Consolidated Financial Statements

Allied World Assurance Company, Ltd

and Subsidiaries

As of and for the years ended December 31, 2018

and 2017

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Report of Independent Auditors

To the Board of Directors of Allied World Assurance Company Ltd and Subsidiaries

We have audited the accompanying consolidated financial statements of Allied World Assurance Company Ltd and its subsidiaries (the "Company"), which comprise the consolidated balance sheets as of December 31, 2018 and 2017, and the related consolidated statements of operations and comprehensive income (loss), of shareholder's equity and of cash flows for the years then ended, including the related notes (collectively referred to as the "consolidated financial statements").

Management's Responsibility for the Consolidated Financial Statements

Management is responsible for the preparation and fair presentation of the consolidated financial statements in accordance with accounting principles generally accepted in the United States of America; 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 the 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 our 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, we consider internal control relevant to the Company'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 Company'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 the Company as of December 31, 2018 and 2017, and the results of its operations and its cash flows for the years then ended in accordance with accounting principles generally accepted in the United States of America.

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Other Matter

Accounting principles generally accepted in the United States of America require that the information about incurred and paid loss developments for all years preceding year end December 31, 2018 and the related historical claims payout percentage disclosure for short-duration insurance contracts on page 26 be presented to supplement the basic financial statements. Such information, although not a part of the basic financial statements, is required by the Financial Accounting Standards Board who considers it to be an essential part of financial reporting for placing the basic financial statements in an appropriate operational, economic, or historical context. We have applied certain limited procedures to the required supplementary information in accordance with auditing standards generally accepted in the United States of America, which consisted of inquiries of management about the methods of preparing the information and comparing the information for consistency with management's responses to our inquiries, the basic financial statements, and other knowledge we obtained during our audit of the basic financial statements. We do not express an opinion or provide any assurance on the information because the limited procedures do not provide us with sufficient evidence to express an opinion or provide any assurance.

PricewaterhouseCoopers LLP

New York, NY
April 26, 2019

ALLIED WORLD ASSURANCE COMPANY, LTD

CONSOLIDATED BALANCE SHEETS

as of December 31, 2018 and 2017

(Expressed in millions of United States dollars, except share and per share amounts)

	As of December 31, 2018	As of December 31, 2017
ASSETS:		
Fixed maturity investments trading, at fair value (amortized cost: 2018: $5,100.0; 2017: $5,196.4)	$ 5,058.1	$ 5,192.6
Equity securities trading, at fair value (cost: 2018: $1,009.0; 2017: $824.8)	802.0	826.6
Other invested assets	705.2	542.8
Total investments	6,565.3	6,562.0
Cash and cash equivalents	477.4	931.5
Restricted cash	151.8	97.2
Insurance balances receivable	712.5	742.2
Funds held	560.0	427.1
Prepaid reinsurance	532.2	490.6
Reinsurance recoverable	2,196.8	2,050.9
Reinsurance recoverable on paid losses	156.9	169.2
Accrued investment income	24.8	11.1
Net deferred acquisition costs	122.4	105.6
Goodwill	388.9	390.0
Intangible assets	88.7	98.7
Balances receivable on sale of investments	0.8	194.7
Net deferred tax assets	57.2	36.5
Amounts due from affiliates	151.8	203.8
Other assets	121.5	136.2
Total assets	$ 12,309.0	$ 12,647.3
LIABILITIES:		
Reserve for losses and loss expenses	7,017.5	7,170.5
Unearned premiums	1,689.7	1,588.5
Reinsurance balances payable	208.8	264.0
Balances due on purchases of investments	0.4	7.3
Other long-term debt	22.5	22.5
Dividends payable	31.1	60.6
Amounts due to affiliates	40.0	111.9
Accounts payable and accrued liabilities	149.5	147.1
Total liabilities	$ 9,159.5	$ 9,372.4
SHAREHOLDER’S EQUITY:		
Common shares: 2018: par value USD 1 per share (1,000,000 shares issued and outstanding) Common shares: 2017: par value USD 1 per share (1,000,000 shares issued and outstanding)	1.0	1.0
Additional paid-in capital	2,403.8	2,276.1
Accumulated other comprehensive gain (loss)	(6.9)	(1.6)
Retained earnings (deficit)	749.7	993.8
Total shareholder’s equity available to Allied World Assurance Company, Ltd	$ 3,147.6	$ 3,269.3
Shareholder’s equity non-VIE non-controlling interests	3.3	6.0
Shareholder’s equity VIE non-controlling interests	(1.4)	(0.4)
Total shareholder’s equity	$ 3,149.5	$ 3,274.9
Total liabilities and shareholder’s equity	$ 12,309.0	$ 12,647.3

See accompanying notes to the consolidated financial statements.

ALLIED WORLD ASSURANCE COMPANY, LTD

CONSOLIDATED STATEMENTS OF OPERATIONS AND COMPREHENSIVE INCOME (LOSS)

for the years ended December 31, 2018 and 2017

(Expressed in millions of United States dollars)

	2018	2017
REVENUES:		
Gross premiums written	$ 3,026.7	$ 2,812.4
Premiums ceded	(910.0)	(791.3)
Net premiums written	2,116.7	2,021.1
Change in unearned premiums	(63.3)	(2.3)
Net premiums earned	2,053.4	2,018.8
Net investment income	155.0	166.2
Net realized investment gains (losses)	(236.3)	5.8
Other income	19.4	15.1
Total revenue	1,991.5	2,205.9
EXPENSES:		
Net losses and loss expenses	1,431.8	1,830.9
Acquisition costs	261.1	282.1
General and administrative expenses	298.5	295.2
Other expense	26.9	56.4
Amortization of intangible assets	9.3	9.3
Foreign exchange (gain) loss	(0.1)	3.4
Total expenses	2,027.5	2,477.3
Income (loss) before income taxes	(36.0)	(271.4)
Income tax expense (benefit)	(13.9)	(6.8)
NET INCOME (LOSS) INCLUDING NON-CONTROLLING INTERESTS	(22.1)	(264.6)
Net income (loss) non-controlling non-VIE interests	(3.8)	(1.5)
Net income (loss) non-controlling VIE interests	0.1	(0.4)
NET INCOME (LOSS) AFTER DEDUCTING NON-CONTROLLING INTERESTS	(18.4)	(262.7)
Other comprehensive gain (loss): foreign currency translation adjustment	(5.2)	9.9
COMPREHENSIVE INCOME (LOSS) INCLUDING NON-CONTROLLING INTERESTS	$ (27.3)	$ (254.7)
Comprehensive income (loss) non-controlling non-VIE interests	(3.8)	(1.5)
Comprehensive income (loss) non-controlling VIE interests	0.1	(0.4)
COMPREHENSIVE INCOME (LOSS) AFTER DEDUCTING NON-CONTROLLING INTERESTS	$ (23.6)	$ (252.8)

See accompanying notes to the consolidated financial statements.

ALLIED WORLD ASSURANCE COMPANY, LTD

CONSOLIDATED STATEMENTS OF SHAREHOLDER'S EQUITY

for the years ended December 31, 2018 and 2017

(Expressed in millions of United States dollars)

	2018	2017
Share capital		
Balance at the beginning of the year	$ 1.0	$ 1.0
Balance at the end of the year	1.0	1.0
Additional paid-in-capital		
Balance at the beginning of the year	2,276.1	2,292.1
Employee share purchases	—	0.3
Non-controlling interest	—	(7.5)
Sale/(Purchase) of restricted shares net of accumulated amortization	57.7	(56.4)
Capital contribution	70.0	47.6
Balance at the end of the year	2,403.8	2,276.1
Accumulated other comprehensive (loss)		
Balance at the beginning of the year	(1.6)	(11.6)
Foreign currency translation adjustment	(5.3)	10.0
Balance at the end of the year	(6.9)	(1.6)
Retained earnings		
Balance at the beginning of the year	993.8	1,753.5
Net income (loss)	(22.1)	(264.6)
Non-controlling interest	3.7	1.9
Dividends	(225.7)	(497.0)
Balance at the end of the year	749.7	993.8
Non-controlling interest		
Balance at the beginning of the year	5.6	—
Non-controlling interest equity	(3.7)	5.6
Balance at the end of the year	1.9	5.6
Total shareholder's equity	$ 3,149.5	$ 3,274.9

See accompanying notes to the consolidated financial statements.

ALLIED WORLD ASSURANCE COMPANY, LTD

CONSOLIDATED STATEMENTS OF CASH FLOWS

for the years ended December 31, 2018 and 2017 (Expressed in millions of United States dollars)

	2018	2017
CASH FLOWS PROVIDED BY (USED IN) OPERATING ACTIVITIES:		
Net income (loss)	$ (22.1)	$ (264.6)
Adjustments to reconcile net income (loss) to cash provided by operating activities:		
Net realized losses (gains) on sales of investments	41.5	(32.7)
Mark-to-market adjustments	210.7	22.4
Stock compensation expense	4.2	17.6
Distributed and undistributed income of equity method investments	0.9	0.1
Changes in:		
Reserve for losses and loss expenses, net of reinsurance recoverables	(298.8)	414.4
Unearned premiums, net of prepaid reinsurance	59.6	1.9
Insurance balances receivable	29.7	(48.3)
Reinsurance recoverable on paid losses	12.3	(70.2)
Funds held	(132.8)	34.7
Reinsurance balances payable	(55.1)	55.9
Net deferred acquisition costs	(16.8)	3.9
Net deferred tax assets	(20.7)	6.5
Accounts payable and accrued liabilities	2.2	(6.2)
Change in amounts due from affiliates	52.0	83.6
Change in amounts due to affiliates	(71.9)	(112.0)
Other items, net	(25.8)	(13.7)
Net cash provided by (used in) operating activities	(230.9)	93.3
CASH FLOWS PROVIDED BY (USED IN) INVESTING ACTIVITIES:		
Purchases of trading securities	(7,372.4)	(7,429.1)
Purchases of other invested assets	(304.1)	(193.8)
Sales of trading securities	7,302.7	7,966.6
Sales of other invested assets	334.3	377.6
Purchases of fixed assets	(8.1)	(8.8)
Change in loans to affiliates	—	40.2
Net cash provided by (used in) investing activities	(47.6)	752.7
CASH FLOWS PROVIDED BY (USED IN) FINANCING ACTIVITIES:		
Dividends paid	(255.3)	(539.1)
Proceeds from other long-term debt	—	22.5
Proceeds from capital contributions	70.0	55.1
Purchases of Fairfax subordinate voting shares	(10.0)	(60.7)
Proceeds from sale of Fairfax subordinate voting shares	76.9	—
Net cash provided by (used in) financing activities	(118.4)	(522.2)
Effect of exchange rate changes on foreign currency cash	(2.6)	2.8
NET INCREASE (DECREASE) IN CASH, CASH EQUIVALENTS, AND RESTRICTED CASH	(399.5)	326.6
CASH, CASH EQUIVALENTS, AND RESTRICTED CASH, BEGINNING OF YEAR	1,028.7	702.1
CASH, CASH EQUIVALENTS, AND RESTRICTED CASH, END OF YEAR	$ 629.2	$ 1,028.7
Supplemental disclosure of cash flow information:		
— Cash paid for income taxes	$ 2.4	$ 2.9

See accompanying notes to the consolidated financial statements.

1. GENERAL

Allied World Assurance Company, Ltd ("Allied World") was incorporated in Bermuda on November 13, 2001 and is a wholly owned subsidiary of Allied World Assurance Company Holdings, Ltd ("Allied World Bermuda"). Allied World Bermuda is wholly owned subsidiary of Allied World Assurance Company Holdings, GmbH ("Allied World Switzerland").

Allied World, through its branches and wholly-owned subsidiaries (collectively the "Company"), provides property and casualty insurance and reinsurance on a worldwide basis. References to "$" are to the lawful currency of the United States.

The Company's Insurance operations include direct insurance operations in the United States, Bermuda, Canada, Europe and Asia Pacific. The Reinsurance operations include the United States, Bermuda, Europe and Singapore.

On July 6, 2017, Fairfax Financial Holdings Limited ("Fairfax"), through Fairfax Financial Holdings (Switzerland) GmbH ("Fairfax Switzerland"), completed the acquisition of 94.6% of the outstanding shares of Allied World Assurance Company Holdings, AG ("Allied World AG") for purchase consideration of $3,977.9 million, consisting of $1,905.6 million in cash and $2,072.3 million by the issuance of 4,799,497 subordinate voting shares of Fairfax. In addition, Allied World AG declared a special pre-closing cash dividend of $5.00 per share ($438.0 million). Contemporaneously with the closing of the acquisition of Allied World AG, Ontario Municipal Employees Retirement System ("OMERS"), the pension plan manager for government employees in the province of Ontario, Alberta Investment Management Corporation ("AIMCo"), an investment manager for pension, endowment and government funds in the province of Alberta, and certain other third parties (together "the co-investors") invested $1,580.0 million for an indirect equity interest in Allied World AG. The remaining 5.4% of the outstanding shares of Allied World AG was acquired by Fairfax Switzerland on August 17, 2017 for purchase consideration of $229.0 million, consisting of $109.7 million in cash and $119.3 million by the issuance of 276,397 subordinate voting shares of Fairfax, in a merger transaction under Swiss law pursuant to which Allied World Switzerland became the surviving entity. This merger resulted in the co-investors holding an indirect ownership interest in Allied World Switzerland of 32.6%. The co-investors will have a dividend in priority to Fairfax, and Fairfax will have the ability to purchase the shares owned by the co-investors over the next seven years.

2. SIGNIFICANT ACCOUNTING POLICIES

These consolidated financial statements have been prepared in accordance with accounting principles generally accepted in the United States ("U.S. GAAP"). The preparation of financial statements in conformity with U.S. 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 significant estimates reflected in the Company's financial statements include, but are not limited to:

- The premium estimates for certain reinsurance agreements,
- Recoverability of deferred acquisition costs,
- The reserve for outstanding losses and loss expenses,
- Valuation of ceded reinsurance recoverables,
- Determination of impairment of goodwill and other intangible assets, and
- Valuation of financial instruments.

Intercompany accounts and transactions have been eliminated on consolidation and all entities meeting consolidation requirements have been included in the consolidated financial statements. To facilitate comparison of information across periods, certain reclassifications have been made to prior year amounts to conform to the current year's presentation.

The significant accounting policies are as follows:

a) Premiums and Acquisition Costs

Premiums are recorded as written on the inception date of the policy. For certain types of business written by the Company, notably assumed reinsurance, the exact premium income may not be known at the policy inception date. In the case of quota share reinsurance treaties assumed by the Company, the underwriter makes an estimate of premium income at

inception. The underwriter's estimate is based on statistical data provided by reinsureds and the underwriter's judgment and experience. Such estimations are refined over the reporting period of each treaty as actual written premium information is reported by ceding companies and intermediaries. Premiums resulting from changes in the estimate of the premium income are recorded in the period the estimate is changed. Certain insurance and reinsurance contracts may require that the premium be adjusted at the expiry of the contract to reflect the change in exposure or loss experience of the insured or reinsured.

