 through 2010 are discounted using an interest rate of 3.0%. Claims related to accident years 2011 through 2018 are discounted using an interest rate of 0.0%.

The reserve for losses and LAE is based upon reports received from reinsureds supplemented with the Company's own case reserve estimates provided by the Company's Claims Division, upon which additional reserves are established for claims that are incurred but not reported ("IBNR").

These reserves are estimates, involving actuarial and statistical projections at a given time, of what management expects the ultimate settlement and administration of claims to cost. The estimates reflect facts and circumstances then known, predictions of future events, estimates of future trends in claims severity and other variable factors such as inflation and new concepts of liability. For certain types of claims, most significantly asbestos-related, environmental, and other mass tort and latent liability claims, the effects of evolving scientific, legal and social issues are potentially so significant that the Company's reserve estimate is subject to significant revision as these issues are resolved over time. For example, asbestos, once regarded as a state-of-the-art construction material, was ultimately determined to be carcinogenic. Still more time passed before courts determined that various types of losses arising from the manufacture and use of asbestos (such as product liability, workers' compensation and the cost of removal) were covered by insurance companies, thereby requiring revisions in such estimates. For asbestos and environmental liabilities, considerable judgment has been exercised by the Company in formulating its estimates. The Company's estimates will be revised as legal, judicial and factual information develops and/or is clarified. The amounts ultimately paid by the Company for these exposures likely will differ, perhaps significantly, from the Company's currently recorded reserves.

The inherent uncertainties of estimating loss reserves are exacerbated for reinsurers by the significant periods of time that often elapse between the occurrence of an insured loss, the reporting of the loss to the primary insurer and, ultimately, to the reinsurer, and the primary insurer's payment of that loss and subsequent indemnification by the reinsurer (the "tail"). As a consequence, actual losses and LAE paid may deviate, perhaps substantially, from estimates reflected in the Company's reserves in its financial statements. Any adjustments of these estimates or differences between estimates and amounts subsequently paid or collected are reflected in income as they occur.

Deferred Policy Acquisition Costs. Deferred acquisition costs consist of commissions and certain operating expenses related to the successful acquisition of new or renewal contracts. These costs are deferred and limited to their estimated realizable value based on the related unearned premiums, anticipated loss and loss adjustment expenses, and anticipated investment income. These costs are amortized ratably over the terms of the related contracts, which are generally a year in duration. Periodically deferred policy acquisition costs are reviewed for recoverability; anticipated investment income is considered in making these evaluations.

Deferred Underwriting Revenue. The Company has several retroactive reinsurance contracts, most notably the loss portfolio transfer agreement and adverse loss development covers with Munich Re. For retroactive reinsurance contracts, adverse loss development in excess of the premiums paid is generally deferred and recognized in income using the interest method over the settlement period of the underlying claims. Changes in the expected timing and estimated amounts of the underlying claim payment patterns produce changes in the periodic income recognized. These changes in estimates are determined retrospectively and included in income in the period of the change and subsequent periods.

Reinsurance Recoverables on Unpaid Losses. Reinsurance recoverables are based upon the application of estimates of unpaid loss and LAE reserves in conjunction with terms specified under individual retrocessional contracts. The amounts ultimately collected may be more or less than such estimates. Any adjustments of these estimates or differences between estimates and amounts subsequently collected are reflected in income as they occur. Loss reserves ceded to unauthorized companies are collateralized by letters of credit, pledged trusts, or cash. The Company has provided for amounts deemed to be uncollectible. Management believes such provision is sufficient to reduce reinsurance recoverables to their collectible amounts.

Investments. Debt securities classified as available for sale are reported at fair value, with unrealized gains and losses excluded from earnings and reflected in stockholder's equity as a component of accumulated other comprehensive income, net of related income taxes.

Treasury inflation-protected securities classified as available for sale are reported at fair value with unrealized gains and losses excluded from earnings and reflected in stockholder's equity as a component of accumulated other

comprehensive income, net of related income taxes. Adjustments related to the inflation factor are included in net investment income.

Equity investments, and debt securities classified as trading, are reported at fair value, with gains and losses, both realized and unrealized, included in net investment income.

Other invested assets includes investments accounted for under the equity method, as the Company's ownership is deemed to represent significant influence. These investments represent the Company's ownership portion of the respective investee's equity. Other invested assets also includes the Company's investments in senior secured fixed term loans carried at amortized cost.

The Company's derivative portfolio may consist of credit default swaps, credit default swap indices, foreign exchange forward contracts, and fixed income futures. The Company does not apply hedge accounting in its reporting of derivative instruments. Derivative instruments are reported at fair value, with gains and losses, both realized and unrealized, included in net investment income. Derivative assets and liabilities and any related cash collateral received or paid, are presented on a net basis when a legally enforceable master netting agreement exists between the Company and the counterparty. A master netting agreement is an agreement between two counterparties who have multiple derivative contracts with each other that provides for the net settlement of all contracts, as well as cash collateral, through a single payment.

The fair value of the credit default swaps and foreign exchange forward contracts are reported in other invested assets if in a net gain position or other liabilities if in a net loss position. The fixed income futures are settled with cash daily, therefore only the one-day open receivable or payable related to the variation margin is included in the Company's Consolidated Balance Sheet in other assets or other liabilities, respectively. The value of the Company's derivative instruments can change, sometimes significantly, based on varying factors such as changes in equity market values, credit spreads, and foreign exchange rates.

Realized gains and losses on the sale of investments are determined on a first-in, first-out basis and are included in net income. Investment income is recognized as earned and includes the accretion of discounts and amortization of premiums related to fixed maturity securities. Purchases and sales are recorded on a trade date basis.

Investments are subject to regular reviews to determine if a decline in value is other than temporary. Factors considered are: the reasons for the decline in value, the extent and durations of the decline, the Company's intent to sell the investment or when it is more likely than not that the Company will be required to sell the investment before its anticipated recovery in value.

For equity securities and investments in limited partnerships and limited liability companies, that the Company intends to sell, or for which it does not have the intent and ability to hold until such time that it has recovered in value, the full amount of an impairment is reported in net realized capital losses.

For fixed income securities that the Company intends to sell, or for which it is more likely than not that it would be required to sell before the anticipated recovery in value, the full amount of an impairment is reported in net realized capital losses.

For fixed income securities that the Company does not intend to sell, or for which it is more likely than not that it would not be required to sell before the anticipated recovery in value, the Company separates the credit loss component of an impairment, defined as the difference between the present value of the cash flows expected to be collected and the amortized cost basis, from the amount related to other factors and reports the credit loss component in net realized capital losses. The impairment related to the other factors is reported in a separate category of accumulated other comprehensive income.

Defined Benefit Plans. The liability for the Company's defined benefit plans is the present value of the defined benefit obligation at the balance sheet date less the fair value of the qualified pension plan assets. Gains or losses and prior service costs or credits that may arise during the period, but are not included as components of net periodic benefit cost, are recognized in other comprehensive income, net of tax.

The defined benefit obligation and periodic benefit cost are calculated by independent actuaries based on plan and employee data and actuarial assumptions provided by the Company. Key assumptions include discount rate, mortality rates, health care cost trends, and expected return on the plan assets of the qualified pension plan. These assumptions are based on available market data and are updated annually. The actuarial assumptions may differ

from the actual results due to changes in market conditions, economic trends and mortality experience. Any changes in these assumptions could have a significant impact on the defined benefit plan liability and future plan costs.

Income Taxes. The Company uses the liability method of accounting for income taxes, whereby deferred tax assets and liabilities are determined based on differences between the financial reporting and tax bases of assets and liabilities and are measured using the enacted tax rates and laws. The Company establishes a "valuation allowance" for any portion of the deferred tax asset that management does not believe is more likely than not realizable.

Financial Condition

The Company is a holding company, which includes its principal subsidiary, Munich Reinsurance America, Inc. Based on combined statutory gross premiums written by the insurance subsidiaries of $5,505.0 million in 2018, the Company is one of the largest property and casualty reinsurers in the U.S., according to Reinsurance Association of America statistics.

Total consolidated assets decreased by 8.3% to $23,472.5 million at December 31, 2018, from $25,596.3 million at December 31, 2017. Total consolidated liabilities decreased by 8.9% to $20,180.4 million at December 31, 2018, from $22,163.5 million at December 31, 2017. These decreases are primarily due to termination of certain business with Munich Re and its affiliates.

The Company may, from time to time, redeem all or part of its 7.45% Senior Notes due 2026 (the "Notes") pursuant to the terms of the indenture under which the Notes were issued (the "Indenture"), or purchase them in privately negotiated transactions, tender offers or otherwise. The indenture contains certain covenants, including, but not limited to, covenants imposing limitations on liens, and restrictions on mergers and sale of assets. At December 31, 2018, $333.8 million aggregate principal of Notes remain outstanding.

Common stockholder's equity decreased 4.1% to $3,292.1 million at December 31, 2017, from $3,432.8 million at December 31, 2017. This decrease was the result of a comprehensive loss of $386.6 million and dividends paid by the Company to Munich-American Holding Company ("MAHC") of $39.1 million, partially offset by a $275.0 million capital contribution received from MAHC and a $10.0 million increase in retained earnings as a result of the adoption of ASU 2016-01 "Recognition and Measurement of Financial Assets and Financial Liabilities".

Statutory surplus of the Company's insurance subsidiaries decreased to $3,901.4 million at December 31, 2018, from $4,187.3 million at December 31, 2017. This decrease was primarily the result of a combined statutory net loss of $397.7 million for 2018, an increase in non-admitted assets of $149.2 million due to limitations on deferred tax assets, and dividends of $39.1 million paid to the Company, partially offset by a $275.0 million capital contribution to Munich Reinsurance America, Inc. This statutory net loss is different from the net loss reported in these financial statements, primarily due to differing accounting treatment for deferred federal income taxes, retroactive reinsurance contracts, and deferred acquisition costs.

The Insurance Department of the State of Delaware (the "Insurance Department") has a risk based capital ("RBC") standard for property and casualty insurance (and reinsurance) companies which measures the amount of capital appropriate for a property and casualty insurance company to support its overall business operations in light of its size and risk profile. At December 31, 2018, Munich Reinsurance America, Inc.'s RBC ratio was 298.6%, compared to 341.2% at December 31, 2017. An RBC ratio in excess of 200% generally requires no regulatory action.

Investments

The total financial statement value of investments and cash decreased slightly to $13,553.6 million at December 31, 2018, from $13,605.2 million at December 31, 2017, primarily resulting from $263.9 million in unrealized market valuation adjustments and $117.4 million in net realized capital losses, offset by a $275.0 million capital contribution received by the Company from MAHC, and $44.6 million of net cash flow from operating activities.

The financial statement value of the investment portfolio at December 31, 2018, included a net increase from amortized cost to fair value of $252.1 million for investments available for sale, compared to a net increase of $17.2 million at December 31, 2017. At December 31, 2018, the Company recognized a cumulative unrealized loss of $198.1 million due to the net adjustment to fair value on investments, after applicable income tax effects, which was reflected as a component of accumulated other comprehensive income. This represents a net decrease to stockholder's equity of $215.8 million, excluding a $4.2 million cumulative-effect reclassification for unrealized

gains on equity securities to retained earnings due to new accounting guidance, from the cumulative unrealized loss on investments of $13.5 million recognized at December 31, 2017.

The Company follows an investment strategy that emphasizes maintaining a high-quality investment portfolio while providing stable periodic returns. The composition of the Company's investment portfolio, on a fair value basis, for the periods ending December 31, was as follows:

	2018		2017	
	Amount	Percent	Amount	Percent
	(Dollars in millions)			
Fixed income securities, available for sale:				
U.S. Government and government agency bonds	$ 5,256.6	38.2 %	$ 5,223.7	37.8 %
Foreign governments	665.8	4.8	826.1	6.0
State and municipal bonds	26.0	0.2	30.9	0.2
Asset-backed securities	387.6	2.8	508.7	3.7
Residential mortgage-backed securities	700.7	5.1	707.2	5.1
Commercial mortgage-backed securities	472.2	3.4	217.9	1.6
Domestic coporate bonds	3,278.8	23.8	3,617.2	26.2
Foreign bonds	1,003.7	7.3	950.2	6.9
Fixed income securities, trading	17.6	0.1	21.1	0.2
Equity securities	167.7	1.2	172.4	1.2
Other invested assets	796.8	5.8	718.5	5.2
Short term investments	587.7	4.3	475.9	3.4
Cash and cash equivalents	405.6	3.0	350.5	2.5
Total fair value	$ 13,766.8	100.0 %	$ 13,820.3	100.0 %

The Company's current investment strategy emphasizes investments in fixed income securities and real estate and infrastructure investment vehicles, rather than equity securities. This strategy is premised on the investment and tax planning strategies within the Munich Re Group. The Company's investment in equity securities was $167.7 million and $159.6 million at December 31, 2018 and 2017, respectively.

The following table indicates the composition of the Company's fixed income securities available for sale, on a fair value basis, by rating as assigned by Standard & Poor's at December 31.

	2018		2017	
	Amount	Percent	Amount	Percent
	(Dollars in millions)			
AAA	$ 800.1	6.8 %	$ 508.9	4.2 %
AA	6,554.0	55.6	6,628.0	54.9
A	770.2	6.5	990.7	8.2
BBB	3,208.7	27.2	3,490.2	28.9
BB and below and not rated	458.4	3.9	464.1	3.8
Total fair value	$ 11,791.4	100.0 %	$ 12,081.9	100.0 %

The Company continues to seek opportunities to enhance investment yield through a fixed maturity investment strategy. The Company also monitors investment and liability duration for each of its insurance subsidiaries to ensure optimal investment performance. The Company seeks to control its need for liquidity through prudent cash management steps, which include frequent and regular communication with its investment manager. The effective duration of the Company's bond portfolio was 4.08 and 4.03 years at December 31, 2018, and 2017, respectively.

Liquidity and Capital Resources

The Company is an insurance holding company whose only material investment is in the capital stock of Munich Reinsurance America, Inc. The Company has been dependent on management service agreements and dividends from the insurance subsidiaries in order to meet its short and long term liquidity requirements, including its debt service obligations. The payment of dividends to the Company by Munich Reinsurance America, Inc. is subject to limitations imposed by the Insurance Department of the State of Delaware (the "Insurance Department"), including the requirement that dividends be paid from available unassigned funds, as set forth in the most recent

annual statement of the insurer. Based on these restrictions, Munich Reinsurance America, Inc. cannot pay dividends in 2019 without the prior approval of the Insurance Department. In the future, the Company believes that its long-term debt service obligations will be provided for by available cash of the Company, dividends and/or tax allocation payments from its subsidiaries, and/or through other forms of financing.

The following table represents the Company's contractual obligations on a consolidated basis and the future periods in which they are expected to be due, at December 31, 2018.

	Less than 1 year	1-3 years	4-5 years	More than 5 years	Total
Loss and LAE reserves	$ 3,214.6	$ 4,440.8	$ 1,304.9	$ 4,219.0	$ 13,179.3
Loss balances payable	88.1	-	-	-	88.1
Funds held under reinsurance treaties	164.4	225.8	65.1	1,755.3	2,210.6
Long term debt obligations	24.9	74.6	49.7	383.5	532.7
Operating lease obligations	4.7	12.9	2.0	3.0	22.6
Total contractual obligations	$ 3,496.7	$ 4,754.1	$ 1,421.7	$ 6,360.8	$ 16,033.3

The payment of loss and LAE reserves included above represents the Company's estimated settlement of its undiscounted reserves based on projected payout patterns. These payout patterns are developed based on historical loss payment data and trends by type and line of business. The timing and amount of such payments is contingent upon the ultimate outcome of claim settlements that will occur over many years. Certain incurred losses and LAE are recoverable under retrocessional contracts. Such recoverables are not reflected in this table. The expected periods due for funds held under reinsurance treaties are based on the projected payout pattern of the associated retrocessional loss reserves, interest accretion, and the expected settlement of any residual balances.

Long term debt obligations reflect the cumulative interest and principal to be paid related to the Company's senior notes through their respective maturity date.

The Company's cash flow from operations may be influenced by a variety of factors, including cyclical changes in the property and casualty reinsurance market, insurance regulatory initiatives, and changes in general economic conditions. Liquidity requirements are met on both a short- and long-term basis by funds provided by operations and from the maturity and sale of investments. Cash provided by operations primarily consists of premiums collected, investment income, and reinsurance recoverable balances collected, less paid claims, retrocessional payments, underwriting and interest expenses, and income tax payments. Cash flows provided by operations were $44.6 million for the year ended December 31, 2018, generally resulting from the Company's underwriting activities. Cash flows provided by operations were $528.7 million and $610.1 million for the years ended December 31, 2017 and 2016, respectively.

Cash flows used in investing activities were $225.5 million, $413.7 million, and $506.6 million for the years ended December 31, 2018, 2017, and 2016, respectively. The negative cash flows from investing activities in 2018, 2017, and 2016 were generally the result of the reinvestment of cash flows provided by operating activities and cash equivalents.

Cash and cash equivalents of $405.6 million and $350.5 million at December 31, 2018 and 2017, respectively, are maintained for liquidity purposes and represented 3.0% and 2.6%, respectively, of total financial statement investments and cash on such dates.

Credit Ratings

The Company and its subsidiaries are assigned financial strength and debt ratings from internationally recognized ratings agencies. Financial strength ratings represent the rating agency's opinion on the financial strength of a company and its capacity to meet the obligations of insurance policies. These independent ratings are one of the important factors that contribute to the Company's competitive position in the insurance market. Debt ratings are assessments of the likelihood that a company will make timely payments on principle and interest on short-and long-term debt.

Moody's. On January 8, 2019, Moody's Investors Service issued a credit opinion update on Munich Re America Corporation following its December 6, 2018 rating affirmation on Munich Reinsurance Company and Munich Reinsurance America Inc., along with the group's associated debt ratings. Moody's affirmed the "Aa3" (Excellent)

insurance financial strength rating of Munich Reinsurance America, Inc. and the "A2" (Upper Medium Grade) senior unsecured debt rating of the Company. The credit opinion update noted the Company's strong explicit and implicit support from Munich Re and the strategic importance of the U.S. operations to the Munich Re group. Moody's also stated that the Company has a strong franchise in the direct and broker reinsurance market, long-standing client relationships and reputation in the U.S., well diversified product lines, and a high quality investment portfolio. The outlook on the ratings is "stable".

Fitch Ratings. On December 4, 2018, Fitch Ratings ("Fitch") announced that it affirmed the "AA" (Very Strong) insurer financial strength rating of Munich Re, including Munich Reinsurance America, Inc. Fitch also affirmed the long-term issuer default rating of "AA-" (Very Strong) of the Company. The outlook on these ratings is "stable". The ratings affirmation reflects the strength of Munich Re's franchise and the group's very strong business profile within the global reinsurance sector, a view that is supported by very strong capitalization and consistent P&C reinsurance results. Fitch regards Munich Re's reinsurance operation as having the scale, diversity and financial strength to attract the highest-quality business that is placed in the global reinsurance market. In addition, Fitch's rating announcements reflect that the Company is a core subsidiary of Munich Re, recognizing a long track record of support and that the Company is the primary platform for the Munich Re organization to pursue reinsurance operations in the large U.S. reinsurance market.

Standard & Poor's. On August 9, 2018, Standard & Poor's Rating Services ("S&P") affirmed its "AA-" (Very Strong) insurer financial strength rating of Munich Re and its related core operating subsidiaries. S&P stated in its report that the "AA-" insurer financial strength rating reflects Munich Re's extremely strong franchise with a global leading position in property and casualty, and life reinsurance business. S&P also cited Munich Re's strong capital risk profile with robust capital adequacy, superior regional and production diversification, very strong reserve adequacy, effective enterprise risk management, and Munich Re's ability of maintaining access to capital markets. In addition, the Company's issuer credit rating and senior debt rating continues to be rated "A-" (Strong). The outlook on the ratings is "stable".

A.M. Best. On July 13, 2018, A.M. Best affirmed the Financial Strength Rating of A+ (Superior) and the Long-Term Issuer Credit Rating of "aa" (Superior) of Munch Re and its operating subsidiaries. The ratings reflect Munich Re's balance sheet strength, which A.M. Best categorizes as "strongest", its very favorable business profile, strong operating performance, and very strong enterprise risk management. Concurrently, A.M. Best affirmed the issuer credit rating and senior debt ratings of "a" (Excellent) of the Company. The outlook for these ratings is "stable". A.M. Best considers the Company to be integral to the Munich Re Group. Additionally, the U.S. reinsurance subsidiaries serve as an important conduit for Munich Re's access to the U.S. market.

There can be no assurance that the Company or its subsidiaries will maintain their current ratings.

Market and Interest Rate Risk

The Company is subject to market risk arising from the potential change in the value of its various financial instruments. These changes may be due to fluctuations in interest and foreign exchange rates, credit spreads, and equity prices. The major components of market risk affecting the Company are interest rate and foreign currency risk.

Interest rate and equity price risk. The Company has both fixed and variable income investments with a value of $12,396.7 million at December 31, 2018, that are subject to changes in value due to market interest rates. In addition to interest rate and foreign exchange risk, the Company's common equity portfolio of $167.7 million at December 31, 2018, is subject to changes in value based on changes in equity prices.

Foreign currency rate risk. Foreign currency rate risk is the potential change in value, income and cash flow arising from adverse changes in foreign currency exchange rates. Although the majority of the Company's remaining international operations are in run-off, the Company generally maintains investments in local currencies to meet its foreign obligations. The Company's primary foreign currency exposures are the Canadian Dollar, Australian Dollar, and the Euro.

Management of market risk. The Company invests in foreign exchange forward contracts to economically hedge the foreign currency exchange risk associated with certain non-U.S. dollar denominated exposures. At December 31, 2018, the Company had three open foreign currency forward contracts with a notional value of $162.9 million. The Company may also use other derivative instruments, such as futures, to economically hedge the duration of fixed income assets due to anticipated changes in the interest rate environment. At December 31, 2018, the Company had no open future positions. Derivatives,

depending on the type of instrument, are inherently at risk to changes in interest rates, foreign exchange rates and price movements. The market valuations are also a function of the volume of transactions and the terms of the given agreement.

Sensitivity Analysis of Market Risk and Disclosures About Model

Interest rate sensitivity analysis is used to measure the Company's interest rate price risk by computing estimated changes in fair value of fixed and variable rate assets and liabilities in the event of a range of assumed changes in market interest rates. This analysis assesses the risk in market risk sensitive instruments in the event of a sudden and sustained 100 to 200 basis point increase or decrease in market interest rates. The following table presents the Company's projected change in fair value of the Company's financial instruments at December 31, 2018. All market sensitive investments presented in this table are either available for sale or trading.

The calculation of fair value is based on quoted market prices, where available. If market prices are not available from a public exchange, fair values are based on quoted market prices of comparable instruments or determined based on quotes from various brokers.

Percent Change in Interest Rates	Fair Value of Total Investments, excluding Common Equities	Hypothetical Change	Percentage Hypothetical Change
(Dollars in millions)			
200 basis point rise	$ 12,469.3	$ (1,129.8)	(8.3) %
100 basis point rise	12,956.0	(643.1)	(4.7)
Base Scenario	13,599.1	-	-
100 basis point decline	14,055.8	456.7	3.4
200 basis point decline	14,677.7	1,078.6	7.9

Percent Change in Interest Rates	Fair Value of Senior Notes	Hypothetical Change	Percentage Hypothetical Change
(Dollars in millions)			
200 basis point rise	$ 357.9	$ (46.2)	(11.4) %
100 basis point rise	380.1	(24.0)	(5.9)
Base Scenario	404.1	-	-
100 basis point decline	430.1	26.0	6.4
200 basis point decline	458.0	53.9	13.3

The preceding tables indicate that at December 31, 2018, in the event of a sudden and sustained increase in prevailing market interest rates, the fair value of the Company's investment and debt instruments would be expected to decrease, and that in the event of a sudden and sustained decrease in prevailing market interest rates, the fair value of the Company's fixed maturity investments and debt instruments would be expected to increase.

Disclosures About Limitations of Sensitivity Analysis

Computations of prospective effects of hypothetical interest rate changes are based on numerous assumptions, including relative levels of market interest rates and loan prepayments, and should not be relied on as indicative of future results.

Certain shortcomings are inherent in the method of analysis presented in the computation of the fair value of fixed rate instruments. Actual values may differ from those projections presented should market conditions vary from assumptions used in the calculation of the fair value. In the event of a change in interest rates, prepayment and early withdrawal levels could deviate significantly from those assumed in the calculation of fair value. Actual results may differ from the hypothetical change in market rates assumed in this disclosure, especially since this sensitivity analysis does not reflect the results of any actions that would be taken by the Company to mitigate such hypothetical losses in fair value.