Premiums are recognized as earned over the period of policy coverage in proportion to the risks to which they relate. Reinsurance premiums under a losses-occurring reinsurance contract are earned over the coverage period. Reinsurance premiums under a risks-attaching reinsurance contract are earned over the same period as the underlying policies, or risks, covered by the contract. As a result, the earning pattern of a risks-attaching reinsurance contract may extend up to 24 months, reflecting the inception dates of the underlying policies. Premiums relating to the unexpired periods of coverage are recorded on the consolidated balance sheets as "unearned premiums".

Acquisition costs, comprised of commissions, brokerage fees and insurance taxes, are costs that are directly related to the successful acquisition of new and renewal business and are deferred. Although permitted under U.S. GAAP to defer certain internal costs that are directly related to the successful acquisition of new and renewal business, the Company does not defer such costs. Acquisition costs that are deferred, and carried on the consolidated balance sheets as an asset, are expensed as the premiums to which they relate are earned. Expected losses and loss expenses, other costs and anticipated investment income related to these unearned premiums are considered in determining the recoverability or deficiency of deferred acquisition costs. If it is determined that deferred acquisition costs are not recoverable, they are expensed. Further analysis is performed to determine if a liability is required to provide for losses which may exceed the related unearned premiums.

Acquisition costs recorded in the consolidated statements of operations and comprehensive income ("consolidated income statements") includes other acquisition-related costs such as profit commissions that are expensed as incurred and the amortization of insurance-related intangible assets.

b) Reserve for Losses and Loss Expenses

The reserve for losses and loss expenses is comprised of two main elements: outstanding loss reserves ("OSLR," also known as case reserves) and reserves for losses incurred but not reported ("IBNR"). OSLR relate to known claims and represent management's best estimate of the likely loss payment. Reserves for IBNR relates to reserves established by the Company for claims that have occurred but have not yet been reported to us as well as for changes in the values of claims that have been reported to us but are not yet settled. See Note 6 for additional information.

c) Ceded Reinsurance

In the ordinary course of business, the Company uses both treaty and facultative reinsurance to minimize its net loss exposure to any one catastrophic loss event or to an accumulation of losses from a number of smaller events. Reinsurance premiums ceded are expensed and any commissions recorded thereon are earned over the period the reinsurance coverage is provided in proportion to the risks to which they relate. For reinsurance treaties that have contractual minimum premium provisions, premiums ceded are recorded at the inception of the treaty based on the minimum premiums. Prepaid reinsurance represents unearned premiums ceded to reinsurance companies. Any unearned ceding commission is included in "net deferred acquisitions costs" on the consolidated balance sheets and is recorded as a reduction to the overall net deferred acquisition cost balance in the consolidated income statements.

Reinsurance recoverable includes the balances due from those reinsurance companies under the terms of the Company's reinsurance agreements for unpaid losses and loss reserves, including IBNR, and is presented net of a provision for uncollectible reinsurance. Amounts recoverable from reinsurers are estimated in a manner consistent with the estimated claim liability associated with the reinsured policy. The Company determines the portion of the IBNR liability that will be recoverable under its reinsurance contracts by reference to the terms of the reinsurance protection purchased. This determination is necessarily based on the estimate of IBNR and accordingly, is subject to the same uncertainties as the estimate of IBNR.

The Company remains liable to the extent that its reinsurers do not meet their obligations under the reinsurance contracts; therefore, the Company regularly evaluates the financial condition of its reinsurers and monitors concentration of credit risk.

d) Investments

The Company has elected the fair value option permitted under U.S. GAAP for all of its fixed maturity investments and equity securities at the time each security was acquired. The Company classifies these investments as "trading securities", and are carried at fair value with any change in unrealized gains or losses recognized in the consolidated income statements and included in “net realized investment gains (losses)”. As a result of this investment classification, the Company does not record any change in unrealized gains or losses on investments as a separate component of accumulated other comprehensive income on the consolidated balance sheets.

Other invested assets consist primarily of investments in hedge funds and private equity funds, which have been accounted for as trading securities as the Company has elected the fair value option as permitted under U.S. GAAP at the time each investment was acquired. In addition, included in the Company’s other invested assets are various investments which are accounted for using the equity method of accounting, and real estate held for investment purposes. Generally, the Company uses the equity method where it does not have a controlling interest and is not the primary beneficiary. Equity method investments are recorded at cost and adjusted for the Company’s proportionate share of earnings or losses on a quarterly lag basis. An other-than-temporary impairment charge related to the equity method investments is assessed when facts and circumstances exists that indicate an impairment may exist. An other-than-temporary impairment charge is recorded when it is determined that the carrying value of the equity method investment is below its fair value and the Company does not have the intent and ability to hold to recovery. See Note 3(d) for additional information regarding an other-than-temporary impairment charge recorded in 2017 related to one of the Company's equity method investments. Interests in real estate held for investment purposes are recorded at cost less accumulated depreciation. Other investments are recorded based on valuation techniques depending on the nature of the individual assets.

At each measurement date, the Company estimates the fair value of the financial instruments using various valuation techniques. The Company utilizes, to the extent available, quoted market prices in active markets or observable market inputs in estimating the fair value of financial instruments. When quoted market prices or observable market inputs are not available, the Company may utilize valuation techniques that rely on unobservable inputs to estimate the fair value of financial instruments, which principally relates to non-binding broker-dealer quotes. The Company bases its determination of whether a market is active or inactive on the spread between what a seller is asking for a security and what a buyer is bidding for that security. Spreads that are significantly above historical spreads are considered inactive markets. The Company also considers the volume of trading activity in the determination of whether a market is active or inactive. See Note 5 for additional information regarding the fair value of financial instruments.

The Company utilizes independent pricing sources to obtain market quotations for securities that have quoted prices in active markets. In general, the independent pricing sources use observable market inputs including, but not limited to, investment yields, credit risks and spreads, benchmarking of like securities, reported trades and sector groupings to determine the fair value. For a majority of the portfolio, the Company obtained two or more prices per security as of December 31, 2018. When multiple prices are obtained, a price source hierarchy is utilized to determine which price source is the best estimate of the fair value of the security. The price source hierarchy emphasizes more weighting to significant observable inputs such as index pricing and less weighting towards non-binding broker-dealer quotes. The Company will investigate any material differences, if any, between the multiple sources and determine which price best reflects the fair value of the individual security. There were no material differences between the prices obtained from the independent pricing sources and the prices obtained from the Company’s investment portfolio managers and other sources as of December 31, 2018 and 2017.

Investment securities are recorded on a trade date basis. Investment income is recognized when earned and includes the accrual of discount or amortization of premium on fixed maturity investments using the effective yield method and is net of related expenses. Interest income for fixed maturity investments is accrued and recognized based on the contractual terms of the fixed maturity investments and is included in “net investment income” in the consolidated income statements. For mortgage-backed and asset-backed securities and any other holdings for which there is a prepayment risk, prepayment assumptions are evaluated and revised on a regular basis. Revised prepayment assumptions are applied to securities on a retrospective basis to the date of acquisition. The cumulative adjustments to amortized cost required due to these changes in effective yields and maturities are recognized in net investment income in the same period as the revision of the assumptions. The Company’s share of undistributed net income from equity method investments is included in net investment income. The return on investments is managed on a total financial statement portfolio return basis, which includes the undistributed net income from equity method investments, and as such have classified these amounts in net investment income.

Realized gains and losses on the disposition of investments, which are based upon the first-in first-out method of identification, are included in “net realized investment gains (losses)” in the consolidated income statements.

e) Consolidation

Subsidiaries - The Company's consolidated financial statements include the assets, liabilities, equity, revenue, expenses and cash flows of the Company. A subsidiary is an entity over which the Company has control. The Company controls an entity when the Company has power over the entity, is exposed to, or has rights to, variable returns from its involvement with the entity and has the ability to affect those returns through its power over the entity. Assessment of control is based on the substance of the relationship between the Company and the entity and includes consideration of both existing voting rights and, if applicable, potential voting rights that are currently exercisable and convertible. The operating results of subsidiaries acquired are included in the consolidated financial statements from the date control is acquired (typically the acquisition date). The operating results of subsidiaries that are divested during the year are included up to the date control ceased (typically the disposition date) and any difference between the fair value of the consideration received and the carrying value of a divested subsidiary is recognized in the consolidated income statements. Accounting policies of subsidiaries have been aligned with those of the Company where necessary.

The Company is involved in the normal course of business with variable interest entities (“VIEs”) as a passive investor in certain asset-backed securities issued by third-party VIEs and affiliated VIEs, as well as certain of its hedge fund and private equity fund investments. The Company performs a qualitative assessment at the date when it becomes initially involved in the VIE, followed by ongoing reassessments related to its involvement in VIEs. The Company’s maximum exposure to loss with respect to these investments is limited to the investment carrying amounts reported in the Company’s consolidated balance sheets and any unfunded commitments.

Under U.S. GAAP, certain limited partnership investments and similar legal entity investments are considered VIEs because there are no substantive kick-out or other participating rights. These VIEs have not been consolidated because the Company has determined it is not considered the primary beneficiary, as it does not have both the power to direct the activities that most significantly impact the economic performance of the entity and the obligation to absorb losses of the entity that could be potentially significant to the VIE or the right to receive benefits from the entity that could be potentially significant. As such, the Company continues to record its interests in these entities at fair value, with changes in fair value recorded in the consolidated income statements. The Company's interests in these entities are recorded in “other invested assets” in the consolidated balance sheets. The Company's maximum exposure to loss in these entities, which is the sum of the carrying value and the unfunded commitment, was $606.8 million as of December 31, 2018.

The Company also has a variable interest in a reciprocal insurance entity that was created during 2017 and of which it is the primary beneficiary. The net liabilities of the reciprocal insurance entity as of December 31, 2018 and December 31, 2017 were $2.5 million and $0.8 million, respectively. The net loss for this entity for the year ended December 31, 2018 and the net loss for the period from inception to December 31, 2017 was $2.3 million and $0.8 million, respectively.

f) Translation of Foreign Currencies

Functional and presentation currency - The consolidated financial statements are presented in U.S. dollars, which is the functional and presentation currency of the consolidated group.

Foreign currency transactions - Foreign currency transactions are translated into the functional currencies of the Company's subsidiaries using the exchange rates prevailing at the dates of the transactions. Foreign exchange gains and losses resulting from the settlement of such transactions and from the translation at year-end exchange rates of monetary assets and liabilities denominated in foreign currencies are recognized in the consolidated income statements. Non-monetary items carried at cost are translated using the exchange rate at the date of the transaction. Non-monetary items carried at fair value are translated at the date the fair value is determined.

Translation of foreign subsidiaries - The functional currencies of some of the Company's subsidiaries differ from the consolidated group U.S. dollar presentation currency. As a result, the assets and liabilities of these foreign subsidiaries (including goodwill and fair value adjustments arising on their acquisition, where applicable) are translated on consolidation at

the rates of exchange prevailing at the balance sheet date. Revenue and expenses are translated at the average rate of exchange for the period. The net unrealized gain or loss resulting from this translation is recognized in accumulated other comprehensive income, and only recycled to the consolidated income statements upon reduction of an investment in a foreign subsidiary.

g) Cash and Cash Equivalents and Restricted Cash

Cash and cash equivalents include amounts held in banks, time deposits, commercial paper, discount notes and U.S. Treasury Bills with maturities of less than three months from the date of purchase. Restricted cash primarily relates to cash held in trust accounts in favor of cedents, other counterparties or government authorities, as well as accounts that are pledged as collateral for the Company's letter of credit facilities.

h) Income Taxes

Allied World and certain of its subsidiaries operate in jurisdictions where they are subject to income taxation. Current and deferred income taxes are charged or credited to operations, or to shareholder's equity in certain cases, based upon enacted tax laws and rates applicable in the relevant jurisdiction in the period in which the tax becomes payable. Deferred income taxes are provided for all temporary differences between the bases of assets and liabilities used in the financial statements and those used in the various jurisdictional tax returns.

It is the Company’s policy to recognize interest accrued related to unrecognized tax benefits in “interest expense” and penalties in “general and administrative expenses” in the consolidated income statements. The Company has not recorded any interest or penalties during the years ended December 31, 2018 and 2017 and the Company has not accrued any payment of interest and penalties as of December 31, 2018 and 2017.

i) Share-based Awards

Subsequent to the acquisition by Fairfax, the Company participates in the Fairfax Financial Restricted Share Plan. The Fairfax Plan generally provide officers, key employees and directors who were employed by or provided services to the Company with awards of restricted shares of Fairfax common stock. As part of the Fairfax Financial Restricted Share Plan, the Company purchases, from time to time, Fairfax shares for issuances to employees. The Fairfax shares are recorded in “additional paid-in capital” in the consolidated balance sheet and based on the fair value at the time of purchase. The restricted share awards generally vest over three or five years.

j) Goodwill and Intangible Assets

The Company classifies its intangible assets into three categories: (1) intangible assets with finite lives subject to amortization, (2) intangible assets with indefinite lives not subject to amortization, and (3) goodwill. Intangible assets, other than goodwill, generally consist of customer renewal rights, distribution channels, internally generated software, non-compete covenants, trademarks, and insurance licenses.

For intangible assets with finite lives, the value of the assets is amortized over their expected useful lives and the expense is included in “amortization of intangible assets” in the consolidated income statements. The Company tests assets for impairment if conditions exist that indicate the carrying value may not be recoverable. If, as a result of the evaluation, the Company determines that the value of the intangible assets is impaired, then the value of the assets will be written-down in the period in which the determination of the impairment is made.

For indefinite lived intangible assets, the Company does not amortize the intangible asset but evaluates and compares the fair value of the assets to their carrying values on an annual basis or more frequently if circumstances warrant. If, as a result of the evaluation, the Company determines that the value of the intangible assets is impaired, then the value of the assets will be written-down in the period in which the determination of the impairment is made.

Goodwill represents the excess of the cost of acquisitions over the fair value of net assets acquired and is not amortized. Goodwill is assigned at acquisition to the applicable reporting unit(s) based on the expected benefit to be received by the reporting units from the business combination. The Company determines the expected benefit based on several factors including the purpose of the business combination, the strategy of the Company subsequent to the business combination and structure of the acquired company subsequent to the business combination. A reporting unit is a component of the Company’s business that has discrete financial information that is reviewed by management. In determining the reporting unit, the

Company analyzes the inputs, processes, outputs and overall operating performance of the reporting unit. The Company has several reporting units to which the goodwill is allocated to.

For goodwill, the Company performs an annual impairment test, or more frequently if circumstances are warranted. The Company may first assess qualitative factors to determine whether it is more likely than not that the fair value of a reporting unit is less than its carrying amount. The results of the qualitative assessment will determine if an entity needs to proceed with the two-step goodwill impairment test. For the year ended December 31, 2018, the Company elected to bypass the qualitative assessment and performed the first step of the goodwill impairment test.

The first step of the goodwill impairment test is to compare the fair value of the reporting unit with its carrying value, including goodwill. If the carrying amount of the reporting unit exceeds its fair value then the second step of the goodwill impairment test is performed.

The second step of the goodwill impairment test determines the goodwill impairment as the difference between the carrying value of a reporting unit and its fair value as calculated in the first step of the goodwill impairment test.

The Company recorded no goodwill impairments during the years ended December 31, 2018 and 2017.

k) Derivative Instruments

The Company utilizes derivative financial instruments as part of its overall risk management strategy. The Company recognizes all derivative financial instruments at fair value as either assets or liabilities on the consolidated balance sheets. The accounting for gains and losses associated with changes in the fair value of a derivative and the effect on the consolidated financial statements depends on its hedge designation and whether the hedge is highly effective in achieving offsetting changes in the fair value of the asset or liability hedged.

The Company may use currency forward contracts and foreign currency swaps to manage currency exposure. The Company may also utilize various derivative instruments such as interest rate futures, interest rate swaps and index options, for the purpose of managing market exposures, interest rate volatility, portfolio duration, hedging certain investments, or enhancing investment performance. These derivatives are not designated as hedges and accordingly are carried at fair value on the consolidated balance sheets within "other assets" or "accounts payable and accrued liabilities" with realized and unrealized gains and losses included in the consolidated income statements.

In addition, the Company’s derivative instruments include insurance and reinsurance contracts that are required to be accounted for as derivatives. This will be the case when the insurance or reinsurance contract provides indemnification to the insured or cedent as a result of a change in a variable versus an identifiable insurable event. The Company considers these insurance and reinsurance contracts to be an extension of its overall insurance operations. The insurance and reinsurance derivative contracts are recorded at fair value, with net premiums received recognized in “net premiums earned” over the period of policy coverage in proportion to the risk to which it relates, and other changes in the fair value of this contract is recorded in “other income” or “other expense” in the consolidated income statements. To the extent losses are incurred or ceded under these contracts, those net losses would be recorded in “net losses and loss expenses”. During the year ended December 31, 2018, the Company recorded net premiums earned of $1.6 million, other income of $6.1 million, and other expense of $6.3 million related to these insurance and reinsurance derivative contracts. During the year ended December 31, 2017, the Company recorded net premiums earned of $1.5 million, other income of $11.2 million, and other expense of $4.4 million related to these insurance and reinsurance derivative contracts.

l) New Accounting Pronouncements

In September 2017, the FASB issued Accounting Standards Update 2017-13 “Revenue Recognition (Topic 605), Revenue from Contracts with Customers (Topic 606), Leases (Topic 840), and Leases (Topic 842): Amendments to SEC Paragraphs Pursuant to the Staff Announcement at the July 20, 2017 EITF Meeting and Rescission of Prior SEC Staff Announcements and Observer Comments” (“ASU 2017-13”). ASU 2017-13 allows for public business entities that otherwise would not meet the definition of public business entities but for a requirement to include or for the inclusion of their financial statements or financial information in another entities filing with the U.S. Securities and Exchange Commission, to adopt ASU 2014-09 (Topic 606) and ASU 2016-02 (Topic 842) according to the timelines for non-public entities. The Company has early adopted the updates related to Topic 606, which didn’t have a material impact to the financial statements, for reporting periods beginning January 1, 2018 and will adopt the Topic 842 updates for reporting periods beginning January 1, 2020.

In February 2016, the Financial Accounting Standards Board (the "FASB") issued Accounting Standards Update 2016-02, "Leases" ("ASU 2016-02"). ASU 2016-02 changes current U.S. GAAP for lessees to recognize lease assets and lease liabilities on the balance sheet for those leases classified as operating leases under previous U.S. GAAP. ASU 2016-02 is effective for annual periods beginning after January 1, 2019, including interim periods. Early application is permitted. The Company is currently assessing the impact that the adoption of ASU 2016-02 will have on future financial statements and disclosures. Specifically, the Company is still evaluating its existing leases to determine the appropriate classification under the new standard and whether it will adopt the practical expedients allowed under ASU 2016-02. In September 2017, the FASB issued Accounting Standards Update 2017-13 "Revenue Recognition (Topic 605), Revenue from Contracts with Customers (Topic 606), Leases (Topic 840), and Leases (Topic 842): Amendments to SEC Paragraphs Pursuant to the Staff Announcement at the July 20, 2017 EITF Meeting and Rescission of Prior SEC Staff Announcements and Observer Comments" ("ASU 2017-13"). The Company will adopt the amendments in ASU 2016-02 for reporting periods beginning January 1, 2020, as ASU 2017-13 allows for delayed adoption for entities that meet certain criteria.

In June 2016, the FASB issued Accounting Standards Update 2016-13, "Financial Instruments - Credit Losses (Topic 326): Measurement of Credit Losses on Financial Instruments" ("ASU 2016-13"). ASU 2016-13 modifies U.S. GAAP related to the recognition of credit losses by replacing the incurred loss impairment methodology in current U.S. GAAP with a methodology that reflects expected credit losses and requires consideration of a broader range of reasonable and supportable information to inform credit loss estimates. ASU 2016-13 would apply to financial assets such as loans, debt securities, trade receivables, off-balance sheet credit exposures, reinsurance receivables, and other financial assets that have the contractual right to receive cash. The measurement of expected credit losses is based on relevant information about past events, including historical experience, current conditions, and reasonable and supportable forecasts that affect the collectibility of the reported amount. The Company's invested assets are measured at fair value through net income, and therefore those invested assets would not be impacted by the adoption of ASU 2016-13. The Company has other financial assets, such as reinsurance recoverables, that could be impacted by the adoption of ASU 2016-13. ASU 2016-13 is effective for annual periods beginning after January 1, 2020, including interim periods. In November 2018, the FASB issued Accounting Standards Update 2018-19, "Codification Improvements to Topic 326, Financial Instruments-Credit Losses" ("ASU 2018-19"). The amendments in ASU 2018-09 mitigate transition complexity by requiring that for nonpublic business entities the amendments in Update 2016-13 are effective for fiscal years beginning after December 15, 2021. The Company is currently assessing the impact that the adoption of ASU 2016-13 will have on future financial statements and disclosures. Specifically, the Company is developing a credit impairment methodology for its reinsurance recoverables based on the guidance in ASU 2016-13.

In August 2016, the FASB issued Accounting Standards Update 2016-15, "Statement of Cash Flows (Topic 230): Classification of Certain Cash Receipts and Cash Payments" ("ASU 2016-15"). ASU 2016-15 clarifies the classification of receipts and payments in the statement of cash flows. ASU 2016-15 provides guidance related to (1) settlement and payment of zero coupon debt instruments, (2) contingent consideration, (3) proceeds from settlement of insurance claims, (4) proceeds from settlement of corporate and bank-owned life insurance policies, (5) distributions from equity method investees, (6) cash receipts from beneficial interests obtained by a transferor, and (7) general guidelines for cash receipts and payments that have more than one aspect of classification. The only item above that will impact the Company is the guidance related to distributions from equity method investees. The Company currently utilizes the nature of distribution approach for classifying such distributions and will adopt ASU 2016-15 for reporting periods beginning January 1, 2019, which is the timeline for nonpublic entities. As the nature of distribution approach is an acceptable method under ASU 2016-15, the Company does not expect the adoption of ASU 2016-15 to have a material impact on its statement of cash flows.

In November 2016, the FASB issued Accounting Standards Update 2016-18, "Statement of Cash Flows (Topic 230): Restricted Cash" ("ASU 2016-18"). ASU 2016-18 require that a statement of cash flows explain the change during the period in the total of cash, cash equivalents, and amounts generally described as restricted cash or restricted cash equivalents. Therefore, amounts generally described as restricted cash and restricted cash equivalents should be included with cash and cash equivalents when reconciling the beginning-of-period and end-of-period total amounts shown on the statement of cash flows. The amendments in this Update do not provide a definition of restricted cash or restricted cash equivalents. The Company adopted ASU 2016-18 as of January 1, 2018.

In May 2017, the FASB issued Accounting Standards Update 2017-09 "Compensation - Stock Compensation (Topic 718): Scope of Modification Accounting" ("ASU 2017-09"). ASU 2017-09 requires that entities account for the effects of a change in terms or conditions of a share based award unless all of the following conditions are met: (1) the fair value of the modified award is the same as the fair value of the original award immediately before the original award is modified, (2) the vesting conditions of the modified award are the same as the vesting conditions immediately before the award was modified, and (3) the classification of the modified award as an equity or liability instrument is the same as the classification of the original award immediately before it was modified. ASU 2017-09 is effective for fiscal years beginning after December 15, 2017. Early

adoption is permitted for reporting periods for which financial statements have not been issued. Aside from modifications pertaining to the acquisition of Allied World Switzerland's outstanding shares by Fairfax, the Company has historically not had modifications to its awards. The Company adopted ASU 2017-09, which didn't have an material impact to the financial statements, as of December 31, 2018.

In August 2017, the FASB issued Accounting Standards Update 2017-12 “Derivatives and Hedging (Topic 815): Targeted Improvements to Accounting for Hedging Activities” (“ASU 2017-12”). ASU 2017-12 permits hedge accounting for risk components in hedging relationships involving nonfinancial and interest rate risks for certain types of cash flow hedges. ASU 2017-12 modifies how entities designate fair value hedges of interest rate risk and also how they measure changes in fair value of hedged items in fair value hedges of interest rates. With regards to amounts excluded from hedge effectiveness, among other changes, ASU 2017-12 permits entities to exclude the portions of changes in fair values of currency swaps that are attributable to cross-currency basis spreads from the assessment of hedge effectiveness. In instances where quantitative testing of hedge effectiveness is required, after the initial quantitative testing, entities may perform subsequent assessments qualitatively, so long as they document on a quarterly basis that the facts and circumstances relating to the hedging relationships haven’t changed. ASU 2017-12 eliminates the requirement to disclose the ineffective portion of the changes in fair value of hedging instruments, but does create some new disclosure requirements pertaining to cash flow and fair value hedges. ASU 2017-12 is effective for annual periods beginning after December 15, 2018, including interim periods. Early application is permitted in any interim period after the issuance of the update. As the Company only utilizes economic hedging instruments and to date has not elected hedge accounting treatment for such instruments, it does not expect the adoption of ASU 2017-12 to have a material impact on its financial statements.

In August 2018, the FASB issued Accounting Standards Update 2018-13 “Fair Value Measurement (Topic 820): Disclosure Framework - Change to the Disclosure Requirements for Fair Value Measurement” (“ASU 2018-13”). ASU 2018-13 changes the disclosure requirements by eliminating, adding, and modifying certain disclosures. The eliminated disclosure requirements were the amount of and the reasons for transfers between Level 1 and Level 2 of the fair value hierarchy, the policy for timing of transfers between levels, the valuation processes for Level 3 fair value measurements and the changes in unrealized gains and losses for the period included in earnings for recurring Level 3 fair value measurements held at the end of the reporting period. The modifications were in lieu of a rollforward for Level 3 fair value measurements, a nonpublic entity is required to disclose transfers into and out of Level 3 of the fair value hierarchy and purchases and issues of Level 3 assets and liabilities. In addition, for investments in certain entities that calculate net asset value, an entity is required to disclose the timing of liquidation of an investee’s assets and the date when restrictions from redemption might lapse only if the investee has communicated the timing to the entity or announce the timing publicly, and the amendments clarify that the measurement uncertainty disclosure is to communicate information about the uncertainty in measurement as of the reporting date. Entities are now required to disclose the range and weighted average of significant unobservable inputs used to develop Level 3 fair value measurements. ASU 2018-13 is effective for calendar year-end companies, January 1, 2020. Early application is permitted. The Company adopted the disclosure revisions as of and for the year ended December 31, 2018.

In October 2018, the FASB issued Accounting Standards Update 2018-17, “Consolidation (Topic 810): Targeted Improvements to Related Party Guidance for Variance Interest Entities” (“ASU 2018-17”). ASU 2018-17 provides that a private company (reporting entity) may elect not to apply VIE guidance to legal entities under common control (including common control leasing arrangements) if both the parent and the legal entity being evaluated for consolidation are not public business entities. Also regarding decision-making fees, indirect interests held through related parties in common control arrangements should be considered on a proportional basis for determining whether fees paid to decision makers and service providers are variable interests. The Company is currently assessing the impact that the adoption of ASU 2018-17 will have on future financial statements and disclosures.

3. INVESTMENTS

a) Trading Securities

Securities accounted for at fair value with changes in fair value recognized in the consolidated income statements by category are as follows:

	December 31, 2018		December 31, 2017	
	Fair Value	Amortized Cost	Fair Value	Amortized Cost
U.S. government and government agencies	$ 2,897.4	$ 2,905.7	$ 3,761.6	$ 3,761.6
Non-U.S. government and government agencies	338.9	346.0	380.2	378.1
States, municipalities and political subdivisions	1.3	2.3	81.7	83.1
Corporate debt:				
Financial institutions	255.3	257.9	79.8	79.0
Industrials	1,317.4	1,326.3	743.5	739.5
Utilities	235.2	235.1	80.0	79.6
Asset-backed	12.6	26.7	65.8	75.5
Total fixed maturity investments, trading	$ 5,058.1	$ 5,100.0	$ 5,192.6	$ 5,196.4

	December 31, 2018		December 31, 2017	
	Fair Value	Cost	Fair Value	Cost
Equity securities	$ 802.0	$ 1,009.0	$ 826.6	$ 824.8
Other invested assets	658.4	675.5	497.2	398.1
	$ 1,460.4	$ 1,684.5	$ 1,323.8	$ 1,222.9

Other invested assets, included in the table above, include investments in private equity funds, hedge funds and a high yield loan fund that are accounted for at fair value, but excludes other private securities, that are accounted for using the equity method of accounting, and real estate investment, that is accounted for at cost less accumulated depreciation, described below in Note 3(b).