Reserves for Unpaid Losses and Loss Adjustment Expenses

General. The Company maintains reserves to cover its estimated ultimate liability for losses and LAE with respect to reported and unreported claims incurred as of the end of each accounting period modified for current trends and estimates of expenses for investigating and settling claims, net of estimated related salvage and subrogation claims. It is the Company's policy to discount all workers' compensation claims on reported and unreported losses at a rate permitted by the Commissioner of Insurance of the State of Delaware. Claims related to accident years prior to 2007 are discounted using an interest rate of 4.5%. Claims related to accident years 2007 through 2010 are discounted using an interest rate of 3.0%. Claims related to accident years 2011 through 2018 are discounted using an interest rate of 0.0%.

The reserve for losses and LAE is based upon reports received from reinsureds supplemented with the Company's own case reserve estimates, upon which additional reserves are established for claims that are incurred but not reported. These reserves are estimates reflecting actuarial and statistical projections at a given time of what management expects the ultimate settlement and administration of claims to cost based on facts and circumstances then known, as well as predictions of future events, estimates of future trends in claims severity and other variable factors such as inflation and new concepts of liability.

When a claim is reported to a ceding company, its claims personnel establish a "case reserve" for the estimated amount of the ultimate payment. The estimate reflects the informed judgment of such personnel based on general insurance reserving practices and on the experience and knowledge of such personnel regarding the nature and value of the specific type of claim. The Company, in turn, establishes a case reserve when it receives notice of a claim from the ceding company. Such reserves are based on an independent evaluation by the Company's claims personnel, and may take into consideration coverage, liability, severity of injury or damage, jurisdiction, the Company's assessment of the ceding company's ability to evaluate and handle the claim and the amount of reserves recommended by the ceding company. Case reserves are adjusted periodically based on subsequent developments and audits of ceding companies.

In calculating its IBNR reserves, which include future development on reported claims, the Company uses generally accepted actuarial reserving techniques that take into account quantitative loss experience data, together, where appropriate, with qualitative factors. IBNR reserves are based on loss experience of the Company and are grouped both by class of business and by contract year or accident year. IBNR reserves are also adjusted to take into account certain factors such as changes in the volume of business written, reinsurance contract terms and conditions, the mix of business, claims processing and inflation that can be expected to affect the Company's liability for losses over time.

For certain types of claims, most significantly for asbestos and environmental-related ("A&E") coverage exposures, the effects of evolving scientific, legal and social issues are potentially so significant that the Company's reserve estimate is subject to significant revision as these issues are resolved over time. For A&E liabilities, considerable judgment has been exercised by the Company in formulating its estimates. The Company's estimates will be revised as legal, judicial and factual information develops and/or is clarified. The amounts ultimately paid by the Company for these exposures likely will differ, perhaps significantly, from the Company's currently recorded reserves.

The Company has geographic exposure to catastrophe losses, which can be caused by a variety of events, including, among others, hurricanes, tornadoes and other windstorms, earthquakes, hail, wildfires, severe winter weather, floods, tsunamis, volcanic eruptions and other naturally-occurring events, such as solar flares. Catastrophes can also result from terrorist attacks and other intentionally destructive acts including those involving nuclear, biological, chemical, radiological, cyber-attacks, explosions and infrastructure failures. 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. Most catastrophes are restricted to small geographic areas; however, hurricanes and earthquakes may produce significant damage in larger areas, especially those that are heavily populated. The Company generally seeks to mitigate its exposure to catastrophes through individual risk selection and the purchase of catastrophe reinsurance.

Traditional liabilities are reviewed using standard actuarial methodologies. Through the application of the chain ladder, Bornhuetter-Ferguson, and expected loss ratio methodologies, pure mathematical indications of ultimate loss and allocated loss adjustment expenses ("ALAE") are established. The best fitting method or a blending of different methods is typically selected for each contract or accident year. In cases where the resulting estimate using these methodologies does not appear to be reasonable based on known information about the

portfolio's historical performance or known market trends, the final estimate of ultimate loss and ALAE is determined using actuarial expertise and management's judgement. While these methods represent the most common approach to establishing ultimate loss and loss expense indications, the Company may utilize numerous other actuarial methods as developed by the global casualty actuarial profession, as may be warranted given the circumstances of a given reserving segment or year.

For events classified as "outliers", large losses exceeding certain dollar thresholds defined by Munich Re, the Company generally establishes the ultimate loss and expense based on a comprehensive evaluation of the specific characteristics associated with a particular event in conjunction with experts from claims and underwriting.

For finite risk, A&E, and other latent exposures, special models and approaches are used, and may include epidemiological studies, statistical based models or cash flow models. Additionally, industry statistics may be used; for example, survival ratios for asbestos and environmental.

The inherent uncertainties of estimating loss reserves are exacerbated for reinsurers by the significant periods of time that often elapse between the occurrence of an insured loss, the reporting of the loss to the primary insurer and, ultimately, to the reinsurer, and the primary insurer's payment of that loss and subsequent indemnification by the reinsurer (the "tail"). As a consequence, actual losses and LAE paid may deviate, perhaps substantially, from estimates reflected in the Company's reserves in its financial statements. Any adjustments of these estimates or differences between estimates and amounts subsequently paid or collected are reflected in income as they occur.

The reconciliation between statutory basis and GAAP basis reserves for each of the three years in the period ended December 31, 2018, is shown below:

Reconciliation of Reserves for Unpaid Losses and LAE
From Statutory Basis to GAAP Basis

	Year ended December 31,		
	2018	**2017**	**2016**
	(Dollars in millions)		
Statutory reserves	$ 8,331.6	$ 7,049.3	$ 6,172.1
Adjustments to a GAAP basis [1]	182.4	151.5	131.1
Reinsurance recoverables on unpaid losses	3,821.4	5,263.5	5,358.1
Reserves on a GAAP basis	$ 12,335.4	$ 12,464.3	$ 11,661.3

[1] Consists primarily of the application of risk transfer and retroactive accounting rules of ASC 944, "Financial Services – Insurance."

Reconciliation of Reserves for Unpaid Losses and LAE
(GAAP Basis)

	Year ended December 31,		
	2018	**2017**	**2016**
	(Dollars in millions)		
Reserves at beginning of period	$ 12,464.3	$ 11,661.3	$ 12,003.6
Reinsurance recoverables on unpaid losses	(5,263.5)	(5,358.1)	(5,855.9)
Net reserves at beginning of period	7,200.8	6,303.2	6,147.7
Net incurred related to:			
Current period	3,876.4	3,095.0	2,060.5
Prior periods	(123.0)	(208.1)	(387.3)
Total net incurred	3,753.4	2,886.9	1,673.2
Net paid related to:			
Current period	(931.2)	(736.0)	(471.5)
Prior periods	(1,598.0)	(1,338.9)	(1,374.9)
Total net paid	(2,529.2)	(2,074.9)	(1,846.4)
Deferred underwriting revenue	91.5	80.8	328.2
Foreign exchange increase (decrease) in reserves	(2.5)	4.8	0.5
Net reserves at end of period	8,514.0	7,200.8	6,303.2
Reinsurance recoverables on unpaid losses	3,821.4	5,263.5	5,358.1
Reserves at end of year	$ 12,335.4	$ 12,464.3	$ 11,661.3

As a result of total changes in estimates of insured events in prior years, losses and LAE were reduced by $123.0 million, $208.1 million, and $387.3 million in 2018, 2017, and 2016, respectively. This prior accident year loss development includes accretion of workers' compensation discount of $15.1 million, $15.8 million, and $16.3 million for 2018, 2017, and 2016, respectively.

Reflecting the indications of the Company's ongoing monitoring of loss reserves and its in-depth annual reserve review, in 2018 the Company decreased loss and LAE reserves for prior accident years by $183.0 million, excluding the impact of certain corporate retrocessional programs with Munich Re. This decrease is predominantly attributable to the workers compensation line of business in response to a continued trend of favorable emergence.

The decreased losses resulted in decreased cessions to various corporate retrocessional programs with Munich Re. The reserve decrease of $183.0 million, coupled with the recognition of previously deferred loss benefits, were partially offset by the reduced cessions, and resulted in an overall decrease to prior accident year losses of $138.1 million, excluding the accretion of workers' compensation discount, for the year ended December 31, 2018.

In 2017 the Company decreased loss and LAE reserves for prior accident years by $165.3 million, excluding the impact of certain corporate retrocessional programs with Munich Re. This reserve decrease was primarily attributable to reductions to third party liability, workers compensation, and property lines of business, offset by increases to the auto liability, health, and other latent liability lines of business. The reserve decrease of $165.3 million, coupled with the net benefit from the corporate retrocessional programs, which includes current recognition of previously deferred loss benefits, resulted in an overall decrease to prior accident year losses of $223.9 million, excluding the accretion of workers' compensation discount, for the year ended December 31, 2017.

In 2016 the Company decreased loss and LAE reserves for prior accident years by $73.9 million, excluding the impact of certain corporate retrocessional programs with Munich Re. This reserve decrease was primarily attributable to reductions to third party liability, workers compensation, and property lines of business, offset by increases to the auto liability and health lines. The reserve decrease coupled with the net benefit from the corporate retrocessional programs, which included current recognition of previously deferred loss benefits, resulted in an overall decrease to prior accident year losses of $403.7 million, excluding the accretion of workers' compensation discount, for the year ended December 31, 2016.

Munich Re provides retrocessional support to accident years 2001 and prior by means of a loss portfolio transfer agreement ("LPT"). The aggregate limit on the LPT cover of $10.1 billion was reached, on an undiscounted loss basis, in 2012. The LPT is a retroactive reinsurance contract and, as such, loss recoveries in excess of premiums ceded are generally deferred and will be recognized in income over the settlement period of the underlying claims. This transaction does not relieve the Company of its obligation to its reinsureds for the periods covered.

In 2010, the Company purchased additional retrocessional support for accident years 2001 and prior from Munich Re, in the form of an adverse development cover ("2010 ADC"). This contract provides protection for adverse development in excess of the LPT limit. Similar to the LPT, the ADC is a retroactive reinsurance contract. The aggregate limit on the ADC of $500.0 million was reached, on an undiscounted loss basis, in 2013.

In 2013, the Company purchased a second adverse development cover from Munich Re ("2013 ADC"). The 2013 ADC provides an additional $500.0 million of limit, of which $435.4 million remains available, on an undiscounted loss basis at December 31, 2018.

The reserves for losses and LAE represent management's best estimate of the ultimate gross, ceded, and net cost of losses and LAE incurred through December 31, 2018. Management will continue to closely evaluate future emerging paid and reported claims activity for its estimation of ultimate loss and LAE reserves, and appropriate loss reserve changes will be recognized as a result of changes in the loss trend assumptions indicated.

Asbestos and Environmental-Related Claims. Reserves established for asbestos and environmental-related coverage exposures ("A&E") reflect the uncertainty inherent in estimating the ultimate future claim amounts arising from these types of exposures. Given the latent nature of A&E exposures, evolving court decisions, wide variations in coverage terms offered over multiple policy periods, and the indefinite nature of any future tort reform, A&E liabilities are subject to significant variation. These factors are particularly challenging for casualty excess-of-loss reinsurers since primary exposure information is not consistently available. Management counterbalances these risks by monitoring claims activity on a quarterly basis and diligently following judicial and legislative decisions which may impact the Company's ultimate liabilities for these unique claims.

The Company had loss reserves for asbestos and environmental liability exposures at December 31, as follows:

	2018		2017	
	Gross	Net	Gross	Net
	(Dollars in millions)			
Asbestos	$ 959.6	$ -	$ 1,010.4	$ -
Environmental-related liability	295.2	1.6	317.3	1.6
Total	$ 1,254.8	$ 1.6	$ 1,327.7	$ 1.6

Loss reserves for A&E exposures at December 31, 2018 and 2017, represent best estimates drawn from a range of possible outcomes based upon currently known facts, projected forward for additional claimants using assumptions and methodologies considered reasonable. There can be no assurance that future losses resulting from these exposures will not have a material adverse effect on future earnings.

The following tables present three calendar years of development of loss and LAE reserves associated with A&E exposures, including case and IBNR reserves. Net loss reserves, net incurred losses and net paid losses include the application of reinsurance recoveries from both specific reinsurance contracts and existing adverse loss retrocessional agreements, including the LPT and ADC contracts. The LPT and ADC contracts are accounted for as retroactive reinsurance with loss development recoveries generally deferred and recognized in income in future periods. The net incurred losses in this table do not reflect the impacts of that deferral and recognition process.

Three Year Development
Asbestos Liabilities

	Year ended December 31,		
	2018	2017	2016
	(Dollars in millions)		
Gross Basis:			
Beginning reserve balance	$ 1,010.4	$ 1,093.6	$ 1,557.3
Incurred loss and LAE	-	-	-
Loss and LAE paid	(50.8)	(83.2)	(463.7)
Ending reserve balance	$ 959.6	$ 1,010.4	$ 1,093.6
Net Basis:			
Beginning reserve balance	$ -	$ -	$ -
Incurred loss and LAE	-	-	-
Loss and LAE paid	-	-	-
Ending reserve balance	$ -	$ -	$ -

Environmental-Related Liabilities

	Year ended December 31,		
	2018	2017	2016
	(Dollars in millions)		
Gross Basis:			
Beginning reserve balance	$ 317.3	$ 347.6	$ 312.4
Incurred loss and LAE	-	-	50.0
Loss and LAE paid	(22.1)	(30.3)	(14.8)
Ending reserve balance	$ 295.2	$ 317.3	$ 347.6
Net Basis:			
Beginning reserve balance	$ 1.6	$ 1.8	$ 2.5
Incurred loss and LAE	-	(0.2)	(0.7)
Loss and LAE paid	-	-	-
Ending reserve balance	$ 1.6	$ 1.6	$ 1.8

In 2018, the Company's reported activity for both asbestos and environmental-related liabilities was generally as expected. The Company continues to utilize the latest industry reports and projections for future claim and severity expectations, and complete internal assessments of industry trends. Given the stability of reported losses and after comparing the industry information to internal emergence and analyses, the Company made no change to either asbestos or environmental liabilities in 2018.

In 2017, the Company's reported activity for both asbestos and environmental-related liabilities showed higher than expected reported activity for the year. Claim counts are near or slightly higher than expectations. The in-depth analysis of the Company's A&E reserves continue to utilize the latest industry reports and projections for future claim and severity expectations, as well as internal assessments of industry trends. After considering this industry information along with the internal emergence and analyses, the Company made no change to either asbestos or environmental liabilities in 2017.

In 2016, the Company's reported activity for both asbestos and environmental showed higher than expected claim count activity, although the average reported losses for both asbestos and environmental remain below long-term averages. The in-depth analysis of the Company's A&E reserves continue to utilize the latest industry reports and projections for future claim and severity expectations, as well as internal assessments of industry trends. Leveraging the industry information with internal emergence, the Company increased loss and LAE reserves for environmental liabilities by $50.0 million for the year ended December 31, 2016. No change was made to asbestos reserves in the aggregate.

Forward-Looking Information

The Company has disclosed certain forward-looking statements concerning its operations, economic performance and financial condition, including, in particular the likelihood of the Company's success in developing and expanding its business and the risks related thereto. These statements are based upon a number of assumptions and estimates that are inherently subject to significant uncertainties and contingencies, many of which are beyond the control of the Company, and reflect future business decisions that are subject to change. Some of these assumptions inevitably will not materialize, and unanticipated events will occur which will affect the Company's results. Such statements may include, but are not limited to, projections of premium revenue, investment income, other revenue, losses, expenses, earnings, cash flows, plans for future operations, common stockholder's equity, investments, capital plans, dividends, plans relating to products or services of the Company, estimates concerning the effects of litigation or other disputes, adverse state or federal legislation or regulation, adverse publicity or news coverage or changes in general economic factors as well as the assumptions for any of the foregoing and are generally expressed with words, such as "believes," "estimates," "expects," "anticipates," "plans," "projects," "forecasts," "goals," "could have," "may have" and similar expressions.

MUNICH RE AMERICA CORPORATION AND SUBSIDIARIES

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KPMG LLP
345 Park Avenue
New York, NY 10154-0102

Independent Auditors' Report

The Board of Directors and Stockholders of
Munich Re America Corporation:

Report on the Financial Statements

We have audited the accompanying consolidated financial statements of Munich Re America Corporation and its subsidiaries, which comprise the consolidated balance sheets as of December 31, 2018 and 2017, and the related consolidated statements of comprehensive income, stockholder's equity, and cash flows for each of the years in the three-year period ended December 31, 2018, and the related notes to the consolidated financial statements.

Management's Responsibility for the Financial Statements

Management is responsible for the preparation and fair presentation of these consolidated financial statements in accordance with U.S. generally accepted accounting principles; this includes the design, implementation, and maintenance of internal control relevant to the preparation and fair presentation of consolidated financial statements that are free from material misstatement, whether due to fraud or error.

Auditors' Responsibility

Our responsibility is to express an opinion on these consolidated financial statements based on our audits. We conducted our audits in accordance with auditing standards generally accepted in the United States of America. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the consolidated financial statements are free from material misstatement.

An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the consolidated financial statements. The procedures selected depend on the auditors' judgment, including the assessment of the risks of material misstatement of the consolidated financial statements, whether due to fraud or error. In making those risk assessments, the auditor considers internal control relevant to the entity's preparation and fair presentation of the consolidated financial statements in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the entity's internal control. Accordingly, we express no such opinion. An audit also includes evaluating the appropriateness of accounting policies used and the reasonableness of significant accounting estimates made by management, as well as evaluating the overall presentation of the consolidated financial statements.

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinion.

Opinion

In our opinion, the consolidated financial statements referred to above present fairly, in all material respects, the financial position of Munich Re America Corporation and its subsidiaries as of December 31, 2018 and 2017, and the results of their operations and their cash flows for the three-year period ended December 31, 2018 in accordance with U.S. generally accepted accounting principles.

Other Matter

Our audit was conducted for the purpose of forming an opinion on the consolidated financial statements as a whole. The supplementary information included in the Supplemental Schedules I through IV, and IV are presented for purposes of additional analysis and are not a required part of the consolidated financial statements. The supplementary information is the responsibility of management and was derived from and relates directly to the underlying accounting and other records used to prepare the consolidated financial statements. The supplementary information has been subjected to the auditing procedures applied in the audit of the consolidated financial statements and certain additional procedures, including comparing and reconciling such information directly to the underlying accounting and other records used to prepare the consolidated financial statements or to the consolidated financial statements themselves, and other additional procedures in accordance with auditing standards generally accepted in the United States of America. In our opinion, the supplementary information is fairly stated in all material respects in relation to the consolidated financial statements as a whole.

KPMG LLP

March 29, 2019

MUNICH RE AMERICA CORPORATION AND SUBSIDIARIES
CONSOLIDATED BALANCE SHEETS
December 31, 2018 and 2017
(Dollars in millions, except share amounts)

	December 31, 2018	Restated December 31, 2017
Assets:		
Investments		
Fixed income securities		
Available for sale, at fair value (amortized cost: December 31, 2018 and 2017 - $12,042.9 and $12,069.9 respectively)	$ 11,791.4	$ 12,081.9
Trading, at fair value	17.6	21.1
Equity securities	167.7	159.6
Other invested assets	583.6	516.2
Short term investments	587.7	475.9
Cash and cash equivalents	405.6	350.5
Total investments and cash	13,553.6	13,605.2
Accrued investment income	81.7	78.2
Premiums and other receivables	2,746.9	2,256.0
Deferred policy acquisition costs	645.3	576.0
Reinsurance recoverables on paid and unpaid losses	3,855.5	5,286.6
Funds held by ceding companies	1,322.3	2,116.8
Prepaid reinsurance premiums	120.3	483.9
Goodwill	237.3	237.3
Deferred federal income taxes	541.8	503.8
Other assets	367.8	452.5
Total assets	$ 23,472.5	$ 25,596.3
Liabilities:		
Loss and loss adjustment expense reserves	$ 12,335.4	$ 12,464.3
Unearned premium reserve	2,178.9	2,336.7
Total insurance reserves	14,514.3	14,801.0
Loss balances payable	88.1	166.5
Funds held under reinsurance treaties	3,111.8	4,505.5
Deferred underwriting revenue	1,553.6	1,644.1
Senior notes	331.7	331.5
Other liabilities	580.9	714.9
Total liabilities	20,180.4	22,163.5
Stockholder's Equity:		
Common stock, par value: $0.01 per share; authorized: 1,000 shares; issued and outstanding: 149.49712 shares at December 31, 2018 and 2017	-	-
Additional paid-in capital	5,595.3	5,320.3
Accumulated deficit	(1,959.9)	(1,735.3)
Accumulated other comprehensive loss	(343.3)	(152.2)
Total stockholder's equity	3,292.1	3,432.8
Total liabilities and stockholder's equity	$ 23,472.5	$ 25,596.3

See accompanying notes to consolidated financial statements.

MUNICH RE AMERICA CORPORATION AND SUBSIDIARIES
CONSOLIDATED STATEMENTS OF COMPREHENSIVE INCOME
Years Ended December 31, 2018, 2017, and 2016
(Dollars in millions)

	Year ended December 31,		
		Restated	
	2018	**2017**	**2016**
Revenue:			
Premiums written	$ 5,271.9	$ 4,172.1	$ 3,127.5
Change in unearned premium reserve	(206.4)	(670.1)	(76.2)
Premiums earned	5,065.5	3,502.0	3,051.3
Net investment income	387.8	331.6	288.2
Net realized capital gains (losses)	(117.9)	(34.8)	83.9
Other income	41.7	44.9	40.7
Total revenue	5,377.1	3,843.7	3,464.1
Losses and expenses:			
Losses and loss adjustment expenses	3,753.4	2,886.9	1,673.2
Commission expense	1,531.8	891.8	730.9
Operating expense	246.5	236.2	239.4
Interest expense	25.2	25.5	25.7
Interest on ceded funds held balances	9.5	47.0	45.5
Other expense	22.6	27.9	24.8
Total losses and expenses	5,589.0	4,115.3	2,739.5
Income (loss) before income taxes	(211.9)	(271.6)	724.6
Federal and foreign income taxes	(12.2)	141.0	78.9
Net income (loss)	(199.7)	(412.6)	645.7
Other comprehensive income, net of tax:			
Unrealized appreciation (depreciation) of investments	(208.8)	33.3	11.8
Reclassification adjustment for gains included in operations	1.4	41.9	(1.6)
Defined benefit plan adjustment	17.0	20.1	6.9
Reclassification adjustment for losses (gains) included in operations	3.5	(2.7)	1.9
Other comprehensive income (loss)	(186.9)	92.6	19.0
Comprehensive income (loss)	$ (386.6)	$ (320.0)	$ 664.7

	Year ended December 31,		
	2018	**2017**	**2016**
Net realized capital gains (losses)			
Total other-than-temporary impairments	$ (13.7)	$ (51.5)	$ (0.1)
Other-than-temporary impairments recognized in other comprehensive income	-	-	-
Net impairment losses recognized in earnings	(13.7)	(51.5)	(0.1)
Other-net realized capital gains (losses)	(104.2)	16.7	84.0
Net realized capital gains (losses)	$ (117.9)	$ (34.8)	$ 83.9

See accompanying notes to consolidated financial statements.

MUNICH RE AMERICA CORPORATION AND SUBSIDIARIES
CONSOLIDATED STATEMENTS OF STOCKHOLDER'S EQUITY
Years Ended December 31, 2018, 2017, and 2016
(Dollars in millions)

	Common stock	Additional paid in capital	Accumulated deficit	Accumulated other comprehensive income (loss)	Total
Balance at January 1, 2016	$ -	5,646.7	(1,381.2)	(229.5)	4,036.0
Net income	-	-	645.7	-	645.7
Other comprehensive income	-	-	-	19.0	19.0
Capital contribution	-	22.3	-	-	22.3
Acquisition-related capital restructure	-	(348.7)	123.3	-	(225.4)
Dividend paid to parent company	-	-	(535.1)	-	(535.1)
Balance at December 31, 2016	-	5,320.3	(1,147.3)	(210.5)	3,962.5
Net loss	-	-	(412.6)	-	(412.6)
Other comprehensive income	-	-	-	92.6	92.6
Tax reform reclassification	-	-	34.3	(34.3)	-
Dividend paid to parent company	-	-	(209.7)	-	(209.7)
Balance at December 31, 2017	-	5,320.3	(1,735.3)	(152.2)	3,432.8
Cumulative-effect adjustment for accounting change	-	-	14.2	(4.2)	10.0
Net income	-	-	(199.7)	-	(199.7)
Other comprehensive income	-	-	-	(186.9)	(186.9)
Capital contribution	-	275.0	-	-	275.0
Dividend paid to parent company	-	-	(39.1)	-	(39.1)
Balance at December 31, 2018	$ -	$ 5,595.3	$ (1,959.9)	$ (343.3)	$ 3,292.1

See accompanying notes to consolidated financial statements.