The maturity distribution of the fixed income portfolio (on a fair value basis), as of December 31, 2018 and December 31, 2017, respectively was as follows:

	December 31, 2018	December 31, 2017
Due in one year or less	$ 2,600.3	$ 3,524.3
Due after one year through five years	2,178.3	1,385.5
Due after five years through ten years	247.6	113.6
Due after ten years	19.3	103.4
Asset-backed	12.6	65.8
Total	$ 5,058.1	$ 5,192.6

The following table shows the credit quality of our fixed income portfolio, as rated by S&P, as of December 31, 2018:

Fixed Income Credit Quality:	**December 31, 2018**	
Rating	**Fair Value**	**Percentage**
U.S. government and agencies	$ 2,897.4	57.2%
AAA/Aaa	237.3	4.7%
AA/Aa	365.7	7.2%
A/A	734.2	14.5%
BBB/Baa	666.3	13.2%
Total BBB/Baa and above	4,900.9	96.8%
CCC+ and below	157.2	3.2%
Total	$ 5,058.1	100.0%

b) Other Invested Assets

Details regarding the carrying value, redemption characteristics and unfunded investment commitments of the other invested assets portfolio as of December 31, 2018 and 2017 were as follows:

Fund Type	Carrying Value as of December 31, 2018	Investments with Redemption Restrictions	Estimated Remaining Restriction Period	Investments without Redemption Restrictions	Redemption Frequency(1)	Redemption Notice Period(1)	Unfunded Commitments
Private equity	$ 290.5	$ 290.5	1-15 Years	$ —			$ 29.6
Levered credit	131.3	131.3	5-10 Years	—			118.4
Real estate	219.9	219.9	7-11 Years	—			41.3
Total private equity	641.7	641.7		—			189.3
Distressed	1.6	—		1.6	Quarterly	60 Days	—
Relative value credit	15.1	—		15.1	Quarterly	60 Days	—
Total hedge funds	16.7	—		16.7			—
Total other invested assets at fair value	658.4	641.7		16.7			189.3
Other private securities	32.5	—		32.5			—
Real estate investment	14.3	—		14.3			—
Total other invested assets	$ 705.2	$ 641.7		$ 63.5			$ 189.3

Fund Type	Carrying Value as of December 31, 2017	Investments with Redemption Restrictions	Estimated Remaining Restriction Period	Investments without Redemption Restrictions	Redemption Frequency(1)	Redemption Notice Period(1)	Unfunded Commitments
Private equity	$ 156.1	$ 156.2	1-14 Years	$ —			$ 106.2
Levered credit	134.5	134.5	2-8 Years	—			129.2
Real estate	177.1	177.1	5-10 Years	—			89.9
Total private equity	467.7	467.8		—			325.3
Distressed	18.4	—		18.4	Quarterly	60 Days	—
Relative value credit	11.1	—		11.1	Quarterly	60 Days	—
Total hedge funds	29.5	—		29.5			—
Total other invested assets at fair value	497.2	467.8		29.5			325.3
Other private securities	45.6	—		45.6			—
Total other invested assets	$ 542.8	$ 467.8		$ 75.1			$ 325.3

(1) The redemption frequency and notice periods only apply to the investments without redemption restrictions.

In general, the Company has invested in hedge funds that require at least 30 days' notice of redemption, and may be redeemed on a monthly, quarterly, semi-annual, annual or longer basis, depending on the fund. Certain hedge funds have lock-up periods ranging from one to three years from initial investment. A lock-up period refers to the initial amount of time an investor is contractually required to invest before having the ability to redeem. Funds that provide for periodic redemptions may, depending on the funds' governing documents, have the ability to deny or delay a redemption request, called a "gate." The fund may implement this restriction because the aggregate amount of redemption requests as of a particular date exceeds a specified level, generally ranging from 15% to 25% of the fund's net assets. The gate is a method for executing an orderly redemption process to reduce the possibility of adversely affecting investors in the fund. Typically, the imposition of a gate delays a portion of the requested redemption, with the remaining portion settled in cash sometime after the redemption date. Certain funds may impose a redemption fee on early redemptions. Interests in private equity funds cannot be redeemed because the investments include restrictions that do not allow for redemption until termination of the fund.

The following describes each investment type:

- **Private equity (primary and secondary):** Primary equity funds include funds that may invest in companies and general partnership interests, as well as direct investments. Secondary funds buy limited partnership interests from existing limited partners of primary private equity funds. As owners of private equity, funds may seek liquidity by selling their existing interests, plus any remaining commitment, to secondary market participants. These funds cannot be redeemed because the investments include restrictions that do not allow for redemption until termination of the funds.
- **Levered credit (including mezzanine debt):** Levered credit funds invest across the capital structures of upper middle market and middle market companies in connection with leveraged buyouts, mergers and acquisitions, recapitalizations, growth financings, refinancings and other corporate purposes. The most common position in the capital structure of mezzanine funds will be between the senior secured debt holder and the equity; however, the funds in which we are invested may include secured debt, subordinated debt, preferred stock and/or private equity. These funds cannot be redeemed because the investments include restrictions that do not allow for redemption until termination of the funds.
- **Real estate funds:** Private real estate funds invest directly (through debt and equity) in commercial real estate (multifamily, industrial, office, student housing and retail) as well as residential property. Real estate managers have diversified portfolios that generally follow core, core-plus, value-added or opportunistic strategies. These funds cannot be redeemed because the investments include restrictions that do not allow for redemption until termination of the funds.
- **Distressed funds:** In distressed debt investing, managers take positions in the debt of companies experiencing significant financial difficulties, including bankruptcy, or in certain positions of the capital structure of structured

securities. The manager relies on the fundamental analysis of these securities, including the claims on the assets and the likely return to bondholders. Certain funds cannot be redeemed because the investments include restrictions that do not allow for redemption until termination of the funds.

- **Relative value credit funds:** These funds seek to take exposure to credit-sensitive securities, long and/or short, based upon credit analysis of issuers and securities and credit market views.
- **Other private securities:** These securities mostly include strategic non-controlling minority investments in private asset management companies and other insurance related investments that are accounted for using the equity method of accounting.
- **Real estate investment:** This includes an interest in a commercial building.

c) Net Investment Income

	Year Ended December 31,	
	2018	2017
Fixed maturity investments	$ 121.1	$ 137.9
Equity securities	14.7	3.7
Other invested assets: hedge funds and private equity	38.1	31.0
Other invested assets: other private securities	3.1	3.1
Cash and cash equivalents	9.0	11.2
Expenses	(31.0)	(20.7)
Net investment income	$ 155.0	$ 166.2

d) Net Realized Gains and Losses

	Year Ended December 31,	
	2018	2017
Gross realized gains on sale of invested assets	$ 26.4	$ 197.4
Gross realized losses on sale or impairment of invested assets	(67.8)	(164.4)
Net realized and unrealized gains (losses) on derivatives	17.5	(5.8)
Mark-to-market gains (losses):		
Debt securities, trading	(25.4)	84.5
Equity securities, trading	(199.9)	(8.1)
Other invested assets, trading	12.9	(97.8)
Net realized investment gains (losses)	$ (236.3)	$ 5.8

Gross realized losses on sale or impairment of invested assets for the year ended December 31, 2017 included a realized loss of $17.1 million related to one of the Company's other private securities, which represented the carrying value of this investment. An impairment was recorded for this investment, who is an asset manager, because the investment was likely not to be a going concern as a result of assets under management being redeemed (including from the Company, which represented a substantial percentage of assets under management).

e) Pledged Assets

As of December 31, 2018 and 2017, $3,110.7 million and $3,106.1 million, respectively, of cash and cash equivalents and investments were deposited, pledged or held in trust accounts in favor of ceding companies and other counterparties or government authorities to comply with reinsurance contract provisions and insurance laws.

In addition, as of December 31, 2018 and 2017, a further $635.8 million and $647.0 million, respectively, of cash and cash equivalents and investments were pledged as collateral for the Company’s letter of credit facilities. See Note 10(c) for details on the Company’s credit facilities.

4. DERIVATIVE INSTRUMENTS

As of December 31, 2018 and 2017, none of the Company's derivatives were designated as hedges for accounting purposes. The following table summarizes information on the location and amounts of derivative fair values on the consolidated balance sheets:

	December 31, 2018				December 31, 2017			
	Asset Derivative Notional Amount	Asset Derivative Fair Value	Liability Derivative Notional Amount	Liability Derivative Fair Value	Asset Derivative Notional Amount	Asset Derivative Fair Value	Liability Derivative Notional Amount	Liability Derivative Fair Value
Foreign exchange contracts	$ 176.9	$ 1.1	$ —	$ —	$ —	$ —	$ 105.7	$ 0.6
Insurance contracts	225.0	12.2	—	—	225.0	7.5	—	—
Reinsurance contracts	—	—	120.0	6.6	—	—	120.0	3.9
Total derivatives	$ 401.9	$ 13.3	$ 120.0	$ 6.6	$ 225.0	$ 7.5	$ 225.7	$ 4.5

Derivative assets and derivative liabilities are classified within "other assets" or "accounts payable and accrued liabilities" on the consolidated balance sheets.

The following table provides the net realized and unrealized gains (losses) on derivatives not designated as accounting hedges recorded on the consolidated income statements:

	Year Ended December 31,	
	2018	2017
Foreign exchange contracts	$ (0.5)	$ 3.0
Total included in foreign exchange gains (losses)	(0.5)	3.0
Foreign exchange contracts	17.4	(0.6)
Interest rate swaps	—	(3.5)
Interest rate futures	0.1	(1.7)
Total included in net realized investment gains (losses)	17.5	(5.8)
Insurance contracts	4.7	(0.3)
Reinsurance contracts	(4.9)	7.1
Total included in other income (other expense)	(0.2)	6.8
Total realized and unrealized gains (losses) on derivatives	$ 16.8	$ 4.0

Derivative Instruments Not Designated as Hedging Instruments

The Company is exposed to foreign currency risk in its investment portfolio. Accordingly, the fair values of the Company's investment portfolio are partially influenced by the change in foreign exchange rates. These foreign currency hedging activities have not been designated as specific hedges for financial reporting purposes.

The Company's insurance and reinsurance subsidiaries and branches operate in various foreign countries and consequently the Company's underwriting portfolio is exposed to foreign currency risk. The Company manages foreign currency risk by seeking to match liabilities under the insurance policies and reinsurance contracts that it writes and that are payable in foreign currencies with cash and investments that are denominated in such currencies. When necessary, the Company may also use derivatives to economically hedge unmatched foreign currency exposures, specifically forward contracts and currency options.

The Company also purchases and sells interest rate future and interest rate swap contracts to actively manage the duration and yield curve positioning of its fixed income portfolio. Interest rate futures and interest rate swaps can efficiently increase or decrease the overall duration of the portfolio. Additionally, interest rate future and interest rate swap contracts can be utilized to obtain the desired position along the yield curve in order to protect against certain future yield curve shapes.

The Company also purchases options to actively manage the Company's equity portfolio.

The Company also has entered into insurance and reinsurance contracts that are required to be accounted for as derivatives. This will be the case when the insurance or reinsurance contract provides indemnification to the insured or cedent as a result of a change in a variable versus an identifiable insurable event, such as a single-trigger ILW. The Company considers these insurance and reinsurance contracts to be an extension of its overall insurance operations.

5. FAIR VALUE OF FINANCIAL INSTRUMENTS

In accordance with U.S. GAAP, fair value is defined as the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date. There is a three-level valuation hierarchy for disclosure of fair value measurements. The valuation hierarchy is based upon whether the inputs to the valuation of an asset or liability are observable or unobservable in the market at the measurement date, with quoted market prices being the highest level (Level 1) and unobservable inputs being the lowest level (Level 3). A fair value measurement will fall within the level of the hierarchy based on the input that is significant to determining such measurement. The three levels are defined as follows:

- **Level 1**: Observable inputs to the valuation methodology that are quoted prices (unadjusted) for identical assets or liabilities in active markets.
- **Level 2**: Observable inputs to the valuation methodology other than quoted market prices (unadjusted) for identical assets or liabilities in active markets. Level 2 inputs include quoted prices for similar assets and liabilities in active markets, quoted prices for identical assets in markets that are not active and inputs other than quoted prices that are observable for the asset or liability, either directly or indirectly, for substantially the full term of the asset or liability.
- **Level 3**: Inputs to the valuation methodology that are unobservable for the asset or liability.

The following table shows the fair value of the Company's financial instruments and where in the fair value hierarchy the fair value measurements are included as of the dates indicated below:

December 31, 2018	Carrying amount	Total fair value	Level 1	Level 2	Level 3
ASSETS:					
Fixed maturity investments:					
U.S. government and government agencies	$ 2,897.4	$ 2,897.4	$ 2,897.4	$ —	$ —
Non-U.S. government and government agencies	338.9	338.9	—	338.9	—
States, municipalities and political subdivisions	1.3	1.3	—	1.3	—
Corporate debt:					
Financial institutions	255.3	255.3	—	255.3	—
Industrials	1,317.4	1,317.4	—	1,228.5	88.9
Utilities	235.2	235.2	—	194.7	40.5
Asset-backed	12.6	12.6	—	6.2	6.4
Total fixed maturity investments	5,058.1	5,058.1	2,897.4	2,024.9	135.8
Equity securities	802.0	802.0	—	645.1	156.9
Other invested assets[(1)]	658.4	658.4	—	—	—
Real estate	14.3	14.3	—	—	14.3
Total investments	6,532.8	6,532.8	2,897.4	2,670.0	307.0
Derivative assets:					
Foreign exchange contracts	1.1	1.1	—	1.1	—
Insurance contracts	12.2	12.2	—	—	12.2
LIABILITIES:					
Derivative liabilities:					
Reinsurance contracts	6.6	6.6	—	—	6.6
Other long-term debt	22.5	20.2	—	20.2	—

December 31, 2017	Carrying amount	Total fair value	Level 1	Level 2	Level 3
ASSETS:					
Fixed maturity investments:					
U.S. government and government agencies	$ 3,761.6	$ 3,761.6	$ 3,760.9	$ 0.7	$ —
Non-U.S. government and government agencies	380.2	380.2	—	380.2	—
States, municipalities and political subdivisions	81.7	81.7	—	81.7	—
Corporate debt		—			
Financial institutions	79.8	79.8	—	78.5	1.3
Industrials	743.5	743.5	—	704.9	38.5
Utilities	80.0	80.0	—	80.0	—
Asset-backed	65.8	65.8	—	—	65.8
Total fixed maturity investments	5,192.6	5,192.6	3,760.9	1,326.0	105.6
Equity securities	826.6	826.6	—	323.3	503.4
Other invested assets[1]	497.3	497.3	—	—	—
Total investments	6,516.5	6,516.5	3,760.9	1,649.3	609.0
Derivative assets:					
Insurance contracts	7.5	7.5	—	—	7.5
LIABILITIES:					
Derivative liabilities:					
Foreign exchange contracts	0.6	0.6	—	0.6	—
Reinsurance contracts	3.9	3.9	—	—	3.9
Other long-term debt	22.5	23.4	—	23.4	—

[1] In accordance with U.S. GAAP, other invested assets, excluding other private securities, and real estate investments, are measured at fair value using the net asset value per share (or its equivalent) practical expedient and have not been classified in the fair value hierarchy.

The following describes the valuation techniques used by the Company to determine the fair value of financial instruments held as of the balance sheet date.

Fair Value of Financial Instruments

U.S. government and government agencies: Comprised primarily of bonds issued by the U.S. Treasury, the Federal Home Loan Bank, the Federal Home Loan Mortgage Corporation and the Federal National Mortgage Association. The fair values of the Company's U.S. government securities are based on quoted market prices in active markets and are included in the Level 1 fair value hierarchy. The Company believes the market for U.S. Treasury securities is an actively traded market given the high level of daily trading volume. The fair values of U.S. government agency securities are priced using the spread above the risk-free yield curve. As the yields for the risk-free yield curve and the spreads for these securities are observable market inputs, the fair values of U.S. government agency securities are included in the Level 2 fair value hierarchy.

Non-U.S. government and government agencies: Comprised of fixed income obligations of non-U.S. governmental entities. The fair values of these securities are based on prices obtained from international indices and are included in the Level 2 fair value hierarchy.

States, municipalities and political subdivisions: Comprised of fixed income obligations of U.S. domiciled state and municipality entities. The fair values of these securities are based on prices obtained from the new issue market, and is included in the Level 2 fair value hierarchy.

Corporate debt: Comprised of bonds issued by or loan obligations of corporations that are diversified across a wide range of issuers and industries. The fair values of corporate debt that are short-term are priced using spread above the LIBOR yield curve, and the fair value of corporate debt that are long-term are priced using the spread above the risk-free yield curve.

The spreads are sourced from broker-dealers, trade prices and the new issue market. As the significant inputs used to price corporate bonds are observable market inputs, the fair values of corporate debt are included in the Level 2 fair value hierarchy, unless the significant inputs used to price the corporate debt securities are broker-dealer quotes and the Company is not able to determine if those quotes are based on observable market inputs, in which case the fair value is included in the Level 3 hierarchy.

Asset-backed: Included in this category are bonds backed by pools of automobile loan receivables, home equity loans, credit card receivables and collateralized loan obligations originated by a variety of financial institutions. The fair values of such securities are priced using prepayment speed and spread inputs that are sourced from the new issue market or broker-dealer quotes. Also included in the asset-backed category are mortgage-backed securities which are comprised of residential and commercial mortgages originated by both U.S. government agencies (such as the Federal National Mortgage Association) and non-U.S. government agencies. The fair values of mortgage-backed securities originated by U.S. government agencies and non-U.S. government agencies are based on a pricing model that incorporates prepayment speeds and spreads to determine appropriate average life of mortgage-backed securities. As the significant inputs used to price the asset-backed securities are observable market inputs, the fair values of these securities are included in the Level 2 fair value hierarchy, unless the significant inputs used to price the asset-backed securities are broker-dealer quotes and the Company is not able to determine if those quotes are based on observable market inputs, in which case the fair value is included in the Level 3 hierarchy.

Equity securities: Comprised of U.S. and foreign common and preferred stocks and mutual funds. Equities are generally included in the Level 2 fair value hierarchy as prices are obtained from market exchanges in active markets. The Company's remaining equity interest in an equity security that it no longer accounts for under the equity method of accounting is included in the Level 3 fair value hierarchy as the fair value is based on the enterprise value of that security which is not a publicly traded company. Also, subsequent to the Company being acquired by Fairfax, the Company has acquired certain securities that are valued by Fairfax by using unobservable inputs, and as such, these securities have been included in the Level 3 fair value hierarchy. When fair value is determined by Fairfax, the fair value is determined by reference to various valuation measures for comparable companies and transactions, including relevant valuation multiples. In some instances, such investments are classified as Level 3 because the valuation multiples applied by the Company were adjusted for differences in attributes between the investment and the underlying companies or transactions from which the valuation multiples were derived.

Other invested assets: Comprised of funds in a range of diversified strategies. In accordance with U.S. GAAP, the fair values of the funds are based on the net asset value of the funds as reported by the fund manager. The Company does not measure its investments that are accounted for using the equity method of accounting at fair value, unless an other-than-temporary impairment is recorded.

Real estate: Comprised of a commercial real estate investment. The fair value of the real estate investment was considered its carrying value given this investment was purchased in 2018.

Derivative instruments: The fair value of foreign exchange contracts are priced from quoted market prices for similar exchange-traded derivatives and pricing valuation models that utilize independent market data inputs. The fair value of foreign exchange contracts are included in the Level 2 fair value hierarchy. The fair value of the insurance and reinsurance contracts are based on an internal model that estimates the expected value based on multiple scenarios (i.e., Monte-Carlo simulation) and discounted back to current value. The key unobservable inputs are the discount rate, which was 10%, and the values of the underlying insured risks. Given the inputs to the internal model are unobservable, the fair value of the insurance and reinsurance contracts are included in the Level 3 fair value hierarchy.

Other long-term debt: Comprised of an external surplus note. The fair value of the other long-term debt is based on the value of the debt using current interest rates. The fair value of the long-term debt is included in the Level 2 fair value hierarchy. See note 10 for additional information.

Non-recurring Fair Value of Financial Instruments

The Company measures the fair value of certain assets on a non-recurring basis, generally quarterly, annually, or when events or changes in circumstances indicate that the carrying amount of the assets may not be recoverable. These assets include investments accounted for using the equity method, goodwill and intangible assets. The Company uses a variety of techniques to measure the fair value of these assets when appropriate, as described below:

Investments accounted for using the equity method: When the Company determines that the carrying value of these assets may not be recoverable, the Company records the assets at fair value with the loss recognized in income. In such cases, the Company measures the fair value of these assets using the techniques discussed above.

Goodwill and intangible assets: The Company tests goodwill and intangible assets for impairment whenever events or changes in circumstances indicate that the carrying amount may not be recoverable, but at least annually for goodwill and indefinite-lived intangibles. When the Company determines that goodwill and indefinite-lived intangible assets may be impaired, the Company may use various techniques, including discounted expected future cash flows and market multiple models, to measure fair value.

Level 3 Financial Instruments

As of December 31, 2018, the Company held financial assets of $319.2 million and financial liabilities of $6.6 million that were measured using Level 3 valuation inputs. As of December 31, 2017, the company held financial assets of $616.5 million and financial liabilities of $3.9 million that were measured using Level 3 valuation inputs. During the year ended December 31, 2018, the Company transferred $0.8 million of financial assets from Level 2 into Level 3. Also during the year ended December 31, 2018, the Company purchased $157.5 million of financial assets that were included in Level 3.

The Company attempts to verify the significant inputs used by broker-dealers in determining the fair value of the securities priced by them. If the Company was unable to obtain sufficient information to determine if the broker-dealers were using significant observable inputs, such securities have been transferred to the Level 3 fair value hierarchy. The Company believes that the prices obtained from the broker-dealers are the best estimate of fair value of the securities being priced as the broker-dealers are typically involved in the initial pricing of the security, and the Company has compared the price per the broker-dealer to other pricing sources and noted no material differences.

The Company's external investment accounting service provider receives prices from internationally recognized independent pricing services to measure the fair values of its fixed maturity investments. Pricing sources are evaluated and selected in a manner to ensure that the most reliable sources are used. The independent pricing sources obtain market quotations and actual transaction prices for securities that have quoted prices in active markets. Each pricing service has its own proprietary method for determining the fair value of securities that are not actively traded. In general, these methods involve the use of "matrix pricing" in which the independent pricing service uses observable market inputs, including, but not limited to, reported trades, benchmark yields, broker-dealer quotes, interest rates, prepayment speeds, default rates and such other inputs as are available from market sources to determine a reasonable fair value.

All of the Company's fixed maturity investment securities classified as Level 3 are valued based on unadjusted broker-dealer quotes. This includes less liquid securities such as lower quality asset-backed securities, commercial mortgage-backed securities and residential mortgage-backed securities. The primary valuation inputs include monthly payment information, the probability of default, loss severity rates and estimated prepayment rates. Significant changes in these inputs in isolation would result in a significantly lower or higher fair value measurement. In general, a change in the assumption of the probability of default is accompanied by a directionally similar change in the assumption used for the loss severity in an event of default and prepayment rates.

The Company records the unadjusted price provided and validates this price through a process that includes, but is not limited to monthly and/or quarterly: (i) comparison of prices between two independent sources, with significant differences requiring additional price sources; (ii) quantitative analysis (e.g., comparing the quarterly return for each managed portfolio to their target benchmark, with significant differences identified and investigated); (iii) evaluation of methodologies used by external parties to calculate fair value, including a review of the inputs used for pricing; (iv) comparison of the price to the Company's knowledge of the current investment market; and (v) back-testing, which includes randomly selecting purchased or sold securities and comparing the executed prices to the fair value estimates from the pricing service. In addition to internal controls, management relies on the effectiveness of the valuation controls in place at the Company's external investment accounting service provider (supported by a Service Organization Controls Report, commonly referred to as a "SOC 1 Report") in conjunction with regular discussion and analysis of the investment portfolio's structure and performance.

6. RESERVE FOR LOSSES AND LOSS EXPENSES

a) Basis for estimating the reserves for losses and loss expenses

The reserve for losses and loss expenses is comprised of two main elements: outstanding loss reserves ("OSLR," also known as case reserves) and reserves for losses incurred but not reported ("IBNR"). OSLR relate to known claims and represent management's best estimate of the likely loss settlement. IBNR reserves relate primarily to unreported events that, based on industry information, management's experience and actuarial evaluation, can reasonably be expected to have occurred and are reasonably likely to result in a loss to the Company. IBNR reserves also relate to estimated development of reported events that based on industry information, management's experience and actuarial evaluation, can reasonably be expected to reach the Company's attachment point and are reasonably likely to result in a loss. The Company also includes in IBNR reserves changes in the values of claims that have been reported but are not yet settled. Each claim is settled individually based upon its merits and it is not unusual for a claim to take years after being reported to settle, especially if legal action is involved. As a result, reserves for losses and loss expenses include significant estimates for IBNR reserves.

The reserve for IBNR is estimated by management for each line of business based on various factors, including underwriters' expectations about loss experience, actuarial analysis, comparisons with the results of industry benchmarks and loss experience to date. The Company implicitly factors into IBNR reserves inflation by assuming an inflation rate consistent with historical trends. The IBNR reserves are calculated as the ultimate amount of losses and loss expenses less cumulative paid losses and loss expenses and OSLR. The Company's actuaries employ generally accepted actuarial methodologies to determine estimated ultimate loss reserves.

The Company believes that its current estimates of liabilities appropriately reflect its current knowledge of the business and the prevailing market, social, legal and economic conditions while giving due consideration to historical trends and volatility evidenced in the liabilities over the longer term. Although management believes that OSLR and the IBNR reserves are sufficient to cover losses assumed by the Company, there can be no assurance that losses will not deviate from the Company's reserves, possibly by material amounts. The methodology of estimating loss reserves is periodically reviewed to ensure that the assumptions made continue to be appropriate. The Company recognizes any changes in its loss reserve estimates, including prior year loss reserve development, and the related reinsurance recoverables in the periods in which they are determined and are recorded in "net losses and loss expenses" in the consolidated income statements.

The reserve for losses and loss expenses consists of the following:

	December 31,	
	2018	2017
Outstanding loss reserves	$ 1,928.4	$ 2,044.1
Reserves for losses incurred but not reported	5,089.1	5,126.4
Reserve for losses and loss expenses	$ 7,017.5	$ 7,170.5

b) Reserve for losses and loss expenses rollforward

The table below is a reconciliation of the beginning and ending liability for unpaid losses and loss expenses. Losses incurred and paid are reflected net of reinsurance recoverables.

	Year Ended December 31,	
	2018	2017
Gross liability at beginning of year	$ 7,170.5	$ 6,255.6
Reinsurance recoverable at beginning of year	(2,050.9)	(1,550.4)
Net liability at beginning of year	5,119.6	4,705.2
Net losses incurred related to:		
Current year	1,579.7	1,759.1
Prior years	(147.9)	71.8
Total incurred	1,431.8	1,830.9
Net paid losses related to:		
Current year	257.4	230.4
Prior years	1,462.7	1,197.1
Total paid	1,720.1	1,427.5
Foreign exchange revaluation and other	(10.6)	11.0
Net liability at end of year	4,820.7	5,119.6
Reinsurance recoverable at end of year	2,196.8	2,050.9
Gross liability at end of year	$ 7,017.5	$ 7,170.5

For the year ended December 31, 2018, the Company recorded net favorable prior year reserve development primarily related to better than expected emergence on the 2017 catastrophe losses and a reduction in unallocated loss adjustment expenses, partially offset by net adverse prior year reserve development in the casualty line of business primarily related to the 2012, 2014 and 2015 accident years and the professional liability line of business primarily related to the 2012 accident year. During the year ended December 31, 2018, the Company incurred net losses, before reinstatement premiums, of $213.2 million in catastrophe-related losses. The net losses incurred from Hurricane Florence, Typhoon Jebi, Typhoon Mangkhut, Hurricane Michael, and the Woolsey and Camp California wildfires were $26.7 million, $37.5 million, $14.0 million, $50.4 million, $24.0 million, $60.6 million, respectively.

For the year ended December 31, 2017, the Company recorded net unfavorable prior year reserve development primarily related to higher than expected claims development within the professional liability line of business for the 2012 and 2013 accident years. This was partially offset by net favorable prior year reserve development in the casualty reinsurance and specialty reinsurance lines of business. During the year ended December 31, 2017, the Company incurred net losses, before reinstatement premiums, of $506.6 million in catastrophe-related losses. The net losses incurred from Hurricane Harvey, Hurricane Irma, Hurricane Maria, earthquakes in Mexico, Typhoon Hato, Cyclone Debbie and the Southern and Northern California wildfires were $116.6 million, $137.0 million, $113.4 million, $9.1 million, $34.0 million, $9.4 million, $47.8 million and $39.3 million, respectively.

The Company has not accrued any additional premiums or return premiums as a result of the net prior year reserve development during the years ended December 31, 2018 and 2017.

Although the Company has historically experienced favorable and unfavorable development in its insurance and reinsurance lines, there is no assurance that conditions and trends that have affected the development of liabilities in the past will continue. It is not appropriate to extrapolate future redundancies based on prior years' development. The methodology of estimating loss reserves is periodically reviewed to ensure that the key assumptions used in the actuarial models continue to be appropriate.

c) *Incurred and Paid Loss Development Triangles*

The following information presents the incurred and paid claims information as of December 31, 2018, net of reinsurance, as well as cumulative claim frequency and total IBNR reserves by accident year. The information about incurred and paid claims development presented for the years ended December 31, 2010 to December 31, 2017 is presented as supplementary information.

The incurred and paid loss development triangles are presented based on the following:

i. *Groupings*
Disaggregated based on lines of business within each operating segment. There are a total of 11 incurred and paid loss development triangles presented of which eight relate to the Insurance segment and three of which relate to the Reinsurance segment. The 11 incurred and paid loss development triangles were selected to create categories that were relatively homogeneous yet were not so small as to have insufficient actuarial credibility, and are consistent with how the Company discloses gross premiums written and net premiums earned by line of business, as well as disaggregated to reflect the reserves acquired from the Hong Kong, Singapore and Labuan branches of RSA in 2015 on a prospective basis. The Company has lines of business that are 100% ceded that are not presented in the incurred and paid loss development triangles.

ii. *Presentation*
All incurred and paid loss development triangles are presented net of reinsurance and excludes unallocated loss adjustment expenses, allowance for uncollectible reinsurance recoverables, currency translation adjustments and fair value adjustments related to acquired reserves as those balances are not estimated for each accident year.