MUNICH RE AMERICA CORPORATION AND SUBSIDIARIES
CONSOLIDATED STATEMENTS OF CASH FLOWS
Years Ended December 31, 2018, 2017, and 2016
(Dollars in millions)

	Year ended December 31,		
	2018	**2017**	**2016**
Cash Flows From Operating Activities:			
Net income (loss)	$ (199.7)	$ (412.6)	$ 645.7
Adjustments to reconcile net income to net cash provided by (used in) operating activities:			
Accrued investment income	(3.5)	(2.4)	1.1
Trading securities	3.5	(11.4)	(9.0)
Premiums and other receivables	(490.1)	(141.9)	(86.0)
Deferred policy acquistion costs	(69.3)	(207.2)	(34.6)
Reinsurance recoverables on paid and unpaid losses	1,423.2	131.4	568.0
Funds held, net	(599.2)	(385.6)	192.6
Insurance reserves	(282.8)	1,156.3	(276.5)
Deferred revenue	(90.5)	(79.7)	(329.0)
Current and deferred federal and foreign income taxes, net	(21.9)	132.3	81.4
Other assets and liabilities, net	309.4	313.4	(72.5)
Depreciation expense on property and equipment	5.6	6.0	5.9
Net realized capital losses (gains)	117.4	34.8	(83.9)
Equity in income of investees	(5.6)	(16.3)	(4.7)
Other, net	(51.9)	11.6	11.6
Net cash provided by operating activities	44.6	528.7	610.1
Cash Flows From Investing Activities:			
Fixed income securities available for sale:			
Purchases	(10,868.9)	(7,749.1)	(7,213.7)
Maturities	304.7	372.9	533.3
Sales	10,493.9	7,377.8	6,188.5
Equity securities:			
Purchases	(0.3)	(2.6)	-
Sales	7.4	-	-
Other invested assets:			
Purchases	(78.3)	(114.2)	(263.4)
Sales	10.0	13.5	4.2
Net derivative instrument settlements	14.6	(3.7)	6.8
Net purchases and sales of short term investments	(106.5)	(306.9)	244.0
Cost of additions to property and equipment	(2.1)	(1.4)	(6.3)
Net cash used in investing activities	(225.5)	(413.7)	(506.6)
Cash Flows From Financing Activities:			
Capital contribution	275.0	-	-
Dividends paid to parent company	(39.1)	(209.7)	(528.9)
Partial extinguishment of senior notes	-	(7.9)	-
Net cash provided by (used in) financing activities	235.9	(217.6)	(528.9)
Effect of exchange rate changes on cash and cash equivalents	0.1	(0.1)	0.1
Net increase (decrease) in cash and cash equivalents	55.1	(102.7)	(425.3)
Acquisition-related adjustment	-	-	(13.8)
Cash and cash equivalents, beginning of period	350.5	453.2	892.3
Cash and cash equivalents, end of period	$ 405.6	$ 350.5	$ 453.2
Supplemental Cash Flow Information:			
Income taxes paid, net	$ (8.7)	$ (2.3)	$ (3.3)
Interest paid	$ (24.9)	$ (25.3)	$ (25.5)
Supplemental Schedule of Noncash Financing Activities			
Dividend to parent company	$ -	$ -	$ 6.3
Capital contribution	$ -	$ -	$ 22.3

See accompanying notes to consolidated financial statements.

1. NATURE OF OPERATIONS

Munich Re America Corporation (the "Company") primarily acts as the holding company for three insurance subsidiaries. Munich Reinsurance America, Inc., a Delaware domiciled insurance company, underwrites property and casualty reinsurance. American Alternative Insurance Corporation ("AAIC"), is a Delaware domiciled insurance company which writes primary insurance business primarily for the alternative market. The Princeton Excess and Surplus Lines Insurance Company ("Princeton E&S"), also a Delaware insurance company, was formed to provide insurance coverage on a non-admitted basis in the United States. Princeton E&S is licensed as an admitted insurer in its state of domicile, Delaware, and is authorized as eligible to write insurance in all states on a non-admitted basis. (Munich Reinsurance America, Inc., AAIC, and Princeton E&S together are the "insurance subsidiaries.")

The Company is a wholly-owned subsidiary of Munich-American Holding Corporation ("MAHC"), a Delaware holding company, which in turn is wholly-owned by Münchener Rückversicherungs-Gesellschaft Aktiengesellschaft in München ("Munich Re"), a company organized under the laws of Germany. As a means to strengthen the statutory surplus of an insurance subsidiary, in December 2018, Munich Re contributed cash of $275.0 to MAHC and further to the Company and Munich Reinsurance America, Inc.

There were no subsequent events requiring adjustment to the financial statements or disclosure through March 29, 2019, the date that the Company's financial statements were issued.

2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

A. Basis of Presentation

The Company's primary business is reinsuring property-casualty risks of domestic and foreign insurance organizations under excess of loss and pro rata reinsurance contracts and providing risk management solutions to alternative market clients. The Company and its subsidiaries operate on a calendar year basis.

The consolidated financial statements have been prepared in conformity with accounting principles generally accepted in the United States of America ("GAAP") and include the accounts of the Company and its subsidiaries. Inter-company accounts and transactions have been eliminated. Investees which represent the Company's investment in voting interests of 20% to 50% generally are recorded using the equity method. 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 disclosure of contingent assets and liabilities at the date of the financial statements and the reported amounts of revenues and expenses during the reporting period. Actual results could differ from those estimates.

The Company's Consolidated Balance Sheet at December 31, 2017, Consolidated Statements of Comprehensive Income and Cash Flows for the years ended December 31, 2017 and 2016, and certain footnotes have been restated to reflect the presentation requirements of the new *Recognition and Measurement of Financial Assets and Financial Liabilities* and *Presentation of Net Periodic Postretirement Benefit Cost* accounting guidance as discussed in Note 2C.

B. Common Control Acquisitions

In 2016 Munich Reinsurance America, Inc. acquired the net assets of certain affiliated entities from Munich Re. The acquired net assets included real estate and renewable energy infrastructure interests, cash, deferred tax assets, and other payables and receivables. These net asset acquisitions were accounted for as business combinations between entities under common control using the pooling-of-interest method. As a result of applying the pooling-of-interest method, Munich Reinsurance America, Inc., recognized cumulative deferred tax benefits of $83.5 attributable to prior periods related to the release of valuation allowances on capital loss carryforwards and net operating losses. The acquired investments are accounted for under the equity and cost methods. The excess of the carry values over the fair values of the acquired investments of one entity was recorded as a capital contribution of

$22.3. The excess of the fair value paid for the acquired investments of another entity over their carry values was recorded as a $6.3 dividend to Munich Re.

C. Application of New Accounting Standards

Revenue from Contracts with Customers

In May 2014, the Financial Accounting Standards Board ("FASB") issued Accounting Standards Update ("ASU") 2014-09, "Revenue from Contracts with Customers", which supersedes most existing revenue recognition guidance. The standard excludes from its scope the accounting for insurance contracts, leases, financial instruments, and other agreements that are governed under other GAAP guidance. The standard is effective for interim and annual reporting periods beginning after December 15, 2017, as amended by ASU 2015-14, and may be applied retrospectively or through a cumulative effect adjustment to retained earnings at the date of adoption. Early adoption is not permitted. The Company adopted this guidance in 2018 without material impact to these consolidated financial statements.

Recognition and Measurement of Financial Assets and Financial Liabilities

In January 2016, the FASB issued ASU 2016-01, "Recognition and Measurement of Financial Assets and Financial Liabilities", which changes the accounting for equity investments, financial liabilities under the fair value option, and the presentation and disclosure requirements for financial instruments. Under the new guidance all equity investments in unconsolidated entities, other than those accounted for using the equity method, are generally measured at fair value through earnings. The standard is effective for interim and annual periods beginning after December 31, 2017. The Company adopted this guidance in January 2018, and recorded the following cumulative-effect change to its Consolidated Balance Sheet, representing the reclassification of net unrealized gains on equity securities and the change in measurement of certain investments previously accounted for at cost.

Equity securities	$ 12.7
Deferred federal income taxes	(2.7)
Accumulated deficit	14.2
Accumulated other comprehensive loss	(4.2)

Statement of Cash Flows

In August 2016, the FASB issued ASU 2016-15, "Statement of Cash Flows – Classification of Certain Cash Receipts and Cash Payments", clarifying the classification of certain cash receipts and cash payments within the statement of cash flows, including distributions received from equity method investments. The guidance requires entities to make an accounting policy election to present cash flows received either in operating cash flows or investing cash flows based on cumulative equity-method earnings or on the nature of the distributions. The guidance is effective in fiscal years beginning after December 15, 2017, and interim periods within those fiscal years. The Company adopted this guidance in 2018 with no impact on its Consolidated Statement of Cash Flows. The Company's policy of including distributions received from equity method investments in operating cash flows remains unchanged.

Presentation of Net Periodic Pension Cost and Net Periodic Postretirement Benefit Cost

In March 2017, the FASB issued ASU 2017-07, "Improving the Presentation of Net Periodic Pension Cost and Net Periodic Postretirement Benefit Cost", which requires entities to disaggregate the components of net periodic benefit cost, present the service cost component with other current compensation costs, and present the other components elsewhere in the income statement outside of income from operations. The standard is effective for interim and annual reporting periods beginning after December 15, 2017. Retrospective income statement presentation is required and the Company's Consolidated Statement of Comprehensive Income for the period ended December 31, 2017 and 2016, and related footnotes have been revised to conform with the new presentation. The

Company adopted this guidance in 2018 without material impact to these consolidated financial statements. See Note 10 –Benefit Plans for additional information.

Reclassification of Certain Tax Effects from Accumulated Other Comprehensive Income

In February 2018, the FASB issued ASU 2018-02, "Reclassification of Certain Tax Effects from Accumulated Other Comprehensive Income", to address concerns related to the application of Accounting Standards Codification ("ASC") 740, Income Taxes, to certain provisions of the Tax Cuts and Jobs Act ("tax reform"). The guidance provides companies the option to reclassify from accumulated other comprehensive income to retained earnings the residual tax effects resulting from the accounting for tax reform. The standard is effective for interim and annual periods beginning after December 15, 2018 and early adoption is permitted. The Company adopted this guidance as of December 31, 2017, and elected to reclassify $34.3 of deferred tax benefits resulting from the tax rate differential from accumulated other comprehensive income to accumulated deficit.

Changes to Disclosure Requirements for Defined Benefit Plans

In August 2018, the FASB issued ASU 2018-14, "Disclosure Framework – Changes to the Disclosure Requirements for Defined Benefit Plans", which eliminates certain disclosures that are no longer considered cost beneficial and requires new disclosures that the FASB considers pertinent. The new guidance is effective for annual periods ending after December 15, 2020, and early adoption is permitted. The Company adopted this guidance effective with these financial statements. See Note 10 – Benefit Plans for the disclosures required by this guidance.

D. Future Application of Accounting Standards

Leases

In February 2016, the FASB issued ASU 2016-02, "Leases", which will require lessees to recognize a right-of-use asset and lease liability for all leases other than those that are short term. The new guidance will also require additional qualitative and quantitative disclosures regarding the nature of an entity's leasing activities. The standard is effective for annual reporting periods beginning after December 15, 2018, and interim periods therein, and early adoption is permitted. The guidance was initially to be applied on a modified retrospective basis, which would require application at the earliest period presented in the financial statements.

In July 2018, the FASB issued ASU 2018-11, "Leases – Targeted Improvements", which provides entities with an additional transition method for applying the new leases standard. Under the new transition option, an entity may apply the new leases standard at the adoption date and recognize a cumulative-effect adjustment to the opening balance of retained earnings in the period of adoption, rather than the earliest period presented in the financial statements.

Upon adoption on the effective date, the Company expects to record the following cumulative-effect change to its Consolidated Balance Sheet, representing the recognition of its right-of-use assets and the present value of its leased office space obligations.

Other assets	$ 17.7
Other liabilities	(19.0)
Accumulated deficit	1.0
Deferred tax asset	0.3

Measurement of Credit Losses on Financial Instruments

In June 2016, the FASB issued ASU 2016-13, "Measurement of Credit Losses on Financial Instruments", which significantly changes the way entities recognize impairment of many financial assets by requiring immediate recognition of estimated credit losses expected to occur over their remaining life based on an expected loss model. Under the new guidance, an entity will measure all expected credit losses for financial instruments held at the

reporting date based on historical experience, current conditions and reasonable and supportable forecasts. The standard is effective for interim and annual periods beginning after December 15, 2020, for public business entities that do not file with the Securities and Exchange Commission ("SEC"). Early adoption is permitted for interim and annual periods beginning after December 15, 2018. The Company is currently assessing the impact of the provisions of this new accounting guidance, which will require the establishment of an allowance for credit losses with a resulting negative adjustment to retained earnings.

Goodwill

In January 2017, the FASB issued ASU 2017-04, "Intangibles and Other – Simplifying the Test for Goodwill Impairment", which eliminates the requirement to determine implied goodwill in measuring an impairment loss. An impairment loss will be measured as the amount by which a reporting unit's carrying value exceeds its fair value, limited to the amount of the goodwill. The guidance is effective prospectively for goodwill impairment tests in fiscal years beginning after December 15, 2020, for public business entities that do not file with the SEC. Early adoption is permitted. The Company is currently assessing the new guidance, but does not believe its adoption will have a material impact on the Company's consolidated financial statements.

Premium Amortization on Callable Debt Securities

In March 2017, the FASB issued ASU 2017-08, "Premium Amortization on Purchased Callable Debt Securities", which requires certain premiums on callable debt securities to be amortized to the earliest call date. The standard is effective for interim and annual reporting periods beginning after December 15, 2018, and early adoption is permitted. Application is required on a modified retrospective basis with a cumulative-effect adjustment to retained earnings as of the beginning of the period of adoption. The adoption of this guidance will not have a material impact on the Company's consolidated financial statements.

Changes to Disclosure Requirements for Fair Value Measurement

In August 2018, the FASB issued ASU 2018-13, "Disclosure Framework – Changes to the Disclosure Requirements for Fair Value Measurement", which eliminates, adds, and modifies certain disclosure requirements for fair value measurements as part of its disclosure framework project. The new guidance is effective for all entities for interim and annual periods beginning after December 15, 2019. Early adoption is permitted. Entities making this election are permitted to early adopt the eliminated or modified disclosure requirements and delay the adoption of the new disclosure requirements until the effective date. The Company does not expect the adoption of this guidance to have a material impact on its footnote disclosures.

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 an impact on the Company.

E. Investments

Debt securities classified as available for sale are reported at fair value, with unrealized gains and losses excluded from earnings and reflected in stockholder's equity as a component of accumulated other comprehensive income, net of related income taxes.

Treasury inflation-protected securities classified as available for sale are reported at fair value with unrealized gains and losses excluded from earnings and reflected in stockholder's equity as a component of accumulated other comprehensive income, net of related income taxes. Adjustments related to the inflation factor are included in net investment income.

Equity investments, and debt securities classified as trading, are reported at fair value, with gains and losses, both realized and unrealized, included in net investment income.

Other invested assets includes investments accounted for under the equity method, as the Company's ownership is deemed to represent significant influence. These investments represent the Company's ownership portion of the respective investee's equity. Other invested assets also includes the Company's investments in senior secured fixed term loans carried at amortized cost.

The Company's derivative portfolio may consist of credit default swaps, credit default swap indices, foreign exchange forward contracts, and fixed income futures. The Company does not apply hedge accounting in its reporting of derivative instruments. Derivative instruments are reported at fair value, with gains and losses, both realized and unrealized, included in net investment income. Derivative assets and liabilities and any related cash collateral received or paid, are presented on a net basis when a legally enforceable master netting agreement exists between the Company and the counterparty. A master netting agreement is an agreement between two counterparties who have multiple derivative contracts with each other that provides for the net settlement of all contracts, as well as cash collateral, through a single payment.

The fair value of the credit default swaps and foreign exchange forward contracts are reported in other invested assets if in a net gain position or other liabilities if in a net loss position. The fixed income futures are settled with cash daily, therefore only the one-day open receivable or payable related to the variation margin is included in the Company's Consolidated Balance Sheet in other assets or other liabilities, respectively. The value of the Company's derivative instruments can change, sometimes significantly, based on varying factors such as changes in equity market values, credit spreads, and foreign exchange rates.

Short term investments are predominantly debt securities purchased with a maturity of greater than three months and less than one year when purchased. Long term securities purchased within a year of their maturity are reported at fair value, with unrealized gains and losses reflected in accumulated other comprehensive income, net of tax. Short term investments with original maturities of less than one year are carried at amortized cost which, because of their short-term nature, approximates fair value.

Realized gains and losses on the sale of investments are determined on a first-in, first-out basis and are included in net income. Investment income is recognized as earned and includes the accretion of discounts and amortization of premiums related to fixed maturity securities. Purchases and sales are recorded on a trade date basis.

The amortized cost for fixed maturity securities is adjusted for unamortized premiums and discounts, which are amortized or accreted using the interest-rate method over the estimated remaining term of the securities. Mortgage-backed and asset-backed securities are further adjusted for anticipated prepayments and defaults.

Investments are subject to regular reviews to determine if a decline in value is other than temporary. Factors considered are: the reasons for the decline in value, the extent and duration of the decline, the Company's intent to sell the investment or when it is more likely than not that the Company will be required to sell the investment before its anticipated recovery in value.

For equity securities and investments in limited partnerships and limited liability companies, that the Company intends to sell, or for which it does not have the intent and ability to hold until such time that it has recovered in value, the full amount of an impairment is reported in net realized capital losses.

For fixed income securities that the Company intends to sell, or for which it is more likely than not that it would be required to sell before the anticipated recovery in value, the full amount of an impairment is reported in net realized capital losses.

For fixed income securities that the Company does not intend to sell, or for which it is more likely than not that it would not be required to sell before the anticipated recovery in value, the Company separates the credit loss component of an impairment, defined as the difference between the present value of the cash flows expected to be collected and the amortized cost basis, from the amount related to other factors and reports the credit loss component in net realized capital losses. The impairment related to the other factors is reported in a separate category of accumulated other comprehensive income.

F. Cash and Cash Equivalents

Cash and cash equivalents include cash on hand, money market funds, and other debt issues purchased with a maturity of three months or less when purchased.

G. Premiums and Unearned Premiums

Premiums are earned over the terms of the related insurance policies and reinsurance contracts. Unearned premium reserves are computed for the remaining period of coverage using pro rata methods.

Assumed reinsurance premiums are based on information provided by ceding companies. Written and earned premiums, and their related cost, which have not yet been reported to the Company are estimated and accrued. The information used in establishing these estimates is reviewed and subsequent adjustments are recorded in the period in which they are determined. On retrospectively rated contracts, estimated additional or return premiums are accrued.

Assumed reinsurance and ceded retrocessional contracts that do not both transfer significant insurance risk and result in the reasonable possibility that the Company or its retrocessionnaires may realize a significant loss from the insurance risk assumed are required to be accounted for as deposits. These contract deposits are included in other assets and other liabilities in the Consolidated Balance Sheets and are accounted for as financing transactions with interest income or expense included in other income and credited or charged to the contract deposits.

A premium deficiency occurs when expected losses and LAE and deferred policy acquisition costs exceed related unearned premiums. Anticipated investment income is considered in making this evaluation. A premium deficiency reserve is established after the related deferred policy acquisition costs have been reduced to zero.

The Company maintains an allowance for doubtful accounts for amounts due from clients in receivership or believed to be in financial difficulty. The total allowance reflected in premiums and other receivables was $16.8 and $16.9 at December 31, 2018 and 2017. There can be no assurance future charges for uncollectible premiums and other receivables will not have a material adverse effect on results of operations in any future period, although management believes any such charges would not be expected to have a material adverse effect on the Company's liquidity or financial condition.

H. Deferred Policy Acquisition Costs

Deferred policy acquisition costs represent acquisition costs, primarily commissions and certain operating expenses related to the successful acquisition of new or renewal contracts. These costs are deferred and limited to their estimated realizable value based on the related unearned premiums, anticipated loss and loss adjustment expenses, and anticipated investment income. These costs are amortized ratably over the terms of the related contracts, which are generally a year in duration. The amortization of deferred policy acquisition costs was $576.0, $368.8, and $334.2 for the years ended December 31, 2018, 2017, and 2016, respectively. Periodically deferred policy acquisition costs are reviewed for recoverability; anticipated investment income is considered in making these evaluations.

I. Loss and Loss Adjustment Expense Reserves

The Company maintains reserves to cover its estimated ultimate liability for loss and loss adjustment expenses ("LAE") with respect to reported and unreported claims incurred as of the end of each accounting period modified for current trends and estimates of expenses for investigating and settling claims, net of estimated related salvage and subrogation claims. These reserves represent management's best estimates based on actuarial indications of ultimate loss and expenses.

It is the Company's policy to discount all workers' compensation claims on reported and unreported losses at a rate permitted by the Commissioner of Insurance of the State of Delaware. Claims related to accident years prior to 2007 are discounted using an interest rate of 4.5%. Claims related to accident years 2007 through 2010 are discounted using an interest rate of 3.0%. Claims related to accident years 2011 through 2018 are discounted using an interest rate of 0.0%. Such discounts resulted in a reduction in gross loss reserves of $843.9 and $1,064.9, and net loss reserves of $248.1 and $325.3, at December 31, 2018 and 2017, respectively.

J. Deferred Underwriting Revenue

The Company has several retroactive reinsurance contracts, most notably the loss portfolio transfer agreement and adverse loss development covers with Munich Re (see Note 13 – Related Party Transactions). For retroactive reinsurance contracts, adverse loss development in excess of the premiums paid is generally deferred and recognized in income using the interest method over the settlement period of the underlying claims. Changes in the expected timing and estimated amounts of the underlying claim payment patterns produce changes in the periodic income recognized. These changes in estimates are determined retrospectively and included in income in the period of the change and subsequent periods.

K. Reinsurance Recoverables on Unpaid Losses

Reinsurance recoverables on unpaid losses were $3,821.4 and $5,263.5 at December 31, 2018, and 2017, respectively. These recoverables were based upon the application of estimates of unpaid loss and LAE reserves in conjunction with terms specified under individual retrocessional contracts. The amounts ultimately collected may be more or less than such estimates. Any adjustments of these estimates or differences between estimates and amounts subsequently collected are reflected in income as they occur.

The Company maintains an allowance for doubtful accounts for amounts due from reinsurers in receivership or believed to be in financial difficulty. The total allowance reflected in reinsurance recoverables on paid and unpaid losses was $40.8 and $106.8 at December 31, 2018 and 2017, respectively. Management believes such provision is sufficient to reduce reinsurance recoverables to their collectible amounts. There can be no assurance future charges for uncollectible reinsurance will not have a material adverse effect on results of operations in any future period, although management believes any such charges would not be expected to have a material adverse effect on the Company's liquidity or financial condition.

L. Defined Benefit Plans

The liability for the Company's defined benefit plans is the present value of the defined benefit obligation at the balance sheet date less the fair value of the qualified pension plan assets. Gains or losses and prior service costs or credits that may arise during the period are recognized in other comprehensive income, net of tax.

The defined benefit obligation and periodic benefit cost are calculated by independent actuaries based on plan and employee data and actuarial assumptions provided by the Company. Key assumptions include discount rate, mortality rates, health care cost trends, and expected return on the plan assets of the qualified pension plan. These assumptions are based on available market data and are updated annually. The actuarial assumptions may differ from the actual results due to changes in market conditions, economic trends and mortality experience. Any changes in these assumptions could have a significant impact on the defined benefit plan liability and future plan costs.

M. Property and Equipment

Property and equipment are carried at cost less accumulated depreciation and are included in other assets in the consolidated balance sheets. Property in own use is evaluated for impairment based on periodic third-party appraisals. The Company uses straight-line depreciation for all of its depreciable assets, with the useful lives ranging from three to forty years depending on the type of asset. The cost of depreciable assets was $240.9 and $243.1 at December 31, 2018 and 2017, respectively. Accumulated depreciation was $151.8 and $149.2 at December 31, 2018 and 2017, respectively.

N. Goodwill

Goodwill represents the cost in excess of net assets acquired in the acquisitions of Munich Reinsurance America, Inc. in 1992 and the minority interests in Munich American Reinsurance Company in 1997. The Company evaluates the recoverability of goodwill annually. The carrying value of goodwill would be reduced to its implied fair value, through a direct write-off, if it were determined through evaluation that the goodwill was impaired.

The Company did not record the goodwill associated with its acquisition by Munich Re in November 1996. Accordingly, any impairments of the related goodwill are not reflected in these consolidated financial statements.

O. Income Taxes

Pursuant to a tax sharing agreement between MAHC and its subsidiaries, which includes the Company and its subsidiaries, a consolidated U.S. Federal income tax return is filed. Each company's annual federal income tax liability is calculated on a standalone basis. The Company also files separate foreign income tax returns as required. The Company uses the liability method of accounting for income taxes, whereby deferred tax assets and liabilities are determined based on differences between the financial reporting and tax bases of assets and liabilities and are measured using the enacted tax rates and laws. The Company establishes a "valuation allowance" for any portion of the deferred tax asset that management does not believe is more likely than not realizable.

P. Foreign Currency Translation

Foreign currency revenue and expenses are translated at exchange rates in effect when the transactions are recorded. Assets and liabilities are re-measured at the rate of exchange in effect at the close of each reporting period. Re-measurement gains and losses of foreign currency denominated investment holdings available for sale are recorded in accumulated other comprehensive income, net of tax. Transaction gains and losses on sales of investments are included in net realized capital gains. Transaction and re-measurement gains and losses related to investments designated as "trading" are included in net investment income. All other transaction and re-measurement gains and losses are included in other income or other expense.

Q. Fair Values of Financial Instruments

The estimated fair value of financial instruments has been determined by the Company using available market information and appropriate valuation methodologies. However, considerable judgment is required in interpreting market data to develop the estimates of fair value. Accordingly, the Company's estimates of fair value are not necessarily indicative of the amounts that the Company could realize in a current market exchange. The use of different market assumptions and/or estimation methodologies may have a material effect on the estimated fair value amounts. Furthermore, fair value estimates disclosed are based on pertinent information available to the Company at December 31, 2018 and 2017. Although the Company is not aware of any factors that would significantly affect the estimated fair value amounts, such amounts have not been comprehensively revalued for purposes of these financial statements since that date; therefore, current estimates of fair value may differ significantly from the amounts disclosed in the financial statements.

The following methods and assumptions were used by the Company in estimating its fair value disclosures (as presented in Note 4—Fair-Value Measurement):

Fixed income securities. Fair values for bonds and certain preferred securities were based on prices from pricing services and index providers, where available, and independent securities broker-dealers, if necessary. The fair value of the Company's investments in private placement fixed income corporate securities are based on a discounted cash flow model.

Equity securities. The fair values of marketable equity securities were based on quoted market prices. The fair value of the Company's equity investments in privately placed real estate limited partnerships, carried at fair value, are based on the net asset value provided by the manager of the funds

Other invested assets. The fair values of credit default swaps were determined based on models that use actively quoted or observable market input values from external market data providers and third party vendors. The fair value of foreign exchange forwards were determined based on the end of period exchange rate and the forward rate of the contract. The value of these derivative instruments can change, sometimes significantly, based on varying factors such as changes in equity market values and foreign exchange rates.

The fair value of the Company's investments in senior secured loans are based on a discounted cash flow model which uses significant observable and unobservable inputs, including: a risk free rate curve, a credit spread curve and an illiquidity spread.

Short term investments. The fair values of long term securities purchased within a year of their maturity were based on quoted market prices by pricing services and index providers, where available, and independent securities dealers, if necessary. The carrying amounts of short term investments with original maturities of less than one year approximate their fair value because of their short-term nature.

Cash and cash equivalents. The carrying amounts of these financial instruments approximate their fair value because of their short-term nature.

Senior notes. The fair value of this obligation was determined based on a price provided by an independent pricing service.

3. INVESTMENTS

A. Fixed Income Securities Designated as Available for Sale

Investments available for sale at December 31, were as follows:

	2018			
	Amortized cost	Gross unrealized gains	Gross unrealized losses	Fair value
Fixed income securities:				
U.S. Treasury securities and obligations of U.S. government agencies and corporations	$ 5,333.6	$ 18.6	$ 95.6	$ 5,256.6
Obligation of states and political subdivisions	25.4	0.6	-	26.0
Foreign government securities	686.0	3.6	23.8	665.8
Corporate securities	4,424.5	8.2	150.2	4,282.5
Asset-backed securities	392.2	-	4.6	387.6
Residential mortgage-backed securities	710.4	8.2	17.9	700.7
Commercial mortgage-backed securities	470.8	4.0	2.6	472.2
Total fixed income securities	12,042.9	43.2	294.7	11,791.4
Short term investments	588.3	-	0.6	587.7
Total investments available for sale	$ 12,631.2	$ 43.2	$ 295.3	$ 12,379.1

	2017			
	Amortized cost	Gross unrealized gains	Gross unrealized losses	Fair value
Fixed income securities:				
U.S. Treasury securities and obligations of U.S. government agencies and corporations	$ 5,272.5	$ 11.1	$ 59.9	$ 5,223.7
Obligation of states and political subdivisions	29.2	1.7	-	30.9
Foreign government securities	811.2	20.3	5.4	826.1
Corporate securities	4,521.1	62.1	15.8	4,567.4
Asset-backed securities	506.9	1.9	0.1	508.7
Residential mortgage-backed securities	709.8	12.4	15.0	707.2
Commercial mortgage-backed securities	219.2	0.6	1.9	217.9
Total fixed income securities	12,069.9	110.1	98.1	12,081.9
Short term investments	476.0	-	0.1	475.9
Total investments available for sale	$ 12,545.9	$ 110.1	$ 98.2	$ 12,557.8

In addition to U.S. Treasury securities, the Company's investment in bonds and securitizations issued by the Federal National Mortgage Association ("FNMA") exceeded 10% of stockholder's equity. The fair value of these securities was $427.8 and $578.2 at December 31, 2018, and 2017, respectively. The majority of these holdings are comprised of mortgage-backed securities.

The amortized cost and fair value of fixed income securities available for sale at December 31, 2018, are shown below by contractual maturity. Actual maturities may differ from contractual maturities because securities may be called or prepaid with or without call or prepayment penalties.

	2018	
	Amortized cost	**Fair value**
Due to mature:		
One year or less	$ 553.7	$ 550.9
After one year through five years	5,683.5	5,590.8
After five years through ten years	3,320.4	3,248.5
After ten years	1,304.1	1,228.3
Residential mortgage-backed securities	710.4	700.7
Commercial mortgage-backed securities	470.8	472.2
Total fixed income securities	$ 12,042.9	$ 11,791.4

At December 31, 2018, and 2017, the Company's investments in fixed income securities investments available for sale were $11,791.4 or 87.0% and $12,081.9 or 88.8%, respectively, of total investments and cash. Fixed income security investments available for sale by market sector at December 31, were as follows:

	2018		2017	
	Amortized cost	**Fair value**	**Amortized cost**	**Fair value**
U.S. government	$ 5,333.6	$ 5,256.6	$ 5,272.5	$ 5,223.7
Foreign government	686.0	665.8	811.2	826.1
State and municipal	25.4	26.0	29.2	30.9
Asset-backed securities	392.2	387.6	506.9	508.7
Residential mortgage-backed securities	710.4	700.7	709.8	707.2
Commercial mortgage-backed securities	470.8	472.2	219.2	217.9
Financial	511.1	494.3	609.7	618.0
Utilities	473.9	461.5	581.7	587.3
Transportation	6.0	6.4	7.0	7.7
Health care	138.2	133.7	177.1	179.1
Natural resources	488.2	462.9	454.5	460.0
Other corporate securities	2,807.1	2,723.7	2,691.1	2,715.3
Total	$ 12,042.9	$ 11,791.4	$ 12,069.9	$ 12,081.9

Net unrealized appreciation (depreciation) on investments included within accumulated other comprehensive income was as follows:

	Year ended December 31,		
	2018	2017	2016
Change in unrealized appreciation (depreciation)			
Fixed income securities	$ (263.5)	$ 103.1	$ (4.8)
Equity securities	(5.3)	2.3	(0.3)
Other investments	(0.5)	-	13.5
Subtotal	(269.3)	105.4	8.4
Income tax effect	(57.7)	30.2	(1.8)
Reclassification adjustment for tax reform rate differential	-	4.6	-
Net change in unrealized appreciation (depreciation)	(211.6)	70.6	10.2
Balance, beginning of year	13.5	(57.1)	(67.3)
Balance, end of year	$ (198.1)	$ 13.5	$ (57.1)

Proceeds from sales of investments available for sale and the related gains and losses realized on those sales were as follows:

	Year ended December 31,		
	2018	2017	2016
Proceeds from sales	$ 10,493.9	$ 7,377.8	$ 6,188.5
Gross gains realized	30.2	87.9	153.8
Gross losses realized	134.1	71.3	69.8

The Company holds certain foreign currency denominated securities in portfolios classified as “trading”, and as a result, proceeds from any sales of these securities are not included in cash flows from investing activities.

Investments with unrealized losses at December 31, 2018 and 2017, and the period of time for which they have been in a continuous loss position, were as follows:

	December 31, 2018					
	Less than 12 months		12 months or longer		Total	
	Fair value	Unrealized losses	Fair value	Unrealized losses	Fair value	Unrealized losses
Fixed income securities:						
U.S. Treasury securities and obligations of U.S. government agencies and corporations	$ 420.0	$ 10.4	$ 2,763.9	$ 85.2	$ 3,183.9	$ 95.6
Foreign government securities	431.2	17.8	104.5	6.0	535.7	23.8
Corporate securities	2,067.0	78.5	1,642.7	71.7	3,709.7	150.2
Asset-backed securities	276.4	4.3	50.1	0.3	326.5	4.6
Residential mortgage-backed securities	-	-	391.1	17.9	391.1	17.9
Commercial mortgage-backed securities	28.3	0.1	142.2	2.5	170.5	2.6
Short term investments	106.8	0.6	-	-	106.8	0.6
Total temporarily impaired investments	$ 3,329.7	$ 111.7	$ 5,094.5	$ 183.6	$ 8,424.2	$ 295.3

	December 31, 2017					
	Less than 12 months		12 months or longer		Total	
	Fair value	Unrealized losses	Fair value	Unrealized losses	Fair value	Unrealized losses
Fixed income securities:						
U.S. Treasury securities and obligations of U.S. government agencies and corporations	$ 3,595.5	$ 26.9	$ 1,058.7	$ 33.0	$ 4,654.2	$ 59.9
Foreign government securities	232.7	2.2	90.0	3.2	322.7	5.4
Corporate securities	1,664.8	12.2	130.3	3.6	1,795.1	15.8
Asset-backed securities	28.2	0.1	-	-	28.2	0.1
Residential mortgage-backed securities	-	-	456.6	15.0	456.6	15.0
Commercial mortgage-backed securities	103.5	0.6	62.5	1.3	166.0	1.9
Short term investments	199.1	0.1	-	-	199.1	0.1
Total temporarily impaired investments	$ 5,823.8	$ 42.1	$ 1,798.1	$ 56.1	$ 7,621.9	$ 98.2

B. Other-than-Temporary Impairment Evaluation

Investments classified as available for sale are subject to regular reviews to determine if a decline in value is other than temporary. For fixed income securities, the Company individually analyzes all positions with greater emphasis on those that have, in management's opinion, declined significantly below cost. The Company considers market conditions, industry characteristics and the fundamental operating results of the issuer to determine if declines in value are due to changes in interest rates, changes relating to a decline in credit quality, or other issues affecting the investment.

For debt securities that are not deemed to be credit impaired, management performs additional analysis to assess whether it intends to sell or if it is more likely than not that the Company will be required to sell the investment before its anticipated recovery in value. This analysis is performed on an individual security basis.

The Company's analysis regarding credit impairment is based on the characteristics of the security:

Corporate securities. In assessing whether a corporate debt security is other than temporarily impaired the Company considers the issuer's financial condition. An analysis of the issuer's financial condition includes whether there has been a decline in the overall value of the issuer or its ability to service the specific security. Factors which may be used include, but are not limited to, credit quality ratings, cash flow sustainability, liquidity, the company's financial strength, industry, and market position.

Structured securities. When evaluating whether a residential mortgage-backed security, commercial mortgage-backed security, collateralized debt obligation and other asset-backed securities are other than temporarily impaired due to credit, the Company examines characteristics of the underlying collateral, such as delinquency and default rates, the quality of the underlying borrower, the type of collateral in the pool, the vintage year of the collateral, subordination levels within the structure of the collateral pool and the quality of any credit guarantors.

For mortgage-backed securities, other than those issued by the Government National Mortgage Association ("GNMA"), which are backed by the full faith and credit of the U.S. Government, or FNMA and FHLMC which are government sponsored enterprises, non-interest related impairment is assessed using a cash flow model that estimates the cash flows on the underlying mortgages. The cash flow model incorporates actual cash flows on the mortgage-backed securities and projects the remaining cash flows using a number of assumptions, including default rates, prepayment rates, and recovery rates.

Management obtains assessments from its investment advisor, an affiliated entity, which develops specific assumptions using as much market data as possible and includes internal estimates as well as estimates published by rating agencies and other third-party sources. Default rates are projected by considering current underlying mortgage loan performance. Other assumptions used contemplate the actual collateral attributes, including geographic concentrations, rating agency loss projections, rating actions and current market prices.

The analysis management utilizes to assess home equity asset-backed securities includes expected cash flow projections provided by the Company's investment advisor which consider expected default expectations and loss severities and prepayment assumptions. The significant inputs in the models include the expected default rates, delinquency rates and foreclosure costs. For non-home equity asset-backed securities, reports and analysis are used to determine expected recovery value for such securities.

At December 31, 2018, fixed income securities that have been in an unrealized loss position for twelve months or longer are comprised of 337 securities with an amortized cost of $5,278.1 and a gross unrealized loss of $183.6. These securities mature as follows: 8.2% due in less than one year; 54.0% due in one to five years; 22.7% due in five to ten years; and 15.1% due in greater than ten years (calculated as a percentage of amortized cost). Management believes these unrealized losses are temporary and the result of changes in market conditions, including interest rates and sector spreads. Management does not intend to sell its fixed income securities that are in loss positions, and believes it is not more likely than not that it will be required to sell the securities that are in an unrealized loss position until such time as they recover in value to the Company's amortized cost or they mature.

For other invested assets that are deemed to be impaired, management performs additional analysis to assess whether it intends to sell, or if it is more likely than not that the Company will be required to sell, the investment before its anticipated recovery in value. This analysis is performed on an individual security basis.

For investments in limited partnerships or limited liability companies, the Company regularly monitors the holding for potential impairment indicators. The Company may consider third-party valuations of the partnership or its underlying holdings, sales of underlying holdings, lower than expected cash flows, or any other adverse event that may affect the fair value of the investee's equity.

C. Fixed Income Securities Designated as Trading

Fixed income securities designated as "trading" include certain foreign currency denominated securities related to an international branch in run-off operations. It is the Company's intent to actively trade these securities. Net gains and losses on trading securities, both realized and unrealized, were included in net investment income as follows:

	Year ended December 31,		
	2018	**2017**	**2016**
Net gains (losses) recognized on trading securities	$ (1.5)	$ 2.5	$ (0.6)
Less: Net gains (losses) recognized on securities sold	0.8	(0.5)	(1.2)
Unrealized gains (losses) recognized on securities still held at the reporting date	$ (2.3)	$ 3.0	$ 0.6

D. Equity Securities

Net gains and losses on equity securities, both realized and unrealized, were included in net investment income as follows:

	Year ended December 31,		
	2018	2017	2016
Net gains recognized on equity securities	$ 0.6	$ 5.7	$ 2.5
Less: Net gains recognized on securities sold	5.7	1.4	0.1
Unrealized gains (losses) recognized on securities still held at the reporting date	$ (5.1)	$ 4.3	$ 2.4

E. Derivative Financial Instruments

Derivatives are financial instruments whose market values are (i) derived from changes in interest rates, foreign exchange rates, credit exposures, or the value of related securities, and (ii) a function of the type of derivative product, the volume of transactions, the terms of the given agreement and market volatility. The Company's derivative portfolio may at times consist of credit default swaps (“CDS”), credit default swap indices (“CDX”), foreign currency forward contracts, and fixed income futures. Derivatives may be exchange-traded or contracted in the over-the-counter market. The Company does not apply hedge accounting in its reporting of derivative instruments. The Company does not use derivatives for speculative purposes.

Derivative transactions are customarily entered into under industry standard master netting agreements. These are agreements between two counterparties who have multiple derivative contracts with each other that provide for the net settlement of all contracts. Cash collateral and security collateral are used to secure the net open exposure of the other party. The risk that counterparties might be unable to fulfill their contractual obligations is mitigated by (i) entering into derivative transactions with highly-rated and creditworthy counterparties, (ii) monitoring counterparty credit exposure to ensure that exposures are within defined limits, and (iii) monitoring collateral values.

A CDS is an over-the-counter derivative instrument representing an agreement between two parties, a seller and a buyer. The seller of the CDS compensates the buyer in the event of a loan default or other credit event pertaining to a “reference entity.” The reference entity may be a specified entity, a group of single name entities, or an index. In return, the buyer makes a series of “premium” payments to the seller. If a credit event does not occur, the seller makes no payments to the buyer and receives only the contractually specified premiums. A CDX is an exchange-traded portfolio of single-entity credit default swaps used to hedge credit risk in the form of an index. Unlike a CDS, a CDX is standardized, making it highly liquid, mitigating counterparty credit risk and a primary market vehicle for gaining diversified credit exposure.

The Company has sold CDS contracts referencing single-name exposures written on corporate credit instruments with the intention of earning spread income on credit exposure through asset replication. Asset replication refers to the development of a synthetic financial instrument with similar risk and return characteristics of an actual security, such as a bond issued by a corporation, that is either unavailable in the cash markets or more economical to acquire in the form of a CDS. The Company replicates the investment characteristics of the reference bond using a combination of a credit default swap and one or more highly-rated fixed income securities held in its investment portfolio. The Company’s CDS derivative agreements contain credit-rating triggers. If the credit rating of either counterparty to the contract were to fall below a given rating level, as specified in each agreement, the transaction is terminated at the then fair value of the derivative.

The notional amounts specified in a CDS or CDX contract are (i) used to calculate the exchange of contractual payments under the agreements, (ii) generally not representative of the potential for gain or loss on these agreements, and (iii) the maximum amount of potential future payments assuming no recoveries in a credit event with respect to a referenced entity. The Company typically enters into CDS or CDX contracts with a maturity of 5 years. At December 31, 2018, the Company had no open CDS or CDX contracts.

Foreign currency forwards are commitments to purchase and sell designated currency amounts at an agreed upon price at a specified future date. The Company invests in foreign exchange forward contracts to economically hedge the foreign currency exchange risk associated with certain non-U.S. dollar denominated exposures. These contracts can be with various counterparties. Cash collateral is required to be maintained within a counterparty's unsecured account to cover any loss position in excess of $0.3 on open contracts. A similar requirement exists for the counterparty, should the open contract reflect a gain position. Foreign currency forward contracts are generally settled by the Company every ninety days. At December 31, 2018, the Company's three open foreign currency forward contracts, having an aggregate notional value of $162.9, reflected a net unrealized gain of $2.1, with $0.3 cash collateral having been received by the Company.

Futures are standardized contracts between two parties, traded on an exchange, to buy or sell an asset for an agreed upon price as of a given date with delivery and payment occurring at a specified future date. The Company has entered into fixed income futures contracts in order to economically hedge the duration of certain fixed income assets in its portfolio due to anticipated changes in the interest rate environment. The daily fair value of the futures contract is determined by the value of an underlying referenced investment. Futures contracts are settled with cash on a daily basis. At December 31, 2018, the Company had no open futures positions.

The fair value of derivatives, by contract type, at December 31, 2018 and 2017 are as follows:

		December 31,	
	Balance Sheet location	**2018**	**2017**
Derivatives not designated as hedging instruments under ASC 815			
Derivative assets			
Foreign exchange forward contracts	Other invested assets	$ 2.3	$ 1.2
Foreign exchange forward contracts	Other liabilities	-	0.2
Total		$ 2.3	$ 1.4
Derivative liabilities			
Foreign exchange forward contracts	Other invested assets	$ 0.2	$ -
Foreign exchange forward contracts	Other liabilities	-	3.8
Total		$ 0.2	$ 3.8

The following table provides information about the earnings (loss) effects of the Company's derivative investments.

	Location in statement of operations	**Year ended December 31, 2018**	**2017**	**2016**
Derivatives not designated as hedging instruments under ASC 815				
Credit default swaps	Net investment income	$ (1.2)	$ (1.8)	$ -
Foreign exchange forward contracts	Net investment income	16.6	(6.9)	(3.1)
Fixed income futures	Net investment income	(3.3)	0.5	(10.5)
Total		$ 12.1	$ (8.2)	$ (13.6)

The following table provides the foreign exchange forward contract derivative asset and liability balances, including cash collateral paid or received, that are offset together in the Consolidated Balance Sheet.

	December 31, 2018		
	Gross amounts of recognized assets (liabilities)	Gross amounts offset in Balance Sheet	Net amounts of assets presented in Balance Sheet
Derivative assets			
Foreign exchange forward contracts	$ 2.3	$ (0.5)	$ 1.8
Total	$ 2.3	$ (0.5)	$ 1.8
Derivative liabilities			
Foreign exchange forward contracts	$ (0.2)	$ 0.2	$ -
Total	$ (0.2)	$ 0.2	$ -

	December 31, 2017		
	Gross amounts of recognized assets (liabilities)	Gross amounts offset in Balance Sheet	Net amounts of assets presented in Balance Sheet
Derivative assets			
Foreign exchange forward contracts	$ 1.4	$ (0.2)	$ 1.2
Total	$ 1.4	$ (0.2)	$ 1.2
Derivative liabilities			
Foreign exchange forward contracts	$ (3.8)	$ 0.2	$ (3.6)
Total	$ (3.8)	$ 0.2	$ (3.6)

F. Net Investment Income and Realized Capital Gains and Losses

Sources of net investment income (loss) were as follows:

	Year ended December 31,		
	2018	2017	2016
Fixed income securities	$ 385.1	$ 323.6	$ 298.2
Equity securities	(15.0)	10.1	4.5
Other invested assets	13.5	19.9	13.6
Derivatives	12.1	(8.2)	(13.6)
Short-term investments	8.6	0.3	0.8
Other	1.7	4.6	1.7
Gross investment income	406.0	350.3	305.2
Investment expenses	(18.2)	(18.7)	(17.0)
Net investment income	$ 387.8	$ 331.6	$ 288.2

Net realized capital investment gains (losses) were as follows:

	Year ended December 31,		
	2018	2017	2016
Fixed income securities	$ (110.8)	$ (2.4)	$ 84.0
Equity securities	-	-	(0.1)
Other	(7.1)	(32.4)	-
Net capital gains (losses)	$ (117.9)	$ (34.8)	$ 83.9

The net realized gains for the years ended December 31, 2018, 2017, and 2016 included write-downs of $13.7, $51.5, and $0.1, respectively, as the decline in the fair value of these securities was considered to be other than temporary. The 2018 and 2017 write-downs included other than temporary impairments of $7.1 and $32.4, respectively, of the Company's investment in a limited liability company based on a reduction in the expected future cash flows of the entity.

G. Assets on Deposit and Held in Trust

At December 31, 2018 and 2017, securities with a fair value of $701.3 and $705.8, respectively, were on deposit with governmental authorities as required by law. At December 31, 2018 and 2017, securities with a fair value of $149.6 and $159.2, respectively, were held in trust under reinsurance agreements for the benefit of the ceding companies.

H. Loans

The Company holds investments in two senior secured fixed term loans with U.S. infrastructure entities. The first loan matures July 2030 and the Company receives a semi-annual variable rate coupon on the outstanding principal and a commitment fee on the undrawn but committed loan balance to the borrower. At December 31, 2018, the Company's open loan commitment was $14.0. The second loan matures November 2025 and the Company receives periodic interest and principal payments based on the applicable London Interbank Offered Rate ("LIBOR") rate for the period. Both loans permit prepayment by the borrower. Loans receivable of $75.1 and $53.6 at December 31, 2018 and 2017, respectively, are included in other invested assets in the Consolidated Balance Sheet.

4. FAIR-VALUE MEASUREMENT

The fair value hierarchy established by Accounting Standards Codification ("ASC") 820, prioritizes valuation technique inputs to measure fair value into three levels. The level in the fair value hierarchy within which the fair value measurement falls is determined based on the lowest level input that is significant to the fair value measurement. The Company categorizes the fair value of its financial instruments as follows:

Level 1 – Unadjusted quoted prices accessible in active markets for identical assets or liabilities at the measurement date. A market is considered active if: (i) pricing information is obtained from the exchange-traded securities, (ii) the securities are actively traded, and (iii) current pricing is available. The types of assets and liabilities utilizing Level 1 valuations include equity securities listed in active markets and investments in publicly traded mutual funds with quoted market prices. The Company receives the quoted market prices from nationally recognized, independent pricing services.

Level 2 – Unadjusted quoted prices for similar assets or liabilities in active markets or inputs, other than quoted prices, that are observable or that are derived principally from, or corroborated by, observable market data through correlation or other means. The Company uses quoted values and other data provided by nationally recognized, independent pricing sources for determining fair values of its fixed income investments. When quoted market prices are unavailable, the pricing services provide an estimated fair value. The pricing services will only produce an estimate of fair value if there is objectively verifiable information to produce a

valuation. The services use pricing applications that vary by asset class and incorporate available market information through processes such as matrix pricing. Fixed income securities are generally categorized as Level 2 since a particular security may not have traded, but the pricing services are able to use valuation models with observable market inputs, such as interest yield curves and prices for similar fixed maturity securities in terms of issuer, maturity and seniority. The types of assets and liabilities utilizing Level 2 valuations generally include U.S. Government securities, municipal bonds, structured notes, mortgage-backed and asset-backed securities, and corporate debt. Foreign exchange forward contracts and credit default swaps are also categorized as Level 2 holdings. Credit default swaps are valued using various models that utilize actively quoted or observable market input values from external market data providers and third party pricing vendors.