The incurred and paid loss development triangles include nine years of historical information. The Company has determined that it is impractical to provide incurred and paid loss development information at this disaggregated basis prior to accident year 2010 as all the necessary data prior to 2010 was not maintained at this disaggregated level.

Acquisitions will be presented in the incurred and paid loss development triangles based on how the acquired reserves impact the nature, amount, timing and uncertainty of the cash flows related the settlement of the reserve for losses and loss expenses. As it relates to the reserves for losses and loss expenses acquired from RSA, those reserves are presented from the date in which they were acquired (April 1, 2015) as separate incurred and paid loss development triangles until such time when it is appropriate to combine with the equivalent Insurance segment incurred and paid loss development triangles. The Company has made changes to how reserves are settled and estimated, and therefore the incurred and paid development information prior to the acquisition will no longer provide relevant information regarding the nature, amount, timing and uncertainty of how these reserves will settle in the future. Also, the Company does not have sufficient information at this disaggregated level to present the Insurance segment incurred and paid loss development triangles on a retrospective basis, including the incurred and paid information from the acquired RSA reserves.

iii. *Foreign exchange*
Reserves for losses and loss expenses and paid losses that are not recorded in the United States dollar functional currency are revalued at the United States dollar conversion rate at the end of the period.

iv. *IBNR*
The 'Total IBNR' by accident year disclosed with the incurred and paid loss development triangles includes (1) IBNR reserves for unreported events and (2) changes in the values of claims that have been reported but are not yet settled.

v. *Claim count*
Cumulative reported claims included in the tables below, which are reflected as the actual claim counts shown, consist of any reported indemnity claim or expense by claimant (e.g., insured) as of December 31, 2018 with a reserve balance greater than one United States dollar (or equivalent foreign currency). By including only claims with reserves greater than one United States dollar (or equivalent foreign currency), the tables do not include any notifications of claims which may or may not result in an indemnity claim. The cumulative claim count information for the acquired RSA operations are higher, on a relative basis, than the other lines of business cumulative claim count information as the acquired RSA operations have a higher percentage of retail business. This will result in reporting, on average, higher frequency of reported claims with lower severity per claim. The Company has determined that it is impractical to provide cumulative reported claim information for the lines of business in the Reinsurance segment as this information is not provided to the Company from the cedents. The Company also does not believe cumulated reported claim counts for its Reinsurance segment provides any meaningful information related to the nature, amount, timing and uncertainty of the cash flows related to the settled of the reserve for losses and loss expenses.

Insurance Segment:

Casualty - Excluding RSA acquired reserves

Incurred Claims and Loss Adjustment Expenses, Net of Reinsurance

	Unaudited	Unaudited	Unaudited	Unaudited	Unaudited	Unaudited	Unaudited	Unaudited		December 31, 2018	
Accident Year	2010	2011	2012	2013	2014	2015	2016	2017	2018	Total IBNR	Cumulative Reported Claims
2010	$ 148.0	$ 171.0	$ 172.6	$ 165.3	$ 159.6	$ 149.3	$ 131.5	$ 131.6	$ 124.6	$ 16.4	283
2011		130.0	149.9	160.0	159.4	152.4	159.6	166.4	171.7	16.9	367
2012			152.4	155.8	158.2	173.6	194.1	216.4	224.2	22.9	438
2013				190.7	199.0	215.2	243.0	241.9	238.1	45.2	677
2014					224.9	228.0	238.3	268.1	288.6	50.9	814
2015						292.8	284.6	283.4	301.2	101.7	871
2016							272.6	257.2	260.1	143.1	987
2017								251.1	249.2	178.0	812
2018									247.9	223.4	580
									$2,105.6		

Cumulative Paid Claims and Loss Adjustment Expenses, Net of Reinsurance

	Unaudited	Unaudited	Unaudited	Unaudited	Unaudited	Unaudited	Unaudited	Unaudited	
Accident Year	2010	2011	2012	2013	2014	2015	2016	2017	2018
2010	$ 0.6	$ 28.4	$ 65.9	$ 72.9	$ 83.1	$ 87.4	$ 96.9	$ 105.2	$ 106.8
2011		2.1	11.4	33.1	63.1	89.1	101.9	120.2	137.5
2012			6.5	25.9	53.2	85.4	114.5	157.2	176.8
2013				9.7	38.6	70.2	103.7	153.4	173.7
2014					8.6	58.4	104.1	165.5	210.3
2015						11.3	35.8	85.6	166.3
2016							10.0	40.6	84.4
2017								10.9	46.3
2018									8.5
									$1,110.6
All outstanding liabilities before 2010, net of reinsurance									$ 61.6
Liability for losses and loss expenses, net of reinsurance									$1,056.8

Casualty - RSA acquired reserves

Incurred Claims and Loss Adjustment Expenses, Net of Reinsurance

	Unaudited	Unaudited	Unaudited	Unaudited	Unaudited	Unaudited	Unaudited	Unaudited		December 31, 2018	
Accident Year	2010	2011	2012	2013	2014	2015	2016	2017	2018	Total IBNR	Cumulative Reported Claims
2010	$ —	$ —	$ —	$ —	$ —	$ 3.2	$ 2.7	$ 1.7	$ 1.7	$ —	130
2011		—	—	—	—	7.2	6.1	5.7	5.6	—	226
2012			—	—	—	19.2	17.7	17.7	17.5	0.1	494
2013				—	—	53.3	43.1	43.2	42.7	0.6	1,252
2014					—	99.0	68.6	72.1	72.1	3.7	3,469
2015						98.8	78.2	76.0	74.0	5.0	7,147
2016							61.2	60.0	58.5	7.7	7,587
2017								37.8	41.3	5.2	7,844
2018									35.5	7.5	7,554
									$ 348.9		

Cumulative Paid Claims and Loss Adjustment Expenses, Net of Reinsurance

	Unaudited	Unaudited	Unaudited	Unaudited	Unaudited	Unaudited	Unaudited	Unaudited	
Accident Year	2010	2011	2012	2013	2014	2015	2016	2017	2018
2010	$ —	$ —	$ —	$ —	$ —	$ 1.0	$ 1.5	$ 1.4	$ 1.6
2011		—	—	—	—	2.7	4.7	5.1	5.2
2012			—	—	—	8.1	14.1	16.0	17.2
2013				—	—	13.2	28.0	36.6	39.7
2014					—	16.7	37.0	51.3	62.6
2015						12.1	31.3	47.7	61.1
2016							13.5	28.7	37.7
2017								9.7	19.6
2018									9.4
									$ 254.1
All outstanding liabilities before 2010, net of reinsurance									$ 0.2
Liability for losses and loss expenses, net of reinsurance									$ 95.0

Professional liability

Incurred Claims and Loss Adjustment Expenses, Net of Reinsurance

	Unaudited	Unaudited	Unaudited	Unaudited	Unaudited	Unaudited	Unaudited	Unaudited		December 31, 2018	
Accident Year	2010	2011	2012	2013	2014	2015	2016	2017	2018	Total IBNR	Cumulative Reported Claims
2010	$ 300.2	$ 305.1	$ 302.0	$ 288.0	$ 253.6	$ 232.8	$ 230.8	$ 230.9	$ 221.3	$ 20.7	519
2011		299.0	321.8	349.6	367.5	350.3	344.5	343.1	349.8	25.7	764
2012			310.4	384.9	407.8	422.5	414.9	473.4	503.4	91.1	853
2013				327.3	358.6	369.3	383.7	393.2	407.5	65.4	902
2014					312.9	343.5	333.1	333.4	332.1	56.3	735
2015						357.5	363.5	361.1	362.3	103.3	652
2016							327.3	335.9	325.3	146.5	655
2017								273.2	286.7	198.3	458
2018									254.7	228.1	325
									$3,043.1		

Cumulative Paid Claims and Loss Adjustment Expenses, Net of Reinsurance

	Unaudited	Unaudited	Unaudited	Unaudited	Unaudited	Unaudited	Unaudited	Unaudited	
Accident Year	2010	2011	2012	2013	2014	2015	2016	2017	2018
2010	$ 9.1	$ 42.9	$ 74.3	$ 107.5	$ 133.8	$ 149.8	$ 179.4	$ 187.2	$ 196.3
2011		14.1	67.5	152.0	203.0	245.6	288.7	296.1	311.2
2012			17.2	79.4	142.7	214.6	279.8	335.4	382.2
2013				12.3	63.4	154.9	230.9	270.0	317.8
2014					13.1	78.2	138.0	185.2	236.9
2015						10.6	73.4	131.8	201.5
2016							12.0	66.4	143.9
2017								9.3	62.1
2018									11.5
									$1,863.4
All outstanding liabilities before 2010, net of reinsurance									$ 97.4
Liability for losses and loss expenses, net of reinsurance									$1,277.1

Property - Excluding RSA acquired reserves

Incurred Claims and Loss Adjustment Expenses, Net of Reinsurance

	Unaudited	Unaudited	Unaudited	Unaudited	Unaudited	Unaudited	Unaudited	Unaudited		**December 31, 2018**	
Accident Year	2010	2011	2012	2013	2014	2015	2016	2017	2018	**Total IBNR**	**Cumulative Reported Claims**
2010	$ 149.8	$ 152.8	$ 144.5	$ 141.8	$ 141.8	$ 142.9	$ 140.1	$ 139.7	$ 139.5	$ —	561
2011		166.5	165.8	157.1	151.9	150.9	149.3	149.2	148.4	—	567
2012			161.1	149.1	143.0	137.8	138.0	137.8	137.8	0.1	674
2013				88.1	80.1	72.5	72.0	71.8	71.3	0.1	977
2014					104.6	102.9	94.7	94.2	92.7	0.6	1,393
2015						116.7	117.8	119.7	118.0	0.1	1,495
2016							107.2	112.4	118.9	1.3	4,099
2017								231.7	231.6	10.8	3,261
2018									170.8	19.7	2,634
									$1,229.0		

Cumulative Paid Claims and Loss Adjustment Expenses, Net of Reinsurance

	Unaudited	Unaudited	Unaudited	Unaudited	Unaudited	Unaudited	Unaudited	Unaudited	
Accident Year	2010	2011	2012	2013	2014	2015	2016	2017	2018
2010	$ 64.3	$ 108.6	$ 123.2	$ 134.2	$ 137.2	$ 138.1	$ 138.7	$ 139.0	$ 139.6
2011		35.3	91.2	130.4	145.3	146.8	148.3	148.6	148.7
2012			21.1	97.7	126.4	134.2	136.0	136.9	136.9
2013				26.7	58.3	66.9	70.1	70.7	70.7
2014					34.9	77.1	89.0	90.4	89.7
2015						53.1	100.6	113.1	114.7
2016							47.1	89.2	112.9
2017								62.4	162.1
2018									68.6
									$1,043.9
All outstanding liabilities before 2010, net of reinsurance									$ 2.0
Liability for losses and loss expenses, net of reinsurance									$ 187.1

Property - RSA acquired reserves

	Incurred Claims and Loss Adjustment Expenses, Net of Reinsurance										
	Unaudited	Unaudited	Unaudited	Unaudited	Unaudited	Unaudited	Unaudited	Unaudited		December 31, 2018	
Accident Year	2010	2011	2012	2013	2014	2015	2016	2017	2018	Total IBNR	Cumulative Reported Claims
2010	$ —	$ —	$ —	$ —	$ —	$ —	$ 0.1	$ 0.1	$ —	$ —	42
2011		—	—	—	—	1.0	0.5	0.5	0.5	—	109
2012			—	—	—	1.8	1.5	1.6	1.6	—	335
2013				—	—	4.4	4.7	4.3	3.9	—	667
2014					—	14.7	15.0	14.5	14.1	—	1,120
2015						23.1	12.5	12.2	12.0	0.1	2,405
2016							21.5	24.6	15.2	1.0	237
2017								20.4	2.0	1.3	31
2018									2.2	1.9	17
									$ 51.5		

	Cumulative Paid Claims and Loss Adjustment Expenses, Net of Reinsurance								
	Unaudited	Unaudited	Unaudited	Unaudited	Unaudited	Unaudited	Unaudited	Unaudited	
Accident Year	2010	2011	2012	2013	2014	2015	2016	2017	2018
2010	$ —	$ —	$ —	$ —	$ —	$ 0.1	$ —	$ 0.1	$ —
2011		—	—	—	—	0.2	0.7	0.9	1.0
2012			—	—	—	0.6	1.4	1.4	1.4
2013				—	—	1.7	3.2	3.4	3.5
2014					—	6.7	10.2	12.9	13.5
2015						2.9	8.5	10.1	11.6
2016							2.0	9.2	1.1
2017								0.1	—
2018									—
									$ 32.1
All outstanding liabilities before 2010, net of reinsurance									$ 0.2
Liability for losses and loss expenses, net of reinsurance									$ 19.6

Programs

Incurred Claims and Loss Adjustment Expenses, Net of Reinsurance

	Unaudited	Unaudited	Unaudited	Unaudited	Unaudited	Unaudited	Unaudited	Unaudited		December 31, 2018	
Accident Year	2010	2011	2012	2013	2014	2015	2016	2017	2018	Total IBNR	Cumulative Reported Claims
2010	$ 70.7	$ 72.5	$ 86.4	$ 80.8	$ 78.8	$ 75.5	$ 75.0	$ 74.5	$ 74.6	$ 1.4	477
2011		54.0	61.9	62.6	58.1	52.5	53.5	51.9	50.3	1.8	441
2012			56.7	60.5	62.4	59.5	58.7	58.9	59.6	3.1	490
2013				64.9	62.0	59.9	56.3	53.9	52.6	4.7	851
2014					74.9	73.9	70.0	67.7	63.2	13.7	1,127
2015						86.8	86.2	81.9	74.8	20.6	1,246
2016							113.6	114.6	117.3	38.9	1,522
2017								147.7	154.4	72.8	2,363
2018									157.1	107.3	2,356
									$ 803.9		

Cumulative Paid Claims and Loss Adjustment Expenses, Net of Reinsurance

	Unaudited	Unaudited	Unaudited	Unaudited	Unaudited	Unaudited	Unaudited	Unaudited	
Accident Year	2010	2011	2012	2013	2014	2015	2016	2017	2018
2010	$ 2.9	$ 17.9	$ 42.4	$ 52.3	$ 59.9	$ 63.4	$ 66.3	$ 67.8	$ 68.9
2011		3.8	15.2	26.7	34.7	41.3	45.3	47.1	47.6
2012			3.8	17.6	29.6	38.3	44.5	48.1	52.1
2013				5.7	15.8	24.4	33.0	40.0	44.0
2014					6.4	16.9	27.5	39.3	44.5
2015						9.3	26.3	37.3	46.3
2016							14.1	43.8	66.2
2017								22.1	63.7
2018									27.8
									$ 461.1
All outstanding liabilities before 2010, net of reinsurance									$ 5.7
Liability for losses and loss expenses, net of reinsurance									$ 348.5

Other specialty - Excluding RSA acquired reserves

Incurred Claims and Loss Adjustment Expenses, Net of Reinsurance

	Unaudited	Unaudited	Unaudited	Unaudited	Unaudited	Unaudited	Unaudited	Unaudited		December 31, 2018	
Accident Year	2010	2011	2012	2013	2014	2015	2016	2017	2018	Total IBNR	Cumulative Reported Claims
2010	$ 1.0	$ 0.9	$ 0.9	$ 0.7	$ 0.5	$ 0.3	$ 0.4	$ 0.5	$ 0.9	$ —	12
2011		17.5	19.9	19.3	18.7	18.7	18.7	18.6	18.4	0.5	21
2012			25.4	25.5	24.3	23.1	23.0	22.9	26.1	1.3	28
2013				23.5	32.4	37.0	36.5	45.1	48.7	4.5	176
2014					55.6	69.4	81.5	76.4	74.9	6.7	714
2015						76.3	81.6	83.8	82.5	16.8	747
2016							107.1	109.4	113.4	36.7	1,318
2017								130.6	115.1	63.1	1,663
2018									125.8	89.1	1,482
									$ 605.8		

Cumulative Paid Claims and Loss Adjustment Expenses, Net of Reinsurance

	Unaudited	Unaudited	Unaudited	Unaudited	Unaudited	Unaudited	Unaudited	Unaudited	
Accident Year	2010	2011	2012	2013	2014	2015	2016	2017	2018
2010	$ —	$ —	$ —	$ 0.1	$ 0.1	$ 0.1	$ 0.4	$ 0.4	$ 0.7
2011		4.1	11.2	14.5	15.1	15.9	16.7	17.7	17.8
2012			0.5	10.3	16.3	19.2	19.7	20.0	24.1
2013				0.9	7.2	20.2	23.1	26.8	37.5
2014					12.9	37.3	48.3	59.6	63.9
2015						14.6	36.8	46.3	57.9
2016							25.1	44.8	61.1
2017								13.4	35.3
2018									15.3
									$ 313.6
All outstanding liabilities before 2010, net of reinsurance									$ —
Liability for losses and loss expenses, net of reinsurance									$ 292.2

Other specialty - RSA acquired reserves

Incurred Claims and Loss Adjustment Expenses, Net of Reinsurance

	Unaudited	Unaudited	Unaudited	Unaudited	Unaudited	Unaudited	Unaudited	Unaudited		December 31, 2018	
Accident Year	2010	2011	2012	2013	2014	2015	2016	2017	2018	Total IBNR	Cumulative Reported Claims
2010	$ —	$ —	$ —	$ —	$ —	$ 1.1	$ 1.2	$ 1.2	$ 1.2	$ —	102
2011		—	—	—	—	1.3	2.7	2.6	2.0	0.1	203
2012			—	—	—	2.5	2.7	2.5	2.2	—	340
2013				—	—	7.3	7.2	6.8	6.6	—	703
2014					—	21.4	22.7	20.5	18.9	0.1	1,997
2015						40.3	43.1	42.0	39.6	—	12,824
2016							32.0	37.4	32.8	7.0	15,116
2017								54.0	43.2	3.1	11,311
2018									34.4	14.5	8,605
									$ 180.9		

Cumulative Paid Claims and Loss Adjustment Expenses, Net of Reinsurance

	Unaudited	Unaudited	Unaudited	Unaudited	Unaudited	Unaudited	Unaudited	Unaudited	
Accident Year	2010	2011	2012	2013	2014	2015	2016	2017	2018
2010	$ —	$ —	$ —	$ —	$ —	$ 0.1	$ 0.3	$ 0.6	$ 0.9
2011		—	—	—	—	0.3	0.9	1.3	1.5
2012			—	—	—	0.4	1.5	1.8	1.9
2013				—	—	2.2	3.3	4.4	5.0
2014					—	5.7	10.3	12.7	13.8
2015						7.4	19.8	28.2	32.8
2016							6.9	13.1	17.0
2017								6.4	29.1
2018									$ 4.8
									$ 106.8
All outstanding liabilities before 2010, net of reinsurance									$ 0.2
Liability for losses and loss expenses, net of reinsurance									$ 74.3

Reinsurance Segment:

Property

Incurred Claims and Loss Adjustment Expenses, Net of Reinsurance

	Unaudited	Unaudited	Unaudited	Unaudited	Unaudited	Unaudited	Unaudited	Unaudited		As of December 31, 2018	
Accident Year	2010	2011	2012	2013	2014	2015	2016	2017	2018	Total IBNR	Cumulative Reported Claims
2010	74.3	76.4	71.2	66.7	65.9	65.9	64.8	64.0	64.0	$ 0.3	n/a
2011	—	181.8	186.2	176.1	170.1	169.1	169.8	170.7	170.6	0.5	n/a
2012	—	—	150.2	119.6	112.0	110.3	107.6	107.5	105.4	0.3	n/a
2013	—	—	—	91.0	61.5	57.2	53.1	52.6	52.5	0.4	n/a
2014	—	—	—	—	134.0	117.2	109.6	108.6	108.5	0.6	n/a
2015	—	—	—	—	—	127.5	105.5	97.2	98.9	1.0	n/a
2016	—	—	—	—	—	—	115.8	117.7	120.6	3.1	n/a
2017	—	—	—	—	—	—	—	296.5	301.7	29.1	n/a
2018	—	—	—	—	—	—	—	—	269.3	106.8	n/a
									$1,291.5		

Cumulative Paid Claims and Loss Adjustment Expenses, Net of Reinsurance

	Unaudited	Unaudited	Unaudited	Unaudited	Unaudited	Unaudited	Unaudited	Unaudited	
Accident Year	2010	2011	2012	2013	2014	2015	2016	2017	2018
2010	$ 11.0	$ 38.0	$ 49.6	$ 56.1	$ 61.0	$ 62.6	$ 63.0	$ 62.7	$ 62.8
2011		47.7	100.1	143.5	157.8	163.9	166.3	168.1	168.8
2012			35.3	78.5	92.2	96.6	99.3	101.8	102.2
2013				19.7	42.9	49.4	51.0	52.4	52.8
2014					50.9	85.9	97.2	102.0	104.3
2015					0.0	45.5	76.9	91.1	95.4
2016							45.5	90.3	103.4
2017								63.6	146.1
2018									70.3
									$ 906.1
All outstanding liabilities before 2010, net of reinsurance									$ 1.0
Liability for losses and loss expenses, net of reinsurance									$ 386.4

The incurred losses and IBNR recorded for accident year 2018 and 2017 was primarily driven by catastrophe losses.

Casualty

Incurred Claims and Loss Adjustment Expenses, Net of Reinsurance

	Unaudited	Unaudited	Unaudited	Unaudited	Unaudited	Unaudited	Unaudited	Unaudited		As of December 31, 2018	
Accident Year	2010	2011	2012	2013	2014	2015	2016	2017	2018	Total IBNR	Cumulative Reported Claims
2010	$ 201.8	$ 222.3	$ 226.3	$ 223.7	$ 214.0	$ 198.8	$ 197.0	$ 192.9	$ 191.6	$ 35.6	n/a
2011		165.6	182.5	187.3	190.7	183.5	178.7	178.8	179.4	35.1	n/a
2012			184.3	208.3	210.5	217.6	222.8	221.3	219.7	39.1	n/a
2013				167.2	182.0	188.7	205.3	200.2	183.5	45.9	n/a
2014					150.1	162.4	163.1	153.9	141.0	57.2	n/a
2015						136.6	136.2	145.3	158.8	58.5	n/a
2016							110.1	99.0	105.8	54.4	n/a
2017								101.0	86.4	62.4	n/a
2018									100.0	90.3	n/a
									$1,366.2		

Cumulative Paid Claims and Loss Adjustment Expenses, Net of Reinsurance

	Unaudited	Unaudited	Unaudited	Unaudited	Unaudited	Unaudited	Unaudited	Unaudited	
Accident Year	2010	2011	2012	2013	2014	2015	2016	2017	2018
2010	$ 2.6	$ 32.2	$ 58.9	$ 76.7	$ 98.5	$ 115.2	$ 127.6	$ 135.5	$ 142.3
2011		8.4	26.9	48.8	70.5	92.3	103.9	116.3	130.8
2012			12.6	39.1	56.6	91.6	126.0	150.0	164.2
2013				7.7	21.7	59.0	79.6	96.5	116.1
2014					1.7	11.2	28.9	41.7	56.9
2015						1.3	12.9	31.9	54.5
2016							1.6	8.7	22.2
2017								1.2	9.8
2018									5.1
									$ 701.9
All outstanding liabilities before 2010, net of reinsurance									$ 172.1
Liability for losses and loss expenses, net of reinsurance									$ 836.4

Specialty

Incurred Claims and Loss Adjustment Expenses, Net of Reinsurance

	Unaudited	Unaudited	Unaudited	Unaudited	Unaudited	Unaudited	Unaudited	Unaudited		As of December 31, 2018	
Accident Year	2010	2011	2012	2013	2014	2015	2016	2017	2018	Total IBNR	Cumulative Reported Claims
2010	$ 9.8	$ 7.5	$ 9.0	$ 8.7	$ 8.6	$ 9.0	$ 8.0	$ 8.0	$ 7.8	0.2	n/a
2011	0.0	28.4	25.5	20.5	21.4	22.9	20.5	20.0	19.8	0.7	n/a
2012	0.0	0.0	121.0	129.3	136.2	135.3	134.7	135.0	135.2	2.3	n/a
2013	0.0	0.0	0.0	109.9	104.7	99.3	101.0	100.1	100.0	1.7	n/a
2014	0.0	0.0	0.0	0.0	116.5	119.7	113.8	111.2	109.7	2.5	n/a
2015	0.0	0.0	0.0	0.0	0.0	124.3	122.4	118.4	114.6	3.7	n/a
2016	—	—	—	—	—	—	115.8	112.4	111.6	3.6	n/a
2017	—	—	—	—	—	—	—	134.2	99.2	4.3	n/a
2018	—	—	—	—	—	—	$ —	$ —	98.4	81.0	n/a
									$ 796.3		

Cumulative Paid Claims and Loss Adjustment Expenses, Net of Reinsurance

	Unaudited	Unaudited	Unaudited	Unaudited	Unaudited	Unaudited	Unaudited	Unaudited	
Accident Year	**2010**	**2011**	**2012**	**2013**	**2014**	**2015**	**2016**	**2017**	**2018**
2010	$ 2.1	$ 4.1	$ 6.1	$ 6.5	$ 7.0	$ 7.1	$ 7.3	$ 7.4	$ 7.5
2011		3.1	12.3	15.5	16.6	17.5	18.1	18.2	18.7
2012			23.1	106.4	120.1	123.8	126.2	128.5	131.2
2013				3.2	75.0	91.1	92.4	95.4	97.0
2014					14.4	98.8	103.4	104.2	105.7
2015						4.0	91.4	105.5	108.3
2016							9.8	92.9	97.4
2017								7.9	87.8
2018									7.2
									$ 660.8
All outstanding liabilities before 2010, net of reinsurance									$ 2.1
Liability for losses and loss expenses, net of reinsurance									$ 137.6

d) Reconciliation of incurred and paid loss development triangles to the reserve for losses and loss expenses

The following table reconciles the net reserve for losses and loss expenses derived from the incurred and paid loss development triangles to the reserve for losses and loss expenses in the consolidated balance sheet as of December 31, 2018

			December 31, 2018
Net reserve for losses and loss expenses per the loss development triangles:			
Insurance:	Casualty	$	1,056.8
	Casualty - RSA acquired reserves		95.0
	Professional liability		1,277.1
	Property		187.1
	Property - RSA acquired reserves		19.6
	Programs		348.5
	Other specialty		292.2
	Other specialty - RSA acquired reserves		74.3
Reinsurance:	Property		386.4
	Casualty		836.4
	Specialty		137.6
Total net reserves for losses and loss expenses per the loss development triangles:		$	4,711.0
Reinsurance recoverable for each loss development triangle:			
Insurance:	Casualty	$	933.4
	Casualty - RSA acquired reserves		8.0
	Professional liability		647.5
	Property		180.5
	Property - RSA acquired reserves		7.5
	Programs		101.1
	Other specialty		143.2
	Other specialty - RSA acquired reserves		49.3
Reinsurance:	Property		—
	Casualty		—
	Specialty		2.4
Total reinsurance recoverables included in the loss development triangles:		$	2,072.9
Total gross reserves for losses and loss expenses included in the loss development triangles:		$	6,783.9
Other balances not included in the loss development triangles:			
	Unallocated loss adjustment expenses	$	107.2
	Other reserves not included in the loss development triangles		122.4
	Currency translation adjustment		(0.4)
	Other		4.4
			233.6
Total gross reserves for losses and loss expenses		$	7,017.5

e) Methods for estimating the reserve for losses and loss expenses, including IBNR reserves, and changes in methodologies

In general, the methods, and related assumptions, used for estimating the reserve for losses and loss expenses, including IBNR, are predicated on whether the line of business falls into one of the following two categories: short-tail line or long-tail line. In certain lines of business, claims are generally reported and paid within a relatively short period of time ("short-tail lines") during and following the policy coverage period. This generally enables the Company to determine with greater certainty the estimate of ultimate losses and loss expenses. The estimate of reserves for short-tail lines of business relies primarily on traditional loss reserving methodologies, utilizing selected paid and reported loss development factors, which are further explained below. Short-tail lines of business in the Insurance segment include general property, energy and inland

marine, all of which are included in the 'property incurred and paid loss development triangle' and aviation, accident and health, and marine, which are included in the 'other specialty incurred and paid loss development triangle'. Short-tail lines of business in the Reinsurance segment include property reinsurance in the 'property incurred and paid loss development triangle', and crop and marine, which are included in the 'specialty incurred and paid loss development triangle'.

The casualty insurance and casualty reinsurance lines of business include general liability risks, healthcare, programs, professional liability and other specialty risks, such as environmental and construction risks. For most of the Company's lines of business, claims may be reported or settled several years after the coverage period has terminated ("long-tail lines"), which increases uncertainties of the reserve estimates in such lines. In addition, the attachment points for these long-tail lines can be relatively high, making reserving for these lines of business more difficult than short-tail lines due to having to estimate whether the severity of the estimated losses will exceed the attachment point. The Company establishes a case reserve when sufficient information is gathered to make a reasonable estimate of the liability, which often requires a significant amount of information and time. Due to the lengthy reporting pattern of these casualty lines, reliance is placed on industry benchmarks supplemented by the Company's own experience. For expected loss ratio selections, the Company considers its existing experience supplemented with analysis of loss trends, rate changes and experience of peer companies. Long-tail lines of business in the Insurance segment are included in the 'casualty incurred and paid loss development triangle', 'professional liability incurred and paid loss development triangle, 'programs incurred and paid loss development triangle', and 'other specialty incurred and paid loss development triangle'. Long-tail lines of business in the Reinsurance segment include casualty reinsurance in the 'casualty incurred and paid loss development triangle'.