Level 3 – Prices or valuation techniques that require inputs that are both unobservable and significant to the overall fair value measurement. The types of assets and liabilities utilizing Level 3 valuations generally include collateralized or senior secured loans; fixed income securities, and certain equity securities which do not have a readily determinable fair value. These instruments are measured via broker-dealer pricing, cash flow modeling, or net asset value per share, as applicable.

Broker-dealer pricing is used either (i) when fair values are unavailable from independent pricing sources and, instead, non-binding quotes are obtained directly from broker-dealers who are active, and often considered the "market makers", in the corresponding markets, or (ii) when the pricing hierarchy indicates that the broker-dealer is the best available source, even though pricing services' values may be available. The inputs of broker-dealer pricing are both significant and unobservable as the Company does not have access to the valuation models used, nor information regarding specific inputs such as credit spreads, prepayment assumptions, or market liquidity factors.

Discounted cash flow modeling is performed for privately placed fixed income securities and loans which are not actively traded and do not have readily observable prices.

Net asset values are applied to investments in privately placed real estate limited partnerships which apply industry practice and measure investment assets at fair value. Such values are provided by the fund sponsors.

The Company utilizes a price source hierarchy to select which price source it will use to determine the fair value. The hierarchy prioritizes pricing sources based on the source's expertise, reliability and availability. Priority is given to established pricing services ahead of broker-dealer price sources. The highest level price source available in the hierarchy is used to measure fair value. The majority of the Company's selected price sources are index providers.

The Company relies on its third-party investment accounting service provider to analyze prices received from the pricing services and broker-dealers to ensure they represent a reasonable estimate of fair value. The Company performs additional analyses to gain assurance on the overall reasonableness of inputs and valuation methodologies used by those sources. These analyses include an annual review of respective price services methodologies and processes, quarterly comparison of market prices to prices obtained from different independent pricing sources, and back-testing of selected sales to determine if there were significant differences between the market price used to value the security prior to sale and the actual sales price.

The fair value of financial instruments at December 31, 2018 and 2017, were as follows:

	2018		2017	
	Carrying value	Fair value	Carrying value	Fair value
Assets:				
Fixed income securities				
Available for sale	$ 11,791.4	11,791.4	$ 12,081.9	$ 12,081.9
Trading	17.6	17.6	21.1	21.1
Equity securities	167.7	167.7	159.6	172.4
Other invested assets				
Derivative assets	1.8	1.8	1.2	1.2
Other	75.1	75.1	53.6	56.1
Short term investments	587.7	587.7	475.9	475.9
Total	$ 12,641.3	$ 12,641.3	$ 12,793.3	$ 12,808.6
Liabilities:				
Senior notes	$ 331.7	$ 404.1	$ 331.5	$ 425.1
Derivative liabilities	-	-	3.6	3.6
Total	$ 331.7	$ 404.1	$ 335.1	$ 428.7

Other invested assets includes senior secured loans, which are carried at amortized cost and categorized as Level 3 within the fair value hierarchy. Other invested assets carried under the equity method of accounting are not included in the presentation above.

Investments measured at fair value on the Consolidated Balance Sheet are categorized as follows:

	December 31, 2018			
	Level 1	**Level 2**	**Level 3**	**Total**
Assets:				
Fixed income securities				
Available for sale investments				
U.S Treasury securities and obligations of U.S government agencies and corporations	$ -	$ 5,256.6	$ -	$ 5,256.6
Obligations of states and political subdivisions	-	26.0	-	26.0
Foreign government securities	-	665.8	-	665.8
Corporate securities	-	4,157.0	125.5	4,282.5
Asset-backed securities	-	94.9	292.7	387.6
Residential mortgage-backed securities	-	700.7	-	700.7
Commercial mortgage-backed securities	-	472.2	-	472.2
Total available for sale investment	-	11,373.2	418.2	11,791.4
Trading investments				-
Foreign government securities	-	15.0	-	15.0
Corporate securities and foreign bonds	-	2.6	-	2.6
Equity securities	95.4	-	72.3	167.7
Other invested assets				
Derivative assets	-	1.8	-	1.8
Short term investments	-	587.7	-	587.7
Total investments carried at fair value	$ 95.4	$ 11,980.3	$ 490.5	$ 12,566.2
Investments carried at cost				75.1
Investments carried at equity				506.7
Cash and cash equivalents				405.6
Total investments not carried at fair value				987.4
Total investments and cash				$ 13,553.6

	December 31, 2017			
	Level 1	Level 2	Level 3	Total
Assets:				
Fixed income securities				
Available for sale investments				
U.S. Treasury securities and obligations of U.S. government agencies and corporations	$ -	$ 5,223.7	$ -	$ 5,223.7
Obligations of states and political subdivisions	-	30.9	-	30.9
Foreign government securities	-	826.1	-	826.1
Corporate securities	-	4,419.9	147.5	4,567.4
Asset-backed securities	-	168.6	340.1	508.7
Residential mortgage-backed securities	-	707.2	-	707.2
Commercial mortgage-backed securities	-	217.9	-	217.9
Total available for sale investments	-	11,594.3	487.6	12,081.9
Trading investments				
Foreign government securities	-	15.9	-	15.9
Corporate securities	-	5.2	-	5.2
Equity securities	100.7	-	-	100.7
Other invested assets				
Derivative assets	-	1.2	-	1.2
Short term investments	-	475.9	-	475.9
Total investments carried at fair value	$ 100.7	$ 12,092.5	$ 487.6	$ 12,680.8
Investments carried at cost				112.5
Investments carried at equity				461.4
Cash and cash equivalents				350.5
Total investments not carried at fair value				924.4
Total investments and cash				$ 13,605.2

The following table summarizes financial instruments for which the Company used significant Level 3 inputs to determine fair value measurements for the years ended December 31, 2018 and 2017.

	Balance at Jan. 1, 2018	Net investment gains (losses) In earnings [1]	Net investment gains (losses) In OCI [2]	Purchases	Sales	Settlements	Transfers into Level 3	Transfers out of Level 3	Balance at Dec. 31, 2018	Change in earnings due to assets still held
Available for sale investments										
Corporate securities	$ 147.5	$ -	$ (16.0)	$ -	$ (6.0)	$ -	$ -	$ -	$ 125.5	$ -
Asset-backed securities	340.1	-	(4.6)	26.6	(17.1)	(152.4)	227.9	(127.8)	292.7	-
Equity securities[3]	71.6	4.6	-	0.3	(4.2)	-	-	-	72.3	-
Total	$ 559.2	$ 4.6	$ (20.6)	$ 26.9	$ (27.3)	$ (152.4)	$ 227.9	$ (127.8)	$ 490.5	$ -

	Balance at Jan. 1, 2017	Net investment gains (losses) In earnings [1]	Net investment gains (losses) In OCI [2]	Purchases	Sales	Settlements	Transfers into Level 3	Transfers out of Level 3	Balance at Dec. 31, 2017	Change in earnings due to assets still held
Available for sale investments										
Corporate securities	$ 97.8	$ -	$ 2.5	$ 60.0	$ (2.7)	$ -	$ -	$ (10.1)	$ 147.5	$ -
Asset-backed securities	271.8	0.2	2.1	245.7	(10.8)	(63.8)	11.4	(116.5)	340.1	-
Total	$ 369.6	$ 0.2	$ 4.6	$ 305.7	$ (13.5)	$ (63.8)	$ 11.4	$ (126.6)	$ 487.6	$ -

(1) Includes gains and losses on sales of financial instruments and other-than-temporary impairments.
(2) "OCI" means other comprehensive income. Includes changes in market value of investments designated as "available for sale" ("AFS").
(3) The January 1, 2018, balance in equity securities reflects the fair value of investments previously measured at cost, now measured at fair value as a result of the adoption of ASU 2016-01.

The Company reviews its fair value hierarchy classifications quarterly. Changes in observability of significant valuation inputs identified during these reviews may trigger reclassification of fair value hierarchy levels of financial assets and liabilities. These reclassifications will be reported as transfers in or out of Level 3 at the end of the period in which the change occurs.

The fair value of the Company's investments in private placement fixed income corporate securities of $125.5 and $147.5 at December 31, 2018 and 2017, respectively, is based on a discounted cash flow model and is included in Level 3. The cash flow model uses significant observable and unobservable inputs, including: a risk free rate curve, a credit spread curve and an illiquidity spread. Changes to assumptions around rate curves or spreads may increase or decrease the fair value. In general, increases in risk free rates or credit and illiquidity spreads would decrease the fair value of the investment.

The fair value of the Company's investment in collateralized loan obligations of $292.7 and $340.1, at December 31, 2018 and 2017, respectively, is based on pricing received from valuation groups at various brokers trading these securities in the marketplace. Prices are determined using a combination of matrix pricing of similar securities and observed transactions. By nature, a valuation group cannot give a binding quote considering they are an independent valuation group and not a trading desk. These prices are received by the Company's investment advisor and validated as part of their internal pricing process. In cases where a price is obtained from multiple brokers, the most conservative price is used. The investment advisor assesses market movements and volatility month-over-month by reviewing the spread movements across the sector based on published index data. This analysis provides indications of how securities performed based on market conditions over the pricing period and is used to validate the prices received from third parties. Spread movements that are not consistent with pricing movements are further reviewed, analyzed, and challenged with the broker if necessary. Collateralized loan obligations of $227.9 were transferred to Level 3 during 2018, as the fair value was determined based on a price provided by a broker-dealer pricing source. Collateralized loan obligations of $127.8 were transferred from Level 3 to Level 2 during 2018, as the fair value was determined based on a price provided by an independent pricing service.

The fair value of the Company's investment in equity securities of $72.3 at December 31, 2018, is based on quarterly net asset values ("NAV") determined by the fund sponsors, and includes cumulative unrealized gains of $17.3, of which $4.6 were recognized in the year ended December 31, 2018. These equity securities are investments in privately placed real estate limited partnerships whose industry practice is to measure investment assets at fair value. These partnerships acquire investments in real estate within the United States for the purposes of generating capital appreciation and current income. The NAV determinations often include appraisals of operational properties, as well as those in various stages of development. The Company may redeem its interests with 90 days notice, subject to liquidity at the fund, as determined by the general partner. To the extent liquidity is not available, distributions are made on a pro-rata basis, based on availability of funds as determined by the general partner. Based on the Company's ownership interests in the funds, the Company does not expect liquidity to be a matter of concern, should it wish to redeem its interests. The Company does not expect such redemption to occur at an amount significantly different from the fund NAV. At December 31, 2018 the Company has not identified any investments in real estate limited partnerships which it intends to sell.

There were no transfers of securities between Levels 1 and 2 during the years ended December 31, 2018 and 2017.

5. ACCUMULATED OTHER COMPREHENSIVE INCOME

The components of accumulated other comprehensive income (loss) are as follows.

	Net unrealized appreciation (depreciation) of investments	Defined benefit plan adjustment	Total
Balance at January 1, 2016	$ (67.3)	(162.2)	$ (229.5)
Period change	10.9	10.5	21.4
Tax effect	0.9	(3.6)	(2.7)
Reclassification adjustment for losses (gains) included in operations	(2.5)	2.9	0.4
Tax effect	0.9	(1.0)	(0.1)
Balance at December 31, 2016	(57.1)	(153.4)	(210.5)
Period change	40.6	30.5	71.1
Tax effect	(7.3)	(10.4)	(17.7)
Reclassification adjustment for losses (gains) included in operations	64.8	(4.2)	60.6
Tax effect	(22.9)	1.5	(21.4)
Reclassification adjustment for tax reform rate differential	(4.6)	(29.7)	(34.3)
Balance at December 31, 2017	$ 13.5	$ (165.7)	$ (152.2)
Period change	(265.8)	21.5	(244.3)
Tax effect	57.0	(4.5)	52.5
Reclassification adjustment for losses (gains) included in operations	1.8	4.4	6.2
Tax effect	(0.4)	(0.9)	(1.3)
Cumulative-effect adjustment for accounting change	(5.3)	-	(5.3)
Tax effect	1.1	-	1.1
Balance at December 31, 2018	$ (198.1)	$ (145.2)	$ (343.3)

Amounts reclassified out of accumulated other comprehensive income from net unrealized appreciation (depreciation) of investments are included in net realized capital gains in the Consolidated Statement of Comprehensive Income. Amounts reclassified from the defined benefit plan adjustment are reflected in other expense. Activity for the 2018 period includes the reclassification of net unrealized gains on equity securities, net of tax, to accumulated deficit due to the adoption of ASU 2016-01. Activity for the 2017 period includes the reclassification of the residual impacts of the accounting for tax reform and the adoption of ASU 2018-02.

6. LOSS AND LOSS ADJUSTMENT EXPENSE RESERVES

A. Reserves and Uncertainties

The reserve for losses and LAE is based upon reports received from reinsureds supplemented with the Company's own case reserve estimates, upon which additional reserves are established for claims that are incurred but not reported ("IBNR"). These reserves are estimates, reflecting actuarial and statistical projections at a given time, of what management expects the ultimate settlement and administration of claims to cost based on facts and circumstances then known, as well as predictions of future events, estimates of future trends in claims severity and other variable factors such as inflation and new concepts of liability.

When a claim is reported to a ceding company, its claims personnel establish a "case reserve" for the estimated amount of the ultimate payment. The estimate reflects the informed judgment of such personnel based on general insurance reserving practices and on the experience and knowledge of such personnel regarding the nature and value of the specific type of claim. The Company, in turn, establishes a case reserve when it receives notice of a claim

from the ceding company. Such reserves are based on an independent evaluation by the Company's claims personnel, and may take into consideration coverage, liability, severity of injury or damage, jurisdiction, the Company's assessment of the ceding company's ability to evaluate and handle the claim and the amount of reserves recommended by the ceding company. Case reserves are adjusted periodically based on subsequent developments and audits of ceding companies.

In calculating its IBNR reserves, which include future development on reported claims, the Company uses generally accepted actuarial reserving techniques that take into account quantitative loss experience data, together, where appropriate, with qualitative factors. IBNR reserves are based on loss experience of the Company and are grouped both by class of business and by contract year or accident year. IBNR reserves are also adjusted to take into account certain factors such as changes in the volume of business written, reinsurance contract terms and conditions, the mix of business, claims processing and inflation that can be expected to affect the Company's liability for losses over time.

For certain types of claims, most significantly for asbestos and environmental-related ("A&E") coverage exposures, the effects of evolving scientific, legal and social issues are potentially so significant that the Company's reserve estimate is subject to significant revision as these issues are resolved over time. For A&E liabilities, considerable judgment has been exercised by the Company in formulating its estimates. The Company's estimates will be revised as legal, judicial and factual information develops and/or is clarified. The amounts ultimately paid by the Company for these exposures likely will differ, perhaps significantly, from the Company's currently recorded reserves.

The inherent uncertainties of estimating loss reserves are exacerbated for reinsurers by the significant periods of time that often elapse between the occurrence of an insured loss, the reporting of the loss to the primary insurer and, ultimately, to the reinsurer, and the primary insurer's payment of that loss and subsequent indemnification by the reinsurer (the "tail"). As a consequence, actual losses and LAE paid may deviate, perhaps substantially, from estimates reflected in the Company's reserves in its financial statements. Any adjustments of these estimates or differences between estimates and amounts subsequently paid or collected are reflected in income as they occur. Management believes that the reserves for losses and LAE as of December 31, 2018, are adequate to cover the ultimate gross cost of losses and LAE incurred through December 31, 2018.

B. Reserve Methodologies

Traditional liabilities are reviewed using standard actuarial methodologies. Through the application of the chain ladder, Bornhuetter-Ferguson, and expected loss ratio methodologies, pure mathematical indications of ultimate loss and allocated loss adjustment expenses ("ALAE") are established. The best fitting method or a blending of different methods is typically selected for each contract or accident year. In cases where the resulting estimate using these methodologies does not appear to be reasonable based on known information about the portfolio's historical performance or known market trends, the final estimate of ultimate loss and ALAE is determined using actuarial expertise and management's judgement. While these methods represent the most common approach to establishing ultimate loss and loss expense indications, the Company may utilize numerous other actuarial methods as developed by the global casualty actuarial profession, as may be warranted given the circumstances of a given reserving segment or year.

For events classified as "outliers", large losses exceeding certain dollar thresholds defined by Munich Re, the Company generally establishes the ultimate loss and expense based on a comprehensive evaluation of the specific characteristics associated with a particular event in conjunction with experts from claims and underwriting.

For finite risk, A&E, and other latent exposures, special models and approaches are used, and may include epidemiological studies, statistical based models or cash flow models. Additionally, industry statistics may be used; for example, survival ratios for asbestos and environmental.

C. Catastrophe Exposure

The Company has geographic exposure to catastrophe losses, which can be caused by a variety of events, including, among others, hurricanes, tornadoes and other windstorms, earthquakes, hail, wildfires, severe winter weather, floods, tsunamis, volcanic eruptions and other naturally-occurring events, such as solar flares. Catastrophes can also result from terrorist attacks and other intentionally destructive acts including those involving nuclear, biological, chemical, radiological, cyber-attacks, explosions and infrastructure failures. 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. Most catastrophes are restricted to small geographic areas; however, hurricanes and earthquakes may produce significant damage in larger areas, especially those that are heavily populated. The Company generally seeks to mitigate its exposure to catastrophes through individual risk selection and the purchase of catastrophe reinsurance.

D. Reserve Development

The reconciliation of loss and loss adjustment expense reserves for the years ended December 31, 2018, 2017, and 2016 is shown below:

	Year ended December 31,		
	2018	2017	2016
Loss and LAE reserves at beginning of period	$ 12,464.3	$ 11,661.3	$ 12,003.6
Reinsurance recoverables on unpaid losses	(5,263.5)	(5,358.1)	(5,855.9)
Net reserves at beginning of period	7,200.8	6,303.2	6,147.7
Net incurred related to:			
Current period	3,876.4	3,095.0	2,060.5
Prior periods	(123.0)	(208.1)	(387.3)
Total net incurred	3,753.4	2,886.9	1,673.2
Net paid related to:			
Current period	(931.2)	(736.0)	(471.5)
Prior periods	(1,598.0)	(1,338.9)	(1,374.9)
Total net paid	(2,529.2)	(2,074.9)	(1,846.4)
Deferred underwriting revenue	91.5	80.8	328.2
Foreign exchange increase (decrease) in reserves	(2.5)	4.8	0.5
Net reserves at end of period	8,514.0	7,200.8	6,303.2
Reinsurance recoverables on unpaid losses	3,821.4	5,263.5	5,358.1
Loss and LAE reserves at end of period	$ 12,335.4	$ 12,464.3	$ 11,661.3

As a result of total changes in estimates of insured events in prior years, losses and LAE were reduced by $123.0, $208.1, and $387.3 in 2018, 2017, and 2016, respectively. This prior accident year loss development includes accretion of workers' compensation discount of $15.1, $15.8, and $16.3 for 2018, 2017, and 2016, respectively.

Reflecting the indications of the Company's ongoing monitoring of loss reserves and its in-depth annual reserve review, in 2018 the Company decreased loss and LAE reserves for prior accident years by $183.0, excluding the impact of certain corporate retrocessional programs with Munich Re. This decrease is predominantly attributable to the workers compensation line of business in response to a continued trend of favorable emergence.

The decreased losses resulted in decreased cessions to various corporate retrocessional programs with Munich Re. The reserve decrease of $183.0, coupled with the recognition of previously deferred loss benefits, were partially offset by the reduced cessions, and resulted in an overall decrease to prior accident year losses of $138.1, excluding the accretion of workers' compensation discount, for the year ended December 31, 2018.

In 2017 the Company decreased loss and LAE reserves for prior accident years by $165.3, excluding the impact of certain corporate retrocessional programs with Munich Re. This reserve decrease was primarily attributable to reductions to third party liability, workers compensation, and property lines of business, offset by increases to the auto liability, health, and other latent liability lines of business. The reserve decrease, coupled with the net benefit from the corporate retrocessional programs, which includes current recognition of previously deferred loss benefits, resulted in an overall decrease to prior accident year losses of $223.9, excluding the accretion of workers' compensation discount, for the year ended December 31, 2017.

In 2016 the Company decreased loss and LAE reserves for prior accident years by $73.9, excluding the impact of certain corporate retrocessional programs with Munich Re. This reserve decrease was primarily attributable to reductions to third party liability, workers compensation, and property lines of business, offset by increases to the auto liability and health lines. The reserve decrease coupled with the net benefit from the corporate retrocessional programs, which included current recognition of previously deferred loss benefits, resulted in an overall decrease to prior accident year losses of $403.7, excluding the accretion of workers' compensation discount, for the year ended December 31, 2016.

Munich Re provides retrocessional support to accident years 2001 and prior by means of a loss portfolio transfer agreement ("LPT"). The aggregate limit on the LPT cover of $10.1 billion was reached, on an undiscounted loss basis, in 2012. The LPT is a retroactive reinsurance contract and, as such, loss recoveries in excess of premiums ceded are generally deferred and will be recognized in income over the settlement period of the underlying claims. This transaction does not relieve the Company of its obligation to its reinsureds for the periods covered.

In 2010 the Company purchased additional retrocessional support for accident years 2001 and prior from Munich Re, in the form of an adverse development cover ("2010 ADC"). This contract provides protection for adverse development in excess of the LPT limit. Similar to the LPT, the ADC is a retroactive reinsurance contract. The aggregate limit on the ADC of $500.0 was reached, on an undiscounted loss basis, in 2013.

In 2013 the Company purchased a second adverse development cover from Munich Re ("2013 ADC"). The 2013 ADC provides an additional $500.0 of limit, of which $435.4 remains available, on an undiscounted loss basis at December 31, 2018.

The following tables present incurred and cumulative paid losses and ALAE by segment and aggregated lines of business on a historical basis by accident year. This claim development information is undiscounted and presented net of reinsurance. The information for the years ended December 31, 2011 to 2017 is presented as supplementary information and is not audited.

IBNR amounts include expected development on reported claims. Negative IBNR may occur for a given aggregate line of business within a reporting segment in some circumstances when estimated case reserves plus cumulative paid losses exceed the ultimate expected losses. This generally occurs when initial paid loss and case reserve estimates established for individual treaties exceed the current best estimate of ultimate losses determined at a segment level.

The Company analyzes the majority of its reserves using underwriting year based data. Where specific accident year data is not available, system algorithms allocate incurred and paid data to an accident year basis. These allocations may, at times, result in an immaterial level of negative IBNR at the accident year level.

Assumed adverse development covers are reflected in the current accident year as negative paid losses.