In the Reinsurance segment, reinsurance contracts are reviewed individually, based upon individual characteristics and loss experience emergence. Loss reserves on assumed reinsurance often have unique features that make them more difficult to estimate than direct insurance. The Company establishes loss reserves upon receipt of advice from a cedent that a reserve is merited. The Company's claims staff may establish additional loss reserves where, in their judgment, the amount reported by a cedent is potentially inadequate. The following are the most significant features that make estimating loss reserves on assumed reinsurance difficult:

- Reinsurers rely upon the cedents and reinsurance intermediaries to report losses in a timely fashion.
- Reinsurers must rely upon cedents to price the underlying business appropriately.
- Reinsurers have less predictable loss emergence patterns than direct insurers, particularly when writing excess-of-loss reinsurance.

For excess-of-loss reinsurance, cedents generally are required to report losses that either exceed 50% of the retention, have a reasonable probability of exceeding the retention or meet serious injury reporting criteria. For quota share reinsurance treaties, cedents are required to give a periodic statement of account, generally monthly or quarterly. These periodic statements typically include information regarding written premiums, earned premiums, unearned premiums, ceding commissions, brokerage amounts, applicable taxes, paid losses and outstanding losses. They can be submitted 60 to 90 days after the close of the reporting period. Some quota share reinsurance treaties have specific language regarding earlier notice of serious claims.

Reinsurance generally has a greater time lag than direct insurance in the reporting of claims. The time lag is caused by the claim first being reported to the cedent, then the intermediary (such as a broker) and finally the reinsurer. This lag can be up to six months or longer in certain cases. There is also a time lag because the insurer may not be required to report claims to the reinsurer until certain reporting criteria are met. The Company uses reporting factors based on data from the Reinsurance Association of America to adjust for time lags. The Company also uses historical treaty-specific reporting factors when applicable. Loss and premium information are entered into the reinsurance system by the Company's claims and accounting departments on a timely basis.

The expected loss ratios that are assigned to each treaty are based upon analysis and modeling performed by a team of pricing actuaries. The historical data reviewed by the team of pricing actuaries is considered in setting the reserves for each cedent. The historical data in the submissions is matched against the carried reserves for the historical treaty years.

Loss reserves do not represent an exact calculation of liability. Rather, loss reserves are estimates of what the Company expects the ultimate resolution and administration of claims will cost. These estimates are based on actuarial and statistical projections and on an assessment of currently available data, as well as estimates of future trends in claims severity and frequency, judicial theories of liability and other factors. Loss reserve estimates are refined as experience develops and as claims are reported and resolved. In addition, the relatively long periods between when a loss occurs and when it may be

reported to the Company's claims department for the casualty insurance and casualty reinsurance lines of business increase the uncertainties of our reserve estimates in such lines.

The Company utilizes a variety of standard actuarial methods in its analysis. The selections from these various methods are based on the loss development characteristics of the specific line of business. For lines of business with long reporting periods such as casualty reinsurance, the Company may rely more on an expected loss ratio method (as described below) until losses begin to develop. For lines of business with short reporting periods such as property insurance, the Company may rely more on a paid loss development method (as described below) as losses are reported relatively quickly. The actuarial methods utilized by the Company include:

Paid Loss Development Method. Ultimate losses are estimated by calculating past paid loss development factors and applying them to exposure periods with further expected paid loss development. The paid loss development method assumes that losses are paid at a consistent rate. The paid loss development method provides an objective test of reported loss projections because paid losses contain no reserve estimates. In some circumstances, paid losses for recent periods may be too varied for accurate predictions. For many coverages, especially casualty coverages, claim payments are made slowly and it may take years for claims to be fully reported and settled. These payments may be unreliable for determining future loss projections because of shifts in settlement patterns or because of large settlements in the early stages of development. Choosing an appropriate "tail factor" to determine the amount of payments from the latest development period to the ultimate development period may also require considerable judgment, especially for coverages that have long payment patterns. When necessary, the Company has had to supplement paid loss development patterns with appropriate benchmarks.

Reported Loss Development Method. Ultimate losses are estimated by calculating past reported loss development factors and applying them to exposure periods with further expected reported loss development. Since reported losses include payments and case reserves, changes in both of these amounts are incorporated in this method. This approach provides a larger volume of data to estimate ultimate losses than the paid loss development method. Thus, reported loss patterns may be less varied than paid loss patterns, especially for coverages that have historically been paid out over a long period of time but for which claims are reported relatively early and have case loss reserve estimates established. This method assumes that reserves have been established using consistent practices over the historical period that is reviewed. Changes in claims handling procedures, large claims or significant numbers of claims of an unusual nature may cause results to be too varied for accurate forecasting. Also, choosing an appropriate "tail factor" to determine the change in reported loss from the latest development period to the ultimate development period may require considerable judgment. When necessary, the Company has had to supplement reported loss development patterns with appropriate benchmarks.

Expected Loss Ratio Method. To estimate ultimate losses under the expected loss ratio method, earned premium is multiplied by an expected loss ratio. The expected loss ratio is selected utilizing industry data, historical Company data and professional judgment. This method is particularly useful for new lines of business where there are no historical losses or where past loss experience is not credible.

Bornhuetter-Ferguson Paid Loss Method. The Bornhuetter-Ferguson paid loss method is a combination of the paid loss development method and the expected loss ratio method. The amount of losses yet to be paid is based upon the expected loss ratios and the expected percentage of losses unpaid. These expected loss ratios are modified to the extent paid losses to date differ from what would have been expected to have been paid based upon the selected paid loss development pattern. This method avoids some of the distortions that could result from a large development factor being applied to a small base of paid losses to calculate ultimate losses. This method will react slowly if actual loss ratios develop differently because of major changes in rate levels, retentions or deductibles, the forms and conditions of reinsurance coverage, the types of risks covered or a variety of other changes.

Bornhuetter-Ferguson Reported Loss Method. The Bornhuetter-Ferguson reported loss method is similar to the Bornhuetter-Ferguson paid loss method with the exception that it uses reported losses and reported loss development factors.

In general, the Company will adjust its reliance on actuarial methods utilized for certain casualty lines of business and accident or treaty years within each of the operating segments shifting from the expected loss ratio method to the Bornhuetter-Ferguson reported loss method to loss development methods in varying degrees depending on the class of business, for example excess casualty versus primary casualty, and how old the accident or treaty year is. Placing greater reliance on more responsive actuarial methods for certain casualty lines of business and accident or treaty years within each of the Company's operating segments is a natural progression that allows further refinement to the estimate of the reserve for losses and loss expenses. The

Company will continue to utilize the expected loss ratio method for the most recent accident and treaty years until the Company has sufficient experience to utilize other acceptable actuarial methodologies. The Company will continue to evaluate and monitor the development of losses and the impact it has on the Company's current and future assumptions.

We will continue to evaluate and monitor the development of these losses and the impact it has on our current and future assumptions. We believe recognition of the reserve changes in the period they were recorded was appropriate since a pattern of reported losses had not emerged and the loss years were previously too immature to deviate from the expected loss ratio method in prior periods.

f) Average historical claims duration

The following is unaudited supplementary information about average historical claims duration for lines of business within each operating segment as of December 31, 2018, except for the average historical claims duration related to the reserve for losses and loss expenses acquired from RSA. It is impractical to provide the average historical claims duration information for the RSA acquisition, as the Company does not have sufficient information at this disaggregated level. Providing the average historical claims duration for the acquired RSA reserves for losses and loss expenses since acquisition does not provide meaningful information regarding the trends and uncertainties of this business as there is not sufficient historical information, and as such it has not been provided in the table below. The tables below present the average annual payout of incurred claims by age, net of reinsurance. This information provides an estimate of the average length of time it takes for losses to be incurred. As discussed above, short-tail lines will have average historical claim durations that occur over the first several years, whereas long-tail lines will have claim durations that extend over many years. The averages calculated below are simple averages based on the ratio of net paid losses in a given accident year to the most recent incurred losses for that same accident year. As such, the averages noted below may overstate or understate the actual claims duration. For example, smaller lines of business that recently started writing insurance policies could have abnormally high average claim duration percentages compared to more mature lines of business.

Years	1	2	3	4	5	6	7	8	9
Insurance									
Casualty	3%	12%	17%	17%	15%	10 %	9%	8 %	1%
Professional liability	4%	16%	19%	16%	12%	10 %	8%	4 %	4%
Property	35%	42%	16%	5%	1%	1 %	—%	— %	—%
Programs	11%	22%	20%	15%	11%	7 %	5%	1 %	2%
Other specialty	12%	23%	16%	9%	4%	7 %	17%	1 %	34%
Reinsurance									
Property	33%	36%	15%	6%	4%	2 %	1%	— %	—%
Casualty	4%	9%	13%	12%	12%	9 %	7%	6 %	4%
Specialty	11%	64%	13%	3%	3%	2 %	2%	2 %	1%

7. CEDED REINSURANCE

The Company purchases reinsurance from third-party reinsurance companies to reduce its net exposure to losses. Reinsurance provides for recovery of a portion of gross losses and loss expenses from these reinsurers. The Company remains liable to the extent that its reinsurers do not meet their obligations under the related reinsurance contracts. The Company therefore regularly evaluates the financial condition of its reinsurers and monitors concentration of credit risk. The Company believes that as of December 31, 2018, its reinsurers are able to meet, and will meet, all of their obligations under the respective agreements. The provision for unrecoverable reinsurance was $0.6 million and $0.6 million as of December 31, 2018 and 2017, respectively. The amount of reinsurance recoverable is as follows:

	2018	2017
OSLR recoverable	$ 416.7	$ 468.7
IBNR recoverable	1,780.1	1,582.2
Reinsurance recoverable	$ 2,196.8	$ 2,050.9
Reinsurance recoverable on paid losses	$ 156.9	$ 169.2

Direct, assumed and ceded premiums written and earned and losses and loss expenses incurred are as follows:

	Premiums Written	Premiums Earned	Losses and Loss Expenses
Year Ended December 31, 2018			
Direct	$ 2,408.9	$ 2,310.8	$ 1,739.9
Assumed	617.8	605.2	368.1
Ceded	(910.0)	(862.6)	(676.2)
	$ 2,116.7	$ 2,053.4	$ 1,431.8
Year Ended December 31, 2017			
Direct	$ 2,171.2	$ 2,151.1	$ 2,114.3
Assumed	641.2	620.0	648.9
Ceded	(791.3)	(752.3)	(932.3)
	$ 2,021.1	$ 2,018.8	$ 1,830.9

Of the premiums ceded during the years ended December 31, 2018 and 2017, approximately 45.0% and 48.5%, respectively, were ceded to four reinsurers.

The Company actively manages its reinsurance exposures by generally selecting reinsurers having a credit rating of "A-" or higher and monitoring the overall credit quality of its reinsurers to ensure that recoverables will be collected.

	December 31, 2018				
	A.M. Best Rating	Reinsurance Recoverable	Percentage of Total	Prepaid Reinsurance[1]	Percentage of Total
Munich Re	A+	$ 425.1	19.4%	$ 91.5	17.2%
Swiss Re	A+	235.1	10.7%	85.8	16.1%
Axis Capital	A+	200.3	9.1%	53.0	10.0%
Markel	A	157.6	7.2%	28.2	5.3%
Everest Re	A+	106.2	4.8%	27.7	5.2%
Top five reinsurers		1,124.3	51.2%	286.2	53.8%
Other reinsurers' balances		1,072.5	48.8%	246.0	46.2%
Total reinsurance recoverable		$ 2,196.8	100.0%	$ 532.2	100.0%

	December 31, 2017				
	A.M. Best Rating	Reinsurance Recoverable	Percentage of Total	Prepaid Reinsurance[1]	Percentage of Total
Munich Re	A+	$ 379.0	18.5%	$ 87.5	17.8%
Axis Capital	A+	207.8	10.1%	58.2	11.9%
Swiss Re	A+	196.5	9.6%	74.3	15.1%
Markel	A	158.8	7.7%	29.5	6.0%
Everest Re	A+	106.7	5.2%	20.8	4.3%
Top five reinsurers		1,048.8	51.1%	270.3	55.1%
Other reinsurers' balances		1,002.1	48.9%	220.3	44.9%
Total reinsurance recoverable		$ 2,050.9	100.0%	$ 490.6	100.0%

(1) Prepaid reinsurance represents unearned premiums ceded to reinsurance companies.

Approximately 97% of ceded reserves were recoverable from reinsurers who had an A.M. Best rating of "A" or higher as of December 31, 2018 and December 31, 2017 as well.

8. FUNDS HELD

The Company has also entered into a collateralized property catastrophe quota share reinsurance contract with Aeolus Re, Ltd., a Bermuda-based property catastrophe reinsurer ("Aeolus Re"), whereby the Company assumes property catastrophe business underwritten by Aeolus Re. The Company provided a multi-year capital commitment to support the business being underwritten by Aeolus Re. To the extent that capital is not utilized to support the business being underwritten by Aeolus Re, as all obligations have been settled, the capital is returned to the Company. To the extent the losses are in excess of the premiums written, the capital is utilized to pay the claims. The capital commitment is recorded in "funds held" on the consolidated balance sheets. The funds held balance related to the Aeolus Re contract as of December 31, 2018 and 2017 was $546.6 million and $407.6 million, respectively. For the years ended December 31, 2018 and 2017, the premiums written assumed by the Company through the collateralized property catastrophe quota share reinsurance contract with Aeolus Re were $49.1 million and $35.1 million, respectively.

9. GOODWILL AND INTANGIBLE ASSETS

The following table shows the Company's goodwill and intangible assets at December 31, 2018 and 2017:

	Goodwill	Indefinite-Lived Intangible Assets	Finite-Lived Intangible Assets		
	Net Carrying Value	Net Carrying Value	Gross Carrying Value	Accumulated Amortization	Net Carrying Value
Balance at December 31, 2017	$ 390.0	23.9	121.2	(46.4)	74.8
Amortization of intangible assets	—	—	—	(9.3)	(9.3)
Foreign currency translation adjustment	(1.1)	—	(0.7)	—	(0.7)
Balance at December 31, 2018	$ 388.9	$ 23.9	$ 120.5	$ (55.7)	$ 64.8

As of December 31, 2018, goodwill of $385.0 million and $3.9 million was allocated to the Insurance segment and Reinsurance segment, respectively. The impairment reviews for goodwill and indefinite-lived intangibles did not result in the recognition of impairment losses for the years ended December 31, 2018 and 2017. The net carrying value of the goodwill is net of accumulated impairment charges of $0.2 million that occurred prior to December 31, 2017.

As of December 31, 2018, the net carrying value of the finite-lived intangible assets is net of accumulated impairment charges of $9.2 million. As of December 31, 2018, the net carrying value of the finite-lived intangible assets is comprised of distribution network intangible assets of $63.2 million and customer renewal intangible