Reinsurance Division
Casualty

Accident Year	Incurred Losses and ALAE Year Ended December 31, 2011	2012	2013	2014	2015	2016	2017	2018	IBNR at December 31, 2018
	Unaudited								
2011	$ 527	$ 524	$ 559	$ 562	$ 568	$ 591	$ 515	$ 492	75
2012		450	471	481	503	507	515	488	118
2013			559	601	618	628	583	598	173
2014				639	637	641	612	608	158
2015					650	637	631	679	342
2016						661	676	681	393
2017							792	819	657
2018								1,237	1,100
							Total	$ 5,602	

Accident Year	Cumulative Paid Losses and ALAE Year Ended December 31, 2011	2012	2013	2014	2015	2016	2017	2018
	Unaudited							
2011	$ 17	$ 74	$ 148	$ 231	$ 294	$ 344	$ 377	$ 389
2012		14	55	118	184	251	295	334
2013			14	67	159	253	313	369
2014				18	71	174	275	346
2015					14	18	125	222
2016						12	67	164
2017							(7)	56
2018								63
							Total	1,943
							Cumulative incurred less paid	3,659
							Outstanding reserves before 2011	870
							Discount of workers' compensation reserves	(255)
							Loss and LAE reserves	$ 4,274

Reinsurance Division
Property

Accident Year	Incurred Losses and ALAE Year Ended December 31, 2011	2012	2013	2014	2015	2016	2017	2018	IBNR at December 31, 2018
	Unaudited								
2011	$ 448	$ 425	$ 436	$ 395	$ 388	$ 390	$ 389	$ 385	-
2012		534	507	477	454	431	424	426	10
2013			236	224	197	193	189	187	(4)
2014				300	288	259	255	252	(3)
2015					230	222	225	227	-
2016						256	253	246	5
2017							968	1,038	201
2018								1,476	884
							Total	$ 4,237	

Accident Year	Cumulative Paid Losses and ALAE Year Ended December 31, 2011	2012	2013	2014	2015	2016	2017	2018
	Unaudited							
2011	$ 90	$ 252	$ 369	$ 363	$ 378	$ 384	$ 386	$ 384
2012		84	323	371	375	379	381	396
2013			71	162	195	178	186	184
2014				98	214	236	245	249
2015					61	180	202	213
2016						50	166	208
2017							333	670
2018								475
							Total	2,779
							Cumulative incurred less paid	1,458
							Outstanding reserves before 2011	6
							Loss and LAE reserves	$ 1,464

Reinsurance Division
Credit

Accident Year	Incurred Losses and ALAE Year Ended December 31, 2011	2012	2013	2014	2015	2016	2017	2018	IBNR at December 31, 2018
	Unaudited								
2011	$ 46	$ 51	$ 43	$ 33	$ 28	$ 28	$ 33	$ 30	(3)
2012		48	67	59	57	52	44	46	(2)
2013			40	45	38	31	26	27	1
2014				48	52	50	39	34	1
2015					38	38	30	27	1
2016						32	42	44	(2)
2017							35	38	8
2018								52	31
							Total	$ 298	

Accident Year	Cumulative Paid Losses and ALAE Year Ended December 31, 2011	2012	2013	2014	2015	2016	2017	2018
	Unaudited							
2011	$ 5	$ 18	$ 30	$ 24	$ 27	$ 25	$ 28	$ 31
2012		13	29	44	57	48	45	45
2013			4	20	31	24	24	24
2014				3	16	34	27	30
2015					4	21	26	23
2016						3	22	32
2017							2	18
2018								7
							Total	210
							Cumulative incurred less paid	88
							Outstanding reserves before 2011	12
							Loss and LAE reserves	$ 100

Reinsurance Division
Ocean Marine

Accident Year	Incurred Losses and ALAE Year Ended December 31, 2011	2012	2013	2014	2015	2016	2017	2018	IBNR at December 31, 2018
	Unaudited								
2011	$ 54	$ 53	$ 56	$ 58	$ 61	$ 58	$ 60	$ 59	(1)
2012		84	94	94	97	101	106	105	3
2013			43	36	34	39	39	40	(1)
2014				50	45	45	42	39	1
2015					12	11	17	15	-
2016						12	10	7	1
2017							42	18	9
2018								30	22
							Total	$ 313	

Accident Year	Cumulative Paid Losses and ALAE Year Ended December 31, 2011	2012	2013	2014	2015	2016	2017	2018
	Unaudited							
2011	$ 4	$ 13	$ 33	$ 43	$ 56	$ 56	$ 58	$ 58
2012		10	47	66	86	95	100	101
2013			3	15	19	31	34	37
2014				13	21	29	34	35
2015					1	2	9	11
2016						1	-	2
2017							1	4
2018								6
							Total	254
							Cumulative incurred less paid	59
							Outstanding reserves before 2011	4
							Loss and LAE reserves	$ 63

Specialty Markets
Casualty

Accident Year	Incurred Losses and ALAE Year Ended December 31, 2011	2012	2013	2014	2015	2016	2017	2018	IBNR at December 31, 2018
	Unaudited								
2011	$ 256	$ 283	$ 277	$ 289	$ 293	$ 298	$ 302	$ 267	39
2012		258	283	285	288	307	336	308	66
2013			309	352	366	386	395	386	107
2014				362	364	365	400	400	102
2015					377	393	448	449	136
2016						373	443	466	211
2017							470	487	322
2018								466	406
							Total	$ 3,229	

Accident Year	Cumulative Paid Losses and ALAE Year Ended December 31, 2011	2012	2013	2014	2015	2016	2017	2018
	Unaudited							
2011	$ 10	$ 45	$ 90	$ 136	$ 179	$ 206	$ 216	$ 219
2012		16	61	100	151	178	207	220
2013			12	66	126	180	228	249
2014				19	71	135	196	253
2015					26	87	180	242
2016						18	79	164
2017							17	74
2018								18
							Total	1,439
							Cumulative incurred less paid	1,790
							Outstanding reserves before 2011	256
							Discount of workers compensation reserves	(63)
							Loss and LAE reserves	$ 1,983

Specialty Markets
Property

Accident Year	Incurred Losses and ALAE Year Ended December 31, 2011	2012	2013	2014	2015	2016	2017	2018	IBNR at December 31, 2018
	Unaudited								
2011	$ 148	$ 135	$ 135	$ 132	$ 133	$ 132	$ 132	$ 131	-
2012		137	136	128	123	122	122	122	-
2013			102	85	78	74	69	68	-
2014				108	96	95	94	93	(1)
2015					93	81	78	76	1
2016						100	78	75	8
2017							142	127	12
2018								221	109
							Total	$ 913	

Accident Year	Cumulative Paid Losses and ALAE Year Ended December 31, 2011	2012	2013	2014	2015	2016	2017	2018
	Unaudited							
2011	$ 63	$ 111	$ 124	$ 127	$ 129	$ 131	$ 131	$ 131
2012		66	105	119	122	121	122	122
2013			43	69	74	70	68	68
2014				53	85	89	92	92
2015					42	66	70	71
2016						36	62	65
2017							42	92
2018								75
							Total	716
							Cumulative incurred less paid	197
							Outstanding reserves before 2011	8
							Loss and LAE reserves	$ 205

Healthcare Health

Accident Year	Incurred Losses and ALAE Year Ended December 31, 2011	2012	2013	2014	2015	2016	2017	2018	IBNR at December 31, 2018
	Unaudited								
2011	$ 316	$ 322	$ 311	$ 311	$ 313	$ 312	$ 312	$ 312	-
2012		350	382	369	375	374	374	374	1
2013			378	401	427	423	422	422	1
2014				372	382	398	393	395	3
2015					350	370	367	357	2
2016						244	296	272	16
2017							204	247	41
2018								5	(3)
							Total	$ 2,384	

Accident Year	Cumulative Paid Losses and ALAE Year Ended December 31, 2011	2012	2013	2014	2015	2016	2017	2018
	Unaudited							
2011	$ 120	$ 296	$ 306	$ 312	$ 312	$ 312	$ 312	$ 312
2012		211	358	376	376	375	374	373
2013			228	397	428	422	421	421
2014				197	352	397	393	392
2015					118	322	355	355
2016						75	234	256
2017							64	206
2018								8
							Total	2,323
							Cumulative incurred less paid	61
							Outstanding reserves before 2011	-
							Loss and LAE reserves	$ 61

As a reinsurer, the Company generally writes excess of loss and pro rata reinsurance contracts. Claims information is reported to the Company via an "account rendering" or a bordereau, for those contracts respectively. An account rendering does not generally include individual claim data, unless significant individual losses are included. A bordereau would include individual claim data, but is not maintained by the Company at that level of detail. The Company's direct, or primary, insurance claims information includes claim count information, however this business represents less than one quarter of the Company's gross incurred losses. For these reasons, the Company considers meaningful claim frequency information to be impracticable to obtain.

The following table summarizes and reconciles the cumulative paid losses and ALAE previously presented with the Company's gross liability for loss and LAE reserves.

	December 31, 2018
Net loss and LAE reserves	
Reinsurance Division	
Casualty	$ 4,273.9
Property	1,464.6
Credit	100.0
Ocean Marine	63.8
Specialty Markets	
Casualty	1,982.7
Property	204.6
Healthcare	60.6
Other	219.9
Net loss and LAE reserves	8,370.1
Reinsurance recoverables on unpaid losses	
Reinsurance Division	
Casualty	4.0
Property	0.1
Credit	-
Ocean Marine	-
Specialty Markets	
Casualty	254.9
Property	39.8
Healthcare	92.0
Other[(1)]	3,430.6
Reinsurance recoverables on unpaid losses	3,821.4
Unallocated loss adjustment expenses	143.9
Gross loss and LAE reserves	$ 12,335.4

(1) Other reinsurance recoverables includes loss and LAE reserves ceded to Munich Re under the LPT and ADC agreements and retrocessions of losses incurred under reinsurance agreements with Munich Re branches or affiliates.

The following table presents average annual payout of incurred losses by age.

	Development Years (Unaudited)							
	1	2	3	4	5	6	7	8
Reinsurance Division								
Casualty	3.4 %	7.7 %	15.1 %	15.4 %	12.0 %	9.6 %	7.3 %	2.3 %
Property	29.0 %	46.4 %	15.7 %	0.9 %	2.6 %	0.6 %	2.1 %	- %
Credit	11.1 %	38.7 %	29.0 %	4.8 %	3.8 %	0.5 %	3.7 %	8.4 %
Ocean Marine	12.3 %	17.4 %	26.0 %	18.0 %	11.0 %	3.6 %	2.4 %	0.5 %
Specialty Markets								
Casualty	4.3 %	13.2 %	16.7 %	15.4 %	12.9 %	8.2 %	3.9 %	1.3 %
Property	49.2 %	35.0 %	7.2 %	2.1 %	0.4 %	0.7 %	0.4 %	- %

The reconciliation of loss and loss adjustment expense reserves for healthcare business for the years ended December 31, 2018, 2017, and 2016 is shown below:

	Year ended December 31,		
	2018	2017	2016
Loss and LAE reserves at beginning of period	$ 216.0	$ 219.8	$ 267.3
Reinsurance recoverables on unpaid losses	(0.2)	(0.9)	(2.8)
Net reserves at beginning of period	215.8	218.9	264.5
Net incurred related to:			
Current period	6.6	206.5	247.1
Prior periods	13.6	45.7	30.6
Total net incurred	20.2	252.2	277.7
Net paid related to:			
Current period	(9.9)	(66.4)	(78.6)
Prior periods	(164.2)	(188.9)	(244.7)
Total net paid	(174.1)	(255.3)	(323.3)
Net reserves at end of period	61.9	215.8	218.9
Reinsurance recoverables on unpaid losses	92.0	0.2	0.9
Loss and LAE reserves at end of period	$ 153.9	$ 216.0	$ 219.8

E. Asbestos and Environmental-Related Claims

Reserves established for A&E exposures necessarily have reflected the uncertainty inherent in estimating the ultimate future claim amounts arising from these types of exposures. Given the latent nature of A&E exposures, evolving court decisions, wide variations in coverage terms offered over multiple policy periods, and the indefinite nature of any future tort reform, A&E liabilities are subject to significant variation. These factors are particularly challenging for casualty excess-of-loss reinsurers since primary exposure information is not consistently available. Management counterbalances these risks by monitoring claims activity on a quarterly basis and diligently following judicial and legislative decisions which may impact the Company's ultimate liabilities for these unique claims.

In 2018, the Company's reported activity for both asbestos and environmental-related liabilities was generally as expected. The Company continues to utilize the latest industry reports and projections for future claim and severity expectations, and complete internal assessments of industry trends. Given the stability of reported losses

and after comparing the industry information to internal emergence and analyses, the Company made no change to either asbestos or environmental liabilities in 2018.

In 2017, the Company's reported activity for both asbestos and environmental-related liabilities showed higher than expected reported activity for the year. Claim counts were near or slightly higher than expectations. The in-depth analysis of the Company's A&E reserves continue to utilize the latest industry reports and projections for future claim and severity expectations, as well as internal assessments of industry trends. After considering this industry information along with the internal emergence and analyses, the Company made no change to either asbestos or environmental liabilities in 2017.

In 2016, the Company's reported activity for both asbestos and environmental show higher than expected claim count activity, although the average reported losses for both asbestos and environmental remain below long term averages. The in-depth analysis of the Company's A&E reserves continue to utilize the latest industry reports and projections for future claim and severity expectations, as well as internal assessments of industry trends. Leveraging the industry information with internal emergence, the Company increased loss and LAE reserves for environmental liabilities by $50.0 for the year ended December 31, 2016. No change was made to asbestos reserves in the aggregate.

The Company had A&E exposure loss reserves, at December 31, as follows:

	2018		2017	
	Gross	Net	Gross	Net
Asbestos	$ 959.6	$ -	$ 1,010.4	$ -
Environmental-related liability	295.2	1.6	317.3	1.6
Total	$ 1,254.8	$ 1.6	$ 1,327.7	$ 1.6

Net loss reserves include the application of reinsurance recoveries from both specific reinsurance contracts and adverse loss development retrocessional agreements, including the LPT and ADC contracts. Loss reserves for A&E exposures at December 31, 2018 and 2017, represent best estimates drawn from a range of possible outcomes based on currently known facts, projected forward for additional claimants using assumptions and methodologies considered reasonable. There can be no assurance that future losses resulting from these exposures will not have a material adverse effect on future earnings.

7. REINSURANCE

The Company purchases reinsurance (retrocessional agreements) for certain risks. Reinsurance companies enter into retrocessional agreements for reasons similar to those that cause primary insurers to purchase reinsurance, namely to reduce net liability on individual risks, to protect against catastrophic losses, to stabilize their financial ratios and to obtain additional underwriting capacity. Changing domestic and international reinsurance markets impact the retrocessional capacity available to all companies. Core retrocessional programs are placed with Munich Re (see Note 13 – Related Party Transactions).

Historically, the retrocessional coverages purchased by the Company included (i) routine coverage for its property and casualty business, (ii) catastrophe retrocessions for its property business, (iii) quota share treaties that enhance underwriting capacity, and (iv) stop loss protection (excess of loss reinsurance that indemnifies the Company against losses that exceed a specific retention). In addition, the aforementioned LPT and ADC agreements protect the Company from additional losses related to accident years 2001 and prior.

Management believes the underwriting performance and statutory surplus position of the insurance subsidiaries have mitigated the need for ongoing accident year stop loss or quota share reinsurance protection. The Company continues to purchase catastrophe retrocessional coverage for its property business and specific retrocessions on certain contracts.

Munich Re (which had an A.M. Best rating of "A+" at December 31, 2018) accounted for approximately 77.7% and 84.0%, of the reinsurance recoverables on paid and unpaid losses at December 31, 2018 and 2017, respectively. GIG Reinsurance Company Ltd. ("GIG Re") accounted for approximately 6.4% and 4.4% of the paid and unpaid losses at December 31, 2018 and 2017, respectively. The reinsurance balance recoverable from GIG Re has been fully collateralized with assets held in trust and funds withheld. These are the only reinsurers for which the recorded recoveries were in excess of 3% of the reinsurance recoverable balance of $3,855.5 and $5,286.6 at December 31, 2018 and 2017, respectively.

The Company believes that it has minimized the credit risk with respect to its retrocessions to companies other than Munich Re by monitoring its retrocessionnaires and collateralizing obligations from foreign retrocessionnaires. Potential deterioration of the financial condition of retrocessional markets is carefully monitored and appropriate actions are taken to eliminate or minimize exposures. As a general rule, the Company requires that unpaid losses and LAE (including IBNR) for certain admitted and non-admitted reinsurers (unregulated by United States insurance regulatory authorities) be collateralized by letters of credit, funds withheld or pledged trust agreements. Actions such as drawdowns of letters of credit provided as collateral, cessation of relationships and commutations may be taken to reduce or eliminate exposure when necessary.

Although reinsurance agreements contractually obligate the Company's reinsurers to reimburse it for the agreed-upon portion of its gross paid losses, they do not discharge the primary liability of the Company. The income statement amounts for premiums written, premiums earned, and losses and loss adjustment expenses are net of reinsurance. Direct, assumed, ceded and net amounts for these items are as follows:

	Year ended December 31,		
	2018	2017	2016
Premiums written			
Direct	$ 1,218.9	$ 1,130.1	$ 1,004.9
Assumed	4,295.1	4,657.1	4,284.1
Ceded	(242.1)	(1,615.1)	(2,161.5)
Net	$ 5,271.9	$ 4,172.1	$ 3,127.5
Premiums earned			
Direct	$ 1,200.9	$ 1,069.9	$ 1,014.5
Assumed	4,478.5	4,390.5	4,175.3
Ceded	(613.9)	(1,958.4)	(2,138.5)
Net	$ 5,065.5	$ 3,502.0	$ 3,051.3
Losses and LAE incurred			
Direct	$ 845.3	$ 830.4	$ 684.8
Assumed	3,222.1	2,997.5	2,472.5
Ceded	(314.0)	(941.0)	(1,484.1)
Net	$ 3,753.4	$ 2,886.9	$ 1,673.2

In recent years, the Company has had a number of reinsurance agreements with Munich Re branches and affiliates, which are then retroceded to Munich Re or another of its affiliates. In 2018 certain of these agreements were novated or cancelled, impacting both assumed and ceded premiums and losses. These decreases were partially offset by increased assumed premium writings, and resulting losses, in the Company's Reinsurance segment.

8. DEPOSIT ACCOUNTING

Insurance and reinsurance contracts that do not transfer insurance risk are subject to deposit accounting. Deposit accounting is applied to contracts that, 1) transfer only significant timing risk, 2) transfer only significant underwriting risk, 3) transfer neither significant timing nor underwriting risk, or 4) those contracts with indeterminate risk.

The deposit asset of $80.2 and $82.7 at December 31, 2018 and 2017, respectively, was primarily comprised of adverse loss development covers and certain retroactive reinsurance agreements, which do not meet risk transfer guidelines. Interest accretion on the deposit asset balance was income of $1.5, $6.0, and $0.8 for the years ended December 31, 2018, 2017, and 2016, respectively.

The deposit liability of $83.1 and $90.7 at December 31, 2018 and 2017, respectively, was primarily comprised of adverse loss development covers and certain retroactive reinsurance agreements, which do not meet risk transfer guidelines. Interest accretion on the deposit liability balance was income of $0.1 and $1.1 for the years ended December 31, 2018 and 2016, respectively, and expense of $3.9 for the year ended December 31, 2017.

9. INCOME TAXES

A consolidated U.S. Federal income tax return is filed pursuant to a tax sharing agreement between MAHC and its subsidiaries. Each company's annual federal income tax liability is calculated on a standalone basis. Under the provisions of the tax sharing agreement, the company is entitled to receive reimbursement for its tax attributes at the time and to the extent that the company is able to utilize such tax attributes on a standalone basis. These tax attributes are treated as non-expiring on a standalone basis to the extent that they have been utilized on the consolidated U.S. Federal income tax return.

On December 22, 2017, the Tax Cuts and Jobs Act (the "Act" or "tax reform") was enacted into law. The Act provided for significant changes to the U.S. federal tax law, including the reduction of the corporate tax rate from 35% to 21% effective January 1, 2018. In accordance with ASC 740 guidance, the Company remeasured its deferred tax assets and liabilities as of the date of enactment at the rate at which they are expected to reverse in the future. For the purposes of this remeasurement, temporary tax differences related to 2017 income items as of December 31, 2017, were used as an estimate for December 22, 2017 values. For the components of accumulated other comprehensive income, actual December 22, 2017 values were used. Based on this remeasurement at 21%, the net deferred tax asset was reduced by $246.9 in 2017.

The Act also specified certain changes to the methodologies used by property and casualty insurers for computing loss reserve discounting beginning in 2018. The resulting one-time transition adjustment is to be recognized over eight years, also beginning in 2018. At the time of enactment, the Internal Revenue Service ("IRS") had not yet developed the new methodology or discount factors to be used for 2017 or 2018, therefore, the Company made certain assumptions and used estimated discount factors calculated by a reinsurance industry trade association to estimate the discounting impact of the Act at December 31, 2017.

In December 2018, the IRS released the final 2017 accident year loss reserve discount factors to be used under the previous methodologies, which did not significantly change the Company's December 31, 2017, estimated tax loss discount calculated under the previous methodologies. The IRS also released the discount factors for the computation of the 2017 loss reserve discount under the newly enacted methodologies and the resulting one-time transition adjustment. The transition adjustment estimated at December 31, 2017, was a deferred tax liability of $46.1. The recalculated transition adjustment, using the factors released by the IRS, was a deferred tax asset of $5.6. In accordance with Staff Accounting Bulletin No. 118, issued by the Securities and Exchange Commission on December 22, 2017, the change in loss reserve discounting in 2018 was treated as a change in accounting estimate.

The net deferred income taxes at December 31, 2018 and 2017, represent the net temporary differences between the tax bases of assets and liabilities and their amounts for financial reporting. The components of the net deferred income taxes, based on a tax rate of 21% at December 31, were as follows:

	2018	2017
Federal net operating loss carry-forwards	$ 315.5	$ 292.1
Loss reserves	100.7	136.6
Loss reserves discounting - tax reform transition	4.9	-
Deferred compensation	67.5	73.4
Investment impairment and capital loss carry-forwards	32.9	9.2
Alternative minimum tax credit carry-forwards	-	34.9
Foreign tax credit carry-forwards	83.8	82.8
Unearned premiums	86.5	77.8
State tax net operating loss carry-forwards	22.1	18.7
Unrealized investment losses	51.1	-
Other deferred tax assets	9.4	15.7
Gross deferred tax assets	774.4	741.2
Valuation allowance	(81.7)	(56.1)
Total deferred tax assets	692.7	685.1
Deferred policy acquisition costs	135.5	121.0
Loss reserve discounting - tax reform transition	-	46.1
Unrealized investment gains	-	3.2
Other deferred liabilities	15.4	11.0
Total deferred tax liabilities	150.9	181.3
Net deferred income taxes	$ 541.8	$ 503.8

At December 31, 2018, the Company had net operating loss carry-forwards for federal income tax purposes of $1,502.3, which are available to offset future taxable income of which $89.6 expire over the period 2027 through 2033, $84.2 of which expire in 2038, and $1,328.5 of which do not expire. The Company generated $111.3 and $424.7 additional net operating loss carry-forwards in 2018 and 2017, respectively. In 2016, the Company utilized $255.4 of net operating loss carry-forwards. Also in 2016, the Company acquired the net assets of Victoria U.S. Holdings, Inc. and Victoria U.S. Property Investment Zwei GmbH from Munich Re in a tax-free reorganization. Upon acquisition, the Company acquired additional tax attributes of net operating loss carry-forwards of $188.7 and capital loss carry-forwards of $59.1.

At December 31, 2018, the Company had capital loss carry-forwards of $108.0, which do not expire. The Company generated $104.1 and $3.9 of capital loss carry-forwards in 2018 and 2017, respectively. In 2016, the Company fully utilized the acquired capital loss carry-forwards of $59.1 from Munich Re against the Company's current period capital gains.

At December 31, 2018, the Company had foreign tax credit carry-forwards of $83.8, which expire over the period 2019 through 2028, available to offset future taxable income for federal income tax purposes.

The corporate Alternative Minimum Tax ("AMT") was repealed under tax reform. AMT credit carry-forwards existing at December 31, 2017, may be utilized against regular tax in future tax years. AMT credit balances remaining at the end of each of the years 2018 through 2020 will be refunded at 50%. Any unutilized balance at the end of 2021 will be refunded in full. In 2018, the Company did not utilize any AMT credits and reclassified $34.9 of AMT credit carry-forwards from deferred tax asset to current tax receivable in anticipation of the refund. In 2017 and 2016, the Company utilized alternative minimum tax credits of $3.8, and $13.8, respectively.

The Company has several reinsurance contracts with Munich Re. Munich Re treats the net transaction amounts as non-deductible capital contributions for tax purposes. In order to avoid double taxation on a world-wide basis,

the Company excludes the gain or loss recognized on these contracts from taxable income. The Company does not deem the exclusion of the gain or loss recognized on these contracts to be an uncertain tax position.

The Company establishes a "valuation allowance" for any portion of the deferred tax asset that management does not believe is more likely than not realizable. In 2018, a valuation allowance of $23.5 was recorded for capital losses due to the lack of projected future capital gains to offset the losses. In 2017, the valuation allowance decreased $30.7 to reflect the tax reform rate change. In 2016, management released the foreign tax credit carry-forward valuation allowance of $52.0 based on its determination that sufficient foreign source income would be generated to fully utilize foreign tax credits prior to expiration. The net change in the valuation allowance for the years ended December 31, was comprised of the following:

	2018	2017	2016
Capital losses	$ 23.5	$ -	$ -
Foreign tax credits	-	-	(52.0)
State tax net operating losses	2.1	0.2	-
Tax reform rate change	-	(30.7)	-
Total change in valuation allowance	$ 25.6	$ (30.5)	$ (52.0)

At December 31, 2018, the valuation allowance of $81.7 was comprised of $10.1 of state tax net operating losses, $23.5 of capital losses, and $48.1 of other net deferred tax assets. At December 31, 2017, the valuation allowance of $56.1 was comprised of $8.0 of state tax net operating losses and $48.1 of other net deferred tax assets.

In 2002, Munich Re contributed a common stock holding and a limited partnership interest to the Company. On the date of transfer, there was a net difference between the aggregate book and tax bases of the contributions which created a potential future tax benefit of approximately $88.0 and potential future tax liability of approximately $20.0. A deferred tax asset and deferred tax liability were not recorded at the time of contribution since Munich Re, not the Company, maintained discretion as to the ultimate disposition of the common stock and limited partnership interest, and thus the ability to trigger recognition of the federal income tax benefit and liability. The Company later sold the contributed stock back to Munich Re, who in turn, sold it to outside parties. This triggered an $87.7 deferred tax benefit for federal income tax purposes, of which $7.4 was later utilized as part of a capital loss carry-back. No federal tax benefit will be recorded until a cash tax benefit is received by the Company; as such, a valuation allowance will be maintained until such time as the cash benefit is recognizable for federal income tax purposes. In 2017 this valuation allowance was reduced from $80.3 to $48.1 to reflect the tax reform rate change.

Management believes that the net deferred tax asset at December 31, 2018, is more likely than not to be realized after consideration of the valuation allowance recorded.

Taxes on foreign income have been provided at the U.S. statutory federal income tax rate of 21% for 2018 and 35% for 2017 and 2016. The difference between the U.S. and foreign tax rates is provided to account for U.S. taxation (net of applicable foreign tax credits) on the future repatriation of these foreign earnings.

Income tax expense (benefit) was as follows:

	Year ended December 31, 2018		
	Current	Deferred	Total
Federal income tax expense (benefit)	$ (24.7)	$ 33.1	$ 8.4
Foreign tax	1.0	-	1.0
Federal tax expense on net realized capital gains	1.1	(22.7)	(21.6)
Total federal and foreign income tax expense (benefit)	$ (22.6)	$ 10.4	$ (12.2)

	Year ended December 31, 2017		
	Current	Deferred	Total
Federal income tax expense (benefit)	$ (3.8)	$ 150.9	$ 147.1
Foreign tax	6.4	-	6.4
Federal tax expense on net realized capital gains	0.2	(12.7)	(12.5)
Total federal and foreign income tax expense	$ 2.8	$ 138.2	$ 141.0

	Year ended December 31, 2016		
	Current	Deferred	Total
Federal income tax expense (benefit)	$ (16.8)	$ 59.0	$ 42.2
Foreign tax	11.3	-	11.3
Federal tax expense on net realized capital gains	3.1	22.3	25.4
Total federal and foreign income tax expense (benefit)	$ (2.4)	$ 81.3	$ 78.9

Reconciliations of the differences between income taxes computed at the federal statutory tax rate and consolidated provisions for income taxes were as follows:

	Year ended December 31,		
	2018	2017	2016
Income (loss) before tax	$ (211.9)	$ (271.6)	$ 724.6
Income tax rate	21%	35%	35%
Tax expense (benefit) at federal statutory income tax rate	(44.5)	(95.1)	253.6
Tax effect of:			
Valuation allowance on deferred tax asset	25.6	0.2	(52.0)
Affiliate reinsurance tax benefit	(1.1)	(32.5)	(125.4)
Non taxable dividend income	0.5	0.6	(0.1)
Tax reform rate change	-	254.1	-
Base erosion and anti-abuse tax	10.8	-	-
Expiration of foreign tax credits	-	11.3	-
Other, net	(3.5)	2.4	2.8
Federal and foreign income tax expense (benefit)	$ (12.2)	$ 141.0	$ 78.9

10. BENEFIT PLANS

Employees are eligible for plans that provide compensation incentives based upon operating results and that reward individuals for performance and contribution to the success of the Company. Charges to operations for such incentives were $38.6, $37.7, and $42.6 for the years ended December 31, 2018, 2017, and 2016, respectively.

The Company has a participant-directed defined contribution plan available to substantially all employees. Participants may elect to make deferral contributions to a retirement savings account of up to 50% of eligible pay, subject to IRS limits. The Company will make a matching contribution of up to 5% of the participant's compensation for each pay period. The costs of the Company's matching contributions were $6.2, $6.3, and $6.1 for the years ended December 31, 2018, 2017, and 2016, respectively.

Employees also participate in a defined contribution retirement savings plan under which the Company makes additional contributions to the employee's retirement savings account. The amount of contribution is age-weighted ranging from 2.0% to 8.0% of eligible compensation. No contributions are required by employees under this plan. Contributions of $9.5, $10.8, and $10.4 were made for the retirement savings plan for the years ended December 31, 2018, 2017, and 2016, respectively.

The Company provides retirement benefits to its employees hired prior to 2006 under a qualified non-contributory defined benefit pension plan. It provides additional benefits to certain employees whose retirement benefits exceed maximum amounts permitted by current tax law under an unfunded, nonqualified pension plan. Benefits under both plans are based on years of service and the average of the employee's highest consecutive five years of compensation. Accrued costs represent estimates based upon current information. Those estimates are subject to change due to changes in the underlying information supporting such estimates in the future. These defined benefit pension plans were frozen in 2011, at which time employees in the plans ceased accruing benefits under the plans and commenced participation in the Company's defined contribution retirement savings plan.

In accordance with IRS funding regulation, no minimum funding contribution was required to be made in 2018, however, the Company made a discretionary contribution of $6.7 in 2018 for the 2017 plan year. No minimum funding contribution is required to be made for the 2018 plan year.

The Company also provides post retirement health care benefits to individuals meeting age and service eligibility requirements. The plan cost to the Company is capped at 150% of the cost as of January 1, 2009. Additional costs above the cap are paid by retiree contributions. The Company funds its obligation currently. In 2017 the eligibility requirements for this plan were amended to include only individuals having ten years of service and having attained the age of 55 by March 31, 2018, or age 65 regardless of service. The Company recognized a curtailment gain of $8.2 related to this plan amendment.

The following table provides a reconciliation of the changes in the plans' benefit obligations and fair value of assets over the years ended December 31, 2018 and 2017, and the funded status at December 31.

	Pension Benefits		Other Post-Retirement Benefits	
	2018	**2017**	**2018**	**2017**
Reconciliation of projected benefit obligation				
Obligation at January 1	$ 764.0	$ 713.2	$ 53.8	$ 84.7
Service cost	-	-	-	0.9
Interest cost	25.7	27.6	1.6	2.2
Plan participants' contributions	-	-	1.5	1.6
Actuarial loss (gain)	(65.4)	50.1	(4.2)	(2.9)
Benefit payments and lump sums	(30.9)	(26.9)	(4.5)	(3.9)
Amendment	-	-	-	(28.8)
Obligation at December 31	$ 693.4	$ 764.0	$ 48.2	$ 53.8
Reconciliation of fair value of plan assets				
Fair value of plan assets at January 1	$ 599.3	$ 556.3	$ -	$ -
Actual return on plan assets	(28.2)	66.2	-	-
Employer contributions	10.6	3.7	3.0	2.3
Plan participants' contributions	-	-	1.5	1.6
Benefit payments and lump sums	(30.9)	(26.9)	(4.5)	(3.9)
Fair value of plan assets at December 31	$ 550.8	$ 599.3	$ -	$ -
Funded status at December 31	$ (142.6)	$ (164.7)	$ (48.2)	$ (53.8)

In 2018, the pension benefit obligation experienced a $65.4 actuarial gain, resulting from a 63 basis point improvement in the weighted average discount rate assumption. In 2017, the pension benefit obligation experienced a $50.1 actuarial loss, resulting from a 50 basis point decline in the weighted average discount rate assumption.

The amounts recognized in the consolidated balance sheets at December 31, were as follows:

	Pension Benefits		Other Benefits	
	2018	2017	2018	2017
Other liabilities - accrued benefit liability	$ 142.6	$ 164.7	$ 48.2	$ 53.8
Accumulated other comprehensive income (loss), pretax				
Net loss	(200.0)	(222.9)	(10.8)	(15.7)
Prior service credit	-	-	25.9	27.7

The following information is provided for the Company's two defined benefit pension plans at December 31.

	Qualified Plan		Nonqualified Plan	
	2018	2017	2018	2017
Projected benefit obligation	$ 601.7	$ 665.7	$ 91.7	$ 98.3
Accumulated benefit obligation	601.7	665.7	91.7	98.3
Fair value of plan assets	550.8	599.3	-	-

The weighted average assumptions used in the measurement of the Company's benefit obligation at December 31, 2018 and 2017, are shown in the following table.

	Pension Benefits		Other Benefits	
	2018	2017	2018	2017
Discount rate	4.08 %	3.45 %	3.85 %	3.18 %

The weighted average asset allocations for the qualified pension plan at December 31, 2018 and 2017 were as follows:

	2018	2017
Fixed income securities	90.9 %	89.7 %
Equity securities	8.8	9.9
Cash and short term money funds	0.3	0.4
Total plan assets	100.0 %	100.0 %

The overall objective of the qualified pension plan is to provide for full and timely payment of retirement benefits utilizing investment policies designed to maintain adequate funding for the plan's liability over time. The plan seeks to produce a return on investments based on levels of liquidity and investment risk that are prudent and reasonable, given prevailing market conditions, and recognizing the importance of the preservation of capital. Investment strategies and asset allocations are based on careful consideration of plan liabilities and expected cash flows, the plan's funded status and our financial condition. Investment performance and asset allocation are measured and monitored on an ongoing basis.

The plan asset portfolio is comprised of fixed income and equity securities. The goal of the fixed income investments is to generate current income and provide stable periodic returns, while the goal of the equity investments is to maintain the long term growth of the plan assets. With the goal of reducing market risk and matching asset duration with expected benefit cash flows, the target allocation of the plan asset portfolio is 90% long-term fixed income securities and 10% equity securities. Below investment-grade fixed income securities are excluded from the asset allocation.

The pension plan assets in trust are categorized in accordance with the fair value hierarchy established by ASC 820, as of December 31 2018 and 2017, as follows.

	2018			
	Level 1	Level 2	Level 3	Total
Mutual funds				
Fixed income securities	$ 500.5	$ -	$ -	$ 500.5
Equity securities	48.3	-	-	48.3
Total investments	$ 548.8	$ -	$ -	$ 548.8

	2017			
	Level 1	Level 2	Level 3	Total
Mutual funds				
Fixed income securities	$ 537.8	$ -	$ -	$ 537.8
Equity securities	59.1	-	-	59.1
Total investments	$ 596.9	$ -	$ -	$ 596.9

The following table provides the components of net periodic benefit cost for the years ended December 31, 2018, 2017, and 2016.

	Pension Benefits			Other Benefits		
	2018	2017	2016	2018	2017	2016
Service cost	$ -	$ -	$ -	$ -	$ 0.9	$ 2.4
Interest cost	25.7	27.6	28.3	1.6	2.2	3.1
Expected return on plan assets	(19.9)	(17.4)	(20.6)	-	-	-
Amortization of net loss	5.6	5.7	6.1	0.6	0.8	1.0
Amortization of prior service credit	-	-	-	(1.8)	(2.5)	(4.2)
Acceleration of prior service credit recognition	-	-	-	-	(8.2)	-
Net periodic benefit cost	$ 11.4	$ 15.9	$ 13.8	$ 0.4	$ (6.8)	$ 2.3

The components of net periodic benefit cost, other than service cost, are included in other expense in the Consolidated Statement of Comprehensive Income.

The prior service costs are amortized on a straight-line basis over the average remaining service period of active participants. Gains and losses in excess of 10% of the greater of the benefit obligation and the market-related value of assets are amortized over the average remaining life expectancy of active participants.

The following table provides other pre-tax changes in plan assets and liabilities recognized in other comprehensive income for the years ended December 31, 2018, 2017, and 2016.

	Pension Benefits			Other Benefits		
	2018	2017	2016	2018	2017	2016
Net gain (loss) for period	$ 17.3	$ (1.2)	$ 12.3	$ 4.2	$ 2.9	$ (1.8)
Amortization of net loss	5.6	5.7	6.1	0.6	0.8	1.0
New prior service credit for period	-	-	-	-	28.8	-
Amortization of prior service credit	-	-	-	(1.8)	(2.5)	(4.2)
Recognition of prior service credit due to curtailment	-	-	-	-	(8.2)	-
Total recognized in other comprehensive income (loss)	$ 22.9	$ 4.5	$ 18.4	$ 3.0	$ 21.8	$ (5.0)

The weighted average assumptions used to determine the net periodic benefit cost for the years ended December 31, are shown in the following table:

	Pension Benefits			Other Benefits		
	2018	2017	2016	2018	2017	2016
Discount rate	3.45 %	3.95 %	4.13 %	3.18 %	3.65 %	3.99 %
Expected return on plan assets	3.40 %	3.20 %	4.00 %	N/A	N/A	N/A
Rate of compensation increase	N/A	N/A	N/A %	N/A	N/A	N/A

The Company determines the overall expected long-term rate of return on plan assets based on the assumption that the long-term historical performance of well-recognized indices, which are representative of long-term plan asset allocations, are reasonable indicators of future investment performance. Historical average annual returns for asset classes may be adjusted to reflect the impact of current and forecasted interest rate environments.

For measurement purposes, a 7.5% annual rate of increase in the per capita cost of covered health care benefits was assumed for 2019. The rate was assumed to decrease gradually to a rate of 4.5% for 2031 and remain at that level thereafter.

Expected future benefit payments for each of the plans are as follows:

	2019	2020	2021	2022	2023	2024 - 2028
Pension Benefits	$ 30.8	$ 32.3	$ 35.0	$ 36.6	$ 37.2	$ 203.5
Other Benefits	$ 4.5	$ 4.6	$ 4.7	$ 4.8	$ 4.8	$ 16.8

11. LONG TERM DEBT

The Company has outstanding $333.8 aggregate principal amount of Senior Notes due December 15, 2026 (the "Notes"). The Notes bear interest at a rate of 7.45% annually, payable on June 15 and December 15 each year. Interest expense of $25.1, $25.4 and $25.6 was recognized on this obligation for each of the years ended December 31, 2018, 2017, and 2016, respectively.

The Company may, from time to time, redeem all or part of its 7.45% Senior Notes due 2026 (the "Notes") pursuant to the terms of the indenture under which the Notes were issued (the "Indenture"), or purchase them in privately negotiated transactions, tender offers or otherwise. The indenture contains certain covenants, including, but not limited to, covenants imposing limitations on liens, and restrictions on mergers and sale of assets. In 2017 the Company repurchased, and subsequently cancelled, $8.1 million aggregate principal of Notes through privately negotiated transactions. There were no repurchase transactions in 2018 or 2016.

12. REGULATORY MATTERS

A. Surplus and Stockholder Dividends

Statutory surplus for the insurance subsidiaries on a combined basis at December 31, 2018 and 2017, was $3,901.4 and $4,187.3, respectively. This decrease was primarily the result of a combined statutory net loss of $397.7 for 2018, an increase in non-admitted assets of $149.2 million due to limitations on deferred tax assets, and dividends of $39.1 paid to the Company, partially offset by a capital contribution of $275.0 to Munich Reinsurance America, Inc. This statutory net loss is different from the net loss reported in these financial statements, primarily due to differing accounting treatments for deferred federal income taxes, retroactive reinsurance contracts, and deferred acquisition costs. The insurance subsidiaries had a statutory net loss of $574.7 and statutory net income of $336.5 for the years ended December 31, 2017 and 2016, respectively.

AAIC declared and paid dividends of $31.9 and $27.8 to the Company in the years ended December 31, 2018 and 2017, respectively. Princeton E&S declared and paid dividends of $7.3 and $7.2 to the Company in the years

ended December 31, 2018 and 2017, respectively. Munich Reinsurance America, Inc. declared and paid dividends of $174.6 to the Company in the year ended December 31, 2017.

The Company has been dependent on management service agreements and dividends from the insurance subsidiaries in order to meet its short and long term liquidity requirements, including its debt service obligations. The payment of dividends to the Company by the insurance subsidiaries is subject to limitations imposed by the Insurance Department of the State of Delaware (the "Insurance Department"), including the requirement that dividends be paid from available unassigned funds, as set forth in the most recent annual statement of the insurer. Based on these restrictions, Munich Reinsurance America, Inc. cannot pay dividends in 2019 without the prior approval of the Insurance Department. At December 31, 2018, AAIC and Princeton E&S, can pay dividends of up to $44.6, and $8.8, respectively, in 2019 without the prior approval of the Insurance Department.

B. Risk Based Capital

The Insurance Department has a risk based capital ("RBC") standard for property and casualty insurance (and reinsurance) companies which measures the amount of capital appropriate for a property and casualty insurance company to support its overall business operations in light of its size and risk profile. At December 31, 2018, Munich Reinsurance America, Inc.'s RBC ratio was 298.6%, compared to 341.2% at December 31, 2017. An RBC ratio in excess of 200% generally requires no regulatory action.

AAIC's and Princeton E&S's RBC ratios were also in excess of 200% at December 31, 2018 and 2017.

C. Statutory Financial Condition Examinations

As part of its general regulatory oversight process, the Insurance Department usually conducts financial condition examinations of domiciled insurers and reinsurers every three to five years, or at such other times as is deemed appropriate by the Insurance Commissioner. In 2017, the Insurance Department completed the regularly scheduled financial condition examination of the Company's insurance subsidiaries for the financial period 2013 through 2016. The Insurance Department's final examination reports were received in 2018, with no adverse findings.

D. Permitted Statutory Accounting Practices

The financial statements of the insurance companies are prepared in accordance with accounting practices prescribed or permitted by the Insurance Department. Insurance companies domiciled in the State of Delaware are required to prepare their statutory basis financial statements in accordance with the National Association of Insurance Commissioners ("NAIC") Accounting Practices and Procedures manual, subject to any difference prescribed or permitted by the State of Delaware or its insurance commissioner.

The NAIC does not allow discounting of non-tabular reserves, however Munich Reinsurance America, Inc. received permission to discount its non-tabular loss reserves for statutory accounting purposes, at a rate consistent with that approved by the Insurance Department for its tabular reserves. The permitted practice of discounting non-tabular reserves resulted in a reduction in statutory net loss reserves and an increase in statutory surplus of $179.5 and $232.7 at December 31, 2018 and 2017, respectively.

13. RELATED PARTY TRANSACTIONS

Although the Company has reduced its reliance on retrocessional coverage in recent years, historically Munich Re participated on the majority of the Company's retrocessional programs as discussed below.

Munich Re provides retrocessional support to accident years 2001 and prior by means of a loss portfolio transfer agreement. The purpose of the LPT is to further support the Company's capital position and effectively mitigate the economic risk associated with potential development that may result from these accident years. This transaction does not relieve the Company of its obligation to its reinsureds for the periods covered. The aggregate limit on the LPT cover of $10.1 billion was reached, on an undiscounted loss basis, in 2012. This program was previously accounted for on a funds withheld basis, the balance of which was exhausted in 2015. There was no impact on net income at the inception of this contract. Loss recoveries of $42.1, $33.3, and $70.0 were ceded to this cover, for the years ended December 31, 2018, 2017, and 2016, respectively. In 2018, 2017, and 2016 the deferred gain was reduced by $69.8, $64.5, and $304.4, respectively, as the recognition of previously deferred benefits exceeded the deferral of benefits from additional development ceded to the LPT during the year. Reinsurance recoverable of $1,707.4 and $1,813.3 was outstanding on the LPT at December 31, 2018 and 2017, respectively. The unamortized deferred gain related to changes in the amounts recoverable on this program was $1,288.8 and $1,358.6 at December 31, 2018 and 2017, respectively.

In 2010 the Company entered into an excess of loss adverse development cover with Munich Re. This reinsurance agreement provided the Company $500.0 of protection for accident years 2001 and prior, for losses in excess of the $10.1 billion limit of the Company's loss portfolio transfer agreement, also with Munich Re. The aggregate limit of this cover was reached, on an undiscounted basis, in 2013. Loss recoveries to this cover were increased by $6.4 and $8.1 for the years ended December 31, 2018 and 2017, respectively, and reduced by $6.8 for the year ended December 31, 2016. Of the loss recoveries ceded, $6.4 and $8.1 were deferred in 2018 and 2017, respectively, and will be recognized in income over the settlement period of the underlying claims. The unamortized deferred gain related to changes in the amounts recoverable on this program was $254.8 and $248.4 at December 31, 2018 and 2017, respectively.

In 2013 the Company entered into a second excess of loss adverse development cover with Munich Re. The terms of this contract are consistent with the 2010 ADC providing the Company with $500.0 of protection for accident years 2001 and prior, for losses in excess of the limits of LPT and the 2010 ADC. Limit of $435.4 remains available, on an undiscounted loss basis, on this cover at December 31, 2018. Loss recoveries to this cover were reduced by $52.1, $6.3 and $28.3 for the years ended December 31, 2018, 2017, and 2016, respectively. Loss recoveries in excess of the premiums ceded are deferred and will be recognized in income over the settlement period of the underlying claims. There is no deferred gain related to this program at December 31, 2018.

The Company had accident year stop loss covers with Munich Re for the 2002 through 2008 accident years, with protection varying between $410.0 and $500.0 per annum. The reinsurance agreement attaches below expected loss ratios for the 2003 through 2005 accident years. Loss recoveries for prior accident years were reduced by $0.9 and $4.3 for the years ended December 31, 2018 and 2016, respectively, and increased by $7.2 for the year ended December 31, 2017. The funds held balance for these covers was $297.9 and $287.5 at December 31, 2018 and 2017, respectively. Interest expense on funds held was $13.5, $13.0, and $12.6 for the years ended December 31, 2018, 2017, and 2016, respectively.

The Company had a variable quota share retrocessional program with Munich Re which covered the majority of the business written by the Company, net of inuring reinsurance, from 2002 to 2005. Loss recoveries were reduced by $66.0 for the year ended December 31, 2018, and increased by $1.0 and $4.9 for the years ended December 31, 2017 and 2016, respectively. The funds held balances for this program were $2,439.5 and $2,367.2 at December 31, 2018 and 2017, respectively. The Company records a receivable for the amount of any program year's experience fund balance which the Company would recover at the termination of the variable quota share contract. These receivable balances were $1,702.5 and $1,585.6 at December 31, 2018 and 2017, respectively. Net interest on funds held and the payable balance was income of $10.4 and $2.1 for the years ended December 31, 2018 and 2017, respectively, and expense of $1.2 for the year ended December 31, 2016.

The Company has property catastrophe reinsurance agreements with Munich Re providing coverage in excess of the Company's net retention levels for accident years 2006 through 2018. For the 2018 accident year, one layer of $2,900.0 is provided in excess of a retention level of $300.0 per occurrence. For 2018, the Company also purchased an aggregate excess of loss cover. This cover provides additional coverage of $200.0 in excess of $100.0 retained per occurence, once an annual aggregate deductible of $200.0 is met. Premiums of $135.0, $66.5, and $58.4, were ceded to these covers for the years ended December 31, 2018, 2017 and 2016, respectively. Loss recoveries of $66.3 and $0.7 were ceded to these agreements for the years ended December 31, 2018 and 2016, respectively. No losses were ceded to these agreements for the year ended December 31, 2017.

Munich Reinsurance America, Inc. has a quota share program with American Modern Home Company ("American Modern"), a subsidiary of MAHC, to cover the property and casualty personal lines business on site-built and manufactured homes, net of inuring reinsurance. The assuming percentage on this program varies between 50% and 90% depending upon the contract year. Premiums written of $412.7, $434.2, and $422.0 were assumed on this program for the years ended December 31, 2018, 2017, and 2016, respectively. Premiums earned were $406.6, $435.0, and $418.9, for the years ended December 31, 2018, 2017, and 2016, respectively. Losses incurred of $269.1, $280.0, and $257.6 were assumed on this program for the years ended December 31, 2018, 2017, and 2016, respectively. Commission expense of $153.1, $163.8, and $157.8 was recognized on this program for the years ended December 31, 2018, 2017, and 2016, respectively.

Munich Reinsurance America, Inc. also has a 100% quota share program with American Modern reinsuring property and casualty business underwritten by the Company's Specialty Markets division, net of inuring reinsurance. Premiums written of $94.5, $101.8, and $94.4 were assumed on this program for the years ended December 31, 2018, 2017, and 2016, respectively. Premiums earned were $101.1, $101.4, and $93.4, for the years ended December 31, 2018, 2017, and 2016, respectively. Losses incurred of $81.1, $102.9, and $69.7 were assumed on this program for the years ended December 31, 2018, 2017, and 2016, respectively. Commission expense of $34.4, $35.8, and $38.0 was recognized on this program for the years ended December 31, 2018, 2017, and 2016, respectively.

The Company has several reinsurance agreements with Munich Re branches and affiliates, which are then retroceded to Munich Re or another of its affiliates. Certain of these agreements were novated or cancelled in 2018. Previously assumed and ceded premiums of $329.0 were returned by, and to, the Company for the year ended December 31, 2018, as a result of these transactions. Premiums written of $1,120.3 and $1,764.2 were assumed from and ceded to these contracts for the years ended December 31, 2017 and 2016, respectively. Assumed and ceded losses incurred related to these agreements were reduced by $50.8 for the year ended December 31, 2018. Losses of $627.9 and $989.4 were assumed from and ceded to these contracts for the years ended December 31, 2017 and 2016, respectively. Net commission income of $0.7 and $1.8 was recognized on these agreements in the years ended December 31, 2017 and 2016, respectively.

As a result of the novation and cancellation of the programs disclosed above, aggregate premiums of $167.6 were returned to the Company by Munich Re and its affiliated companies for the year ended December 31, 2018. Total premiums ceded to Munich Re and its affiliated companies were $1,356.0 and $1,909.5 for the years ended December 31, 2017 and 2016, respectively. Total losses and LAE ceded to Munich Re and its affiliated companies were $18.4, $811.4, and $1,384.3, for the years ending December 31, 2018, 2017, and 2016, respectively. Total ceding commissions of $44.5, $625.2, and $642.2 were earned on programs with Munich Re and its affiliated companies in the years ended December 31, 2018, 2017, and 2016. Total insurance reserves outstanding with Munich Re and its affiliated companies were $3,063.0 and $4,956.9 at December 31, 2018 and 2017, respectively. Gross premiums assumed from Munich Re and its affiliated companies were $184.3, $1,663.2, and $2,289.7 for the years ended December 31, 2018, 2017, and 2016, respectively.

MEAG Munich ERGO Asset Management GmbH ("MEAG") is an affiliated investment advisor responsible for the management of the majority of the Company's investments in infrastructure entities and real estate limited partnerships. Fees paid to MEAG were $2.8, $3.1, and $1.6 for the years ended December 31, 2018, 2017, and 2016, respectively.

MEAG New York is an affiliated investment advisor responsible for the management of the majority of the Company's investment portfolio. Fees paid to MEAG New York were $9.1, $8.9, and $9.0 for the years ended December 31, 2018, 2017, and 2016, respectively.

Munich Reinsurance America, Inc. has a revolving credit agreement with MAHC which allows MAHC to borrow up to $225.0 from Munich Reinsurance America, Inc. Outstanding amounts under this agreement bear interest at a rate equal to the LIBOR, for a period equal in duration to the interest period, plus 25 basis points. There were no amounts outstanding under this agreement at December 31, 2018. The termination date of this agreement is December 28, 2021.

The Company also has a revolving credit agreement with MAHC, which allows MAHC to borrow up to $225.0 from the Company. Outstanding amounts under this agreement bear interest annually at a rate equal to the LIBOR, for a period equal in duration to the interest period, plus 25 basis points. There were no amounts outstanding under this agreement at December 31, 2018. The termination date of this agreement is December 28, 2021.

The Company has a revolving credit agreement with Munich Re America Services, Inc., which allows Munich Re America Services, Inc. to borrow up to $10.0 from the Company. Outstanding amounts under this agreement bear interest annually at a rate equal to the 90 Day LIBOR plus 25 basis points. There were no amounts outstanding under this agreement at December 31, 2018. The termination date of this agreement is October 1, 2023.

14. COMMITMENTS AND CONTINGENT LIABILITIES

A. Commitments

The Company has a senior secured fixed term loan commitment with a U.S. infrastructure entity in the amount of $80.0, with $14.0 remaining on the commitment at December 31, 2018. The timing and amount of future disbursements are dependent on the borrower meeting certain performance metrics over the period. The Company expects to fulfill this obligation in 2019.

As part of the common control acquisition in 2015, the Company assumed an agreement with U.S. Property Fund V GmbH & Co. KG ("USPF V"), a real estate investment partnership, to make contributions to the partnership totaling $20.0. The Company has $0.8 remaining on this commitment at December 31, 2018.

B. Surety Bonds

The Company is contingently obligated as co-surety to certain surety bonds issued by its reinsured clients. In all such cases, an indemnification and hold harmless agreement is executed that limits the Company's exposure to the extent provided under the reinsurance contract in the event of a claim. As co-surety, the Company would only incur a loss in excess of the limits of the reinsurance contract if a default by both the bonded principal and the co-surety occurred. Based upon internal risk modeling, which takes into consideration the financial strength and rating of the co-surety, a co-surety loss on any of these agreements is deemed to be remote. At December 31, 2018, the Company's contingent obligation under all co-surety arrangements is $527.4.

C. Financial Guarantees

At December 31, 2018, the Company has provided guarantees in the amount of $198.5 to certain counterparties of the weather and energy trading operations of an affiliate, Munich Re Trading, LLC ("MRTL") pursuant to a credit support facility between the Company and MRTL (the "Guarantees"). Pursuant to the facility, the Company, may, but is not obligated to, issue credit support of up to a maximum of $350.0 for MRTL in furtherance of MRTL's trading business. The credit support will be in the form of guarantees wherein the Company guarantees the payment obligations of MRTL arising from certain transactions or contracts relating to the supply of energy services or weather related derivatives. The Guarantees remain in effect until the earlier of (i) the underlying transactions expire and all obligations are satisfied or (ii) the Guarantees are terminated pursuant to their terms. Upon payment of

any obligations under the Guarantees, the Company has subrogation rights against MRTL. Based upon internal risk modeling, the current status of the payment risk on the Guarantees is deemed to be remote.

The American Re Management Limited Pension Plan (the "Plan") provides benefits to eligible members from American Re Management Limited and Great Lakes Services Limited (the “Plan Employers”), affiliates of the Company. The Plan is closed to future benefit accrual. In a valuation report dated as of June 2013, the valuation undertaken on a solvency basis revealed a deficit of £5.0 million. In return for the Trustees accepting repayment of the deficit by the Plan Employers over a ten year period of time, the Company agreed to provide a guarantee of the Plan Employers' obligations to the Plan. In a valuation report as of November 2016, the valuation undertaken revealed a deficit of £2.2 million. The Plan Employers remain principally liable for the obligations of the Plan and continue to pay the deficit amounts and the Company’s guarantee remains in place.

D. Leases

The Company has operating leases for certain of its furniture, fixtures, and computer equipment, and office space used by its branch office and subsidiary locations. Lease expense was $4.4, $4.0, and $3.7 for the years ended December 31, 2018, 2017, and 2016, respectively.

Future net minimum payments under non-cancelable leases at December 31, 2018, were estimated to be as follows:

2019	2020	2021	2022	2023	2023 and thereafter
$ 4.7	$ 4.8	$ 4.3	$ 3.8	$ 2.0	$ 3.0

E. Litigation

The Company is involved in non-claim litigation incidental to its business principally related to insurance company insolvencies or liquidation proceedings in the ordinary course of business. Also, in the ordinary course of business, the Company is sometimes involved in adversarial proceedings incidental to its insurance and reinsurance business. The amounts at risk in these proceedings are taken into account in setting loss reserves. Based upon its familiarity with or review and analysis of such matters, the Company believes that none of the pending litigation matters will have a material adverse effect on the consolidated financial statements of the Company. However, no assurance can be given as to the ultimate outcome of any such litigation matters.

15. SEGMENT REPORTING

Management reviews the Company's financial results focusing on its property and casualty ("P&C") business segments, comprised of its Reinsurance and Specialty Markets divisions. The underwriting results of the P&C segments are management's key focus in evaluating the underwriting performance of the Company. These results are reviewed on a "gross less specific retrocessions" basis. Specific retrocessions are those underwritten within the business segment and generally designed to reduce the net liability on individual risks. Other retrocessional programs underwritten on a corporate basis and designed to protect the overall surplus of the insurance subsidiaries are not included in the property and casualty underwriting results. These retrocessions, in addition to the underwriting results of health care business, other business segments in run-off, and certain business written on behalf of Munich Re and its affiliated companies, are aggregated to reconcile the P&C segments underwriting results to the consolidated statements of operations. Elements of underwriting results are **bold**.

The Company does not allocate certain items of revenues and expenses, nor are they included in the assessment of the segment results as reviewed by the Company's management. The assets and liabilities of the Company are generally not maintained on a segment or geographical basis. An allocation of such assets and liabilities is considered by the Company to be impracticable.

Year ended December 31, 2018

	Reinsurance	Specialty Markets	Total P&C	Total Corporate & Other	Total
Revenues					
Gross premiums written	$ 3,945.5	$ 1,101.3	$ 5,046.8	$ 467.2	$ 5,514.0
Net premiums written	3,943.8	837.9	4,781.7	490.2	5,271.9
Premiums earned	3,787.4	836.0	4,623.4	442.1	5,065.5
Net investment income					387.8
Net realized capital losses					(117.9)
Other income					41.7
Total revenue					5,377.1
Losses and Expenses					
Losses and LAE	2,800.6	640.9	3,441.5	311.9	3,753.4
Underwriting expense	1,350.4	242.9	1,593.3	185.0	1,778.3
Interest expense					25.2
Interest on ceded funds held					9.5
Other expense					22.6
Total losses and expenses					5,589.0
Loss before income taxes					(211.9)
Underwriting loss	$ (363.6)	$ (47.8)	$ (411.4)	$ (54.8)	$ (466.2)
Losses and LAE Ratio	73.9 %	76.7 %	74.4 %	N/M	74.1 %
Underwriting Expense Ratio	35.7	29.0	34.5	N/M	35.1
Combined Ratio	109.6 %	105.7 %	108.9 %	N/M	109.2 %

N/M = not meaningful

Year ended December 31, 2017

	Reinsurance	Specialty Markets	Total P&C	Total Corporate & Other	Total
Revenues					
Gross premiums written	$ 2,777.1	$ 1,032.6	$ 3,809.7	$ 1,977.5	$ 5,787.2
Net premiums written	2,772.9	771.9	3,544.8	627.3	4,172.1
Premiums earned	2,144.0	731.4	2,875.4	626.6	3,502.0
Net investment income					331.6
Net realized capital losses					(34.8)
Other income					44.9
Total revenue					3,843.7
Losses and Expenses					
Losses and LAE	1,581.7	790.0	2,371.7	515.2	2,886.9
Underwriting expense	700.4	211.6	912.0	216.0	1,128.0
Interest expense					25.5
Interest on ceded funds held					47.0
Other expense					27.9
Total losses and expenses					4,115.3
Loss before income taxes					(271.6)
Underwriting loss	$ (138.1)	$ (270.2)	$ (408.3)	$ (104.6)	$ (512.9)
Losses and LAE Ratio	73.8 %	108.0 %	82.5 %	N/M	82.4 %
Underwriting Expense Ratio	32.6	28.9	31.7	N/M	32.2
Combined Ratio	106.4 %	136.9 %	114.2 %	N/M	114.6 %

N/M = not meaningful

Year ended December 31, 2016

	Reinsurance	Specialty Markets	Total P&C	Total Corporate & Other	Total
Revenues					
Gross premiums written	$ 1,688.5	$ 926.4	$ 2,614.9	$ 2,674.1	$ 5,289.0
Net premiums written	1,684.4	693.4	2,377.8	749.7	3,127.5
Premiums earned	1,597.1	691.4	2,288.5	762.8	3,051.3
Net investment income					288.2
Net realized capital gains					83.9
Other income					40.7
Total revenue					3,464.1
Losses and Expenses					
Losses and LAE	889.7	539.6	1,429.3	243.9	1,673.2
Underwriting expense	516.6	211.6	728.2	242.1	970.3
Interest expense					25.7
Interest on ceded funds held					45.5
Other expense					24.8
Total losses and expenses					2,739.5
Income before income taxes					724.6
Underwriting gain (loss)	$ 190.8	$ (59.8)	$ 131.0	$ 276.8	$ 407.8
Losses and LAE Ratio	55.7 %	78.1 %	62.5 %	N/M	54.8 %
Underwriting Expense Ratio	32.4	30.6	31.8	N/M	31.8
Combined Ratio	88.1 %	108.7 %	94.3 %	N/M	86.6 %

N/M = not meaningful

16. UNAUDITED QUARTERLY FINANCIAL DATA

The following summarized quarterly financial data is unreviewed and unaudited by the Company's independent auditors.

	2018			
	First	Second	Third	Fourth
Operating Data				
Premiums written	$ 1,337.1	$ 1,308.4	$ 1,560.0	$ 1,066.4
Premiums earned	1,096.9	1,279.6	1,273.3	1,415.7
Losses and LAE	671.3	781.8	1,079.8	1,220.5
Underwriting expenses	382.7	438.7	464.9	492.0
Underwriting gain (loss)	42.9	59.1	(271.4)	(296.8)
Net investment income	77.3	122.2	93.7	94.6
Net realized capital gains (losses)	(15.0)	(28.9)	(47.9)	(26.1)
Interest expense	6.3	6.3	6.3	6.3
Net income to common stockholder	61.5	125.7	(183.5)	(203.4)
Comprehensive income (loss)	(76.1)	65.0	(197.0)	(178.5)

	2017			
	First	Second	Third	Fourth
Operating Data				
Premiums written	$ 1,006.4	$ 814.0	$ 1,109.2	$ 1,242.5
Premiums earned	814.5	853.3	883.8	950.4
Losses and LAE	490.9	546.3	1,202.1	647.6
Underwriting expenses	267.4	308.2	267.4	285.0
Underwriting gain (loss)	56.2	(1.2)	(585.7)	17.8
Net investment income	84.6	89.7	68.9	88.4
Net realized capital gains (losses)	(41.6)	15.7	(14.6)	5.7
Interest expense	6.4	6.5	6.3	6.3
Net income to common stockholder	64.4	70.2	(350.3)	(196.9)
Comprehensive income (loss)	127.9	96.8	(325.0)	(219.7)

SCHEDULE I

MUNICH RE AMERICA CORPORATION
SUMMARY OF INVESTMENTS
OTHER THAN INVESTMENTS IN RELATED PARTIES
December 31, 2018
(Dollars in millions)

Type of Investment	Amortized cost	Fair value	Amount at which shown in the balance sheet
Fixed income securities:			
Fixed income securities available for sale:			
U.S. Government and government agencies	$ 5,333.6	$ 5,256.6	$ 5,256.6
States, municipalities and political subdivisions	25.4	26.0	26.0
Asset-backed securities	392.2	387.6	387.6
Residential mortgage-backed securities	710.4	700.7	700.7
Commercial mortgage-backed securities	470.8	472.2	472.2
Foreign governments	686.0	665.8	665.8
Public utilities	473.9	461.5	461.5
Corporate bonds	3,950.6	3,821.0	3,821.0
Total fixed income securities available for sale	12,042.9	11,791.4	11,791.4
Fixed income securities trading	17.6	17.6	17.6
Total fixed income securities	12,060.5	11,809.0	11,809.0
Equity securities:			
Common stock available for sale:			
Industrial and miscellaneous and all other	167.7	167.7	167.7
Total equity securities	167.7	167.7	167.7
Short term investments	588.3	587.7	587.7
Other invested assets	583.6	796.8	583.6
Total investments	$ 13,400.1	$ 13,361.2	$ 13,148.0

See Independent Auditors' Report on F-2.

SCHEDULE II

MUNICH RE AMERICA CORPORATION
CONDENSED FINANCIAL INFORMATION
CONDENSED BALANCE SHEETS
December 31, 2018 and 2017
(Dollars in millions)

	December 31, 2018	December 31, 2017
Assets		
Investment in subsidiaries	$ 3,539.3	$ 3,688.3
Short term investments	146.6	139.7
Cash and cash equivalents	7.3	0.3
Goodwill	12.9	12.9
Current federal income taxes receivable	29.1	3.3
Miscellanous receivables	0.2	0.2
Total assets	$ 3,735.4	$ 3,844.7
Liabilities		
Interest payable	$ 1.0	$ 1.0
Deferred federal income taxes	109.3	77.6
Senior notes	331.7	331.5
Other liabilities	1.3	1.8
Total liabilities	443.3	411.9
Stockholder's Equity		
Common stock	-	-
Additional paid in capital	5,595.3	5,320.3
Accumulated deficit	(1,959.9)	(1,735.3)
Accumulated other comprehensive income (loss)	(343.3)	(152.2)
Total stockholder's equity	3,292.1	3,432.8
Total liabilities and stockholder's equity	$ 3,735.4	$ 3,844.7

See accompanying note to condensed financial statements.
See Independent Auditors’ Report on F-2.

SCHEDULE II

MUNICH RE AMERICA CORPORATION
CONDENSED FINANCIAL INFORMATION
CONDENSED STATEMENTS OF COMPREHENSIVE INCOME
Years Ended December 31, 2018, 2017, and 2016
(Dollars in millions)

	Year ended December 31,		
	2018	**2017**	**2016**
Revenue			
Net investment income	$ 2.9	$ 1.3	$ 0.5
Net realized capital losses	-	-	(0.1)
Other income	42.4	48.6	49.3
Total	45.3	49.9	49.7
Expenses			
Interest expense	25.3	25.6	25.9
Operating expenses	1.6	5.0	2.7
Total expenses	26.9	30.6	28.6
Operating income before federal income taxes	18.4	19.3	21.1
Federal income taxes	10.1	(66.1)	6.6
Income before equity in undistributed net income of subsidiaries	8.3	85.4	14.5
Equity in undistributed net income (loss) of subsidiaries	(208.0)	(498.0)	631.2
Net income (loss) to common stockholder	(199.7)	(412.6)	645.7
Other comprehensive income (loss)	(186.9)	92.6	19.0
Comprehensive income (loss)	$ (386.6)	$ (320.0)	$ 664.7

See accompanying note to condensed financial statements.
See Independent Auditors' Report on F-2.

SCHEDULE II

MUNICH RE AMERICA CORPORATION
CONDENSED FINANCIAL INFORMATION
CONDENSED STATEMENTS OF CASH FLOWS
Years Ended December 31, 2018, 2017 and 2016
(Dollars in millions)

	Year ended December 31,		
	2018	**2017**	**2016**
Cash Flows From Operating Activities:			
Net income (loss) to common stockholder	$ (199.7)	$ (412.6)	$ 645.7
Adjustments to reconcile net income (loss) to cash provided by operating activities:			
Equity in undistributed loss (income) of subsidiaries	208.0	498.0	(631.2)
Current and deferred federal income tax asset	5.9	(84.9)	18.6
Increase in other asset/liabilities	(0.3)		
Other, net	(2.3)	(0.9)	(0.3)
Net cash provided by (used in) operating activities	11.6	(0.4)	32.8
Cash Flows From Investing Activities:			
Investment in subsidiary	(275.0)	-	-
Dividends received from subsidiaries	39.1	209.7	528.9
Net purchases and sales in short term investments	(4.6)	8.4	(59.8)
Net cash provided by (used in) investing activities	(240.5)	218.1	469.1
Cash Flows From Financing Activities:			
Capital contribution from parent company	275.0	-	-
Partial extinguishment of senior notes	-	(7.9)	-
Dividends paid to parent company	(39.1)	(209.7)	(528.9)
Net cash used in financing activities	235.9	(217.6)	(528.9)
Net increase (decrease) in cash	7.0	0.1	(27.0)
Cash and cash equivalents, beginning of period	0.3	0.2	27.2
Cash and cash equivalents, end of period	$ 7.3	$ 0.3	$ 0.2
Supplemental Cash Flow Information:			
Income taxes paid	$ (8.7)	$ (2.3)	$ (3.3)
Interest paid	$ (24.9)	$ (25.3)	$ (25.5)
Supplemental Schedule of Noncash Financing Activities			
Dividend to parent company	$ -	$ -	$ 6.3
Capital contribution	$ -	$ -	$ 22.3

See accompanying note to condensed financial statements.
See Independent Auditors' Report on F-2.

SCHEDULE II—CONDENSED FINANCIAL INFORMATION
MUNICH RE AMERICA CORPORATION
NOTE TO CONDENSED FINANCIAL INFORMATION

The condensed financial information of Munich Re America Corporation for the years ended December 31, 2018, 2017, and 2016, should be read in conjunction with the consolidated financial statements of Munich Re America Corporation and subsidiaries and the notes thereto. Investment in subsidiaries is recorded using the equity method of accounting.

SCHEDULE III

MUNICH RE AMERICA CORPORATION
SUPPLEMENTAL INSURANCE INFORMATION
(Dollars in millions)

Segment	Deferred policy acquisition costs	Net unpaid benefits, losses, claims and loss expenses	Unearned premiums	Earned premiums	Net investment income (1)	Claims and claim adjustment expense	Amortization of deferred policy acquisition costs	Underwriting expenses	Premiums written
Year ended December 31, 2018									
Reinsurance	$ 473.4	$ 5,983.6	$ 1,423.4	$ 3,787.5	$ -	$ 2,800.6	$ 411.7	$ 1,350.4	$ 3,943.8
Insurance	63.4	2,237.2	436.8	835.9	-	640.9	64.3	242.9	837.9
Other	108.5	293.2	318.7	442.1	-	311.9	100.0	185.0	490.2
Total	$ 645.3	$ 8,514.0	$ 2,178.9	$ 5,065.5	$ -	$ 3,753.4	$ 576.0	$ 1,778.3	$ 5,271.9
Year ended December 31, 2017									
Reinsurance	$ 411.7	$ 4,724.8	$ 1,267.2	$ 2,144.0	$ -	$ 1,581.7	$ 220.4	$ 700.4	$ 2,772.9
Insurance	64.3	2,094.4	436.7	731.4	-	790.0	50.6	211.6	771.9
Other	100.0	381.6	632.8	626.6	-	517.4	97.8	222.0	627.3
Total	$ 576.0	$ 7,200.8	$ 2,336.7	$ 3,502.0	$ -	$ 2,889.1	$ 368.8	$ 1,134.0	$ 4,172.1
Year ended December 31, 2016									
Reinsurance	$ 220.4	$ 4,141.2	$ 640.8	$ 1,597.1	$ -	$ 889.7	$ 181.3	$ 516.6	$ 1,684.4
Insurance	50.6	1,774.8	376.9	691.4	-	539.6	52.4	211.6	693.4
Other	97.8	387.2	965.7	762.8	-	247.0	100.5	252.6	749.7
Total	$ 368.8	$ 6,303.2	$ 1,983.4	$ 3,051.3	$ -	$ 1,676.3	$ 334.2	$ 980.8	$ 3,127.5

(1) The Company does not allocate net investment income by reportable segment, as it is not included in the assessment of the segment results as reviewed by the Company's management.

See Independent Auditors' Report on F-2.

SCHEDULE IV

MUNICH RE AMERICA CORPORATION AND SUBSIDIARIES
REINSURANCE
(Dollars in millions, except percentages)

	Gross amount	Ceded to other companies	Assumed from other companies	Net amount	Percentage of amount assumed to net
Year ended December 31, 2018					
Life insurance in force	$ -	$ -	$ -	$ -	
Premiums:					
Life insurance	$ -	$ -	$ -	$ -	- %
Accident and health insurance	186.2	145.7	182.9	223.4	81.9
Property-liability insurance	1,014.7	468.2	4,295.6	4,842.1	88.7
Title insurance	-	-	-	-	-
Total premiums	$ 1,200.9	$ 613.9	$ 4,478.5	$ 5,065.5	88.4 %

	Gross amount	Ceded to other companies	Assumed from other companies	Net amount	Percentage of amount assumed to net
Year ended December 31, 2017					
Life insurance in force	$ -	$ -	$ -	$ -	
Premiums:					
Life insurance	$ -	$ -	$ -	$ -	- %
Accident and health insurance	189.1	105.6	307.5	391.0	78.6
Property-liability insurance	880.8	1,852.8	4,083.0	3,111.0	131.2
Title insurance	-	-	-	-	-
Total premiums	$ 1,069.9	$ 1,958.4	$ 4,390.5	$ 3,502.0	125.4 %

	Gross amount	Ceded to other companies	Assumed from other companies	Net amount	Percentage of amount assumed to net
Year ended December 31, 2016					
Life insurance in force	$ -	$ -	$ -	$ -	
Premiums:					
Life insurance	$ -	$ -	$ -	$ -	- %
Accident and health insurance	164.7	60.2	337.2	441.7	76.3
Property-liability insurance	849.8	2,078.3	3,838.1	2,609.6	147.1
Title insurance	-	-	-	-	-
Total premiums	$ 1,014.5	$ 2,138.5	$ 4,175.3	$ 3,051.3	136.8 %

See Independent Auditors' Report on F-2.

SCHEDULE VI

MUNICH RE AMERICA CORPORATION AND SUBSIDIARIES
Supplemental Information (For Property-Casualty Insurance Underwriters)
(Dollars in millions)

	Deferred policy acquisition costs	Reserves for unpaid claims and claims adjustment expenses	Discount, if any deducted in previous column	Unearned premiums	Earned premiums	Net investment income	Claims and claim adjustment expenses incurred related to: current year	Claims and claim adjustment expenses incurred related to: prior year	Amortization of deferred policy acquisition costs	Paid claims and claims adjustment expenses	Premiums written
Year ended December 31, 2018											
(a) Consolidated property-casualty insurance entities	$ 645.3	$ 12,335.4	$ Note (1)	$ 2,178.9	$ 5,065.5	$ 387.8	$ 3,876.4	$ (123.0)	$ 576.0	$ 2,529.2	$ 5,271.9
(b) Unconsolidated property-casualty insurance entities	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Year ended December 31, 2017											
(a) Consolidated property-casualty insurance entities	$ 576.0	$ 12,464.3	$ Note (1)	$ 2,336.7	$ 3,502.0	$ 331.6	$ 3,095.0	$ (208.1)	$ 368.8	$ 2,074.9	$ 4,172.1
(b) Unconsolidated property-casualty insurance entities	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Year ended December 31, 2016											
(a) Consolidated property-casualty insurance entities	$ 368.8	$ 11,661.3	$ Note (1)	$ 1,983.4	$ 3,051.3	$ 288.2	$ 2,060.5	$ (387.3)	$ 334.2	$ 1,846.4	$ 3,127.5
(b) Unconsolidated property-casualty insurance entities	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -

(1) Workers' compensation reserves are discounted at a rate of 4.5% for accident years prior to 2007, a rate of 3.0% for accident years 2007 through 2010, and a rate of 0.0% for accident years 2011 through 2018. The discount is $843.9, $1,064.9, and $1,174.4 as of December 31, 2018, 2017, and 2016, respectively.

See Independent Auditors' Report on F-2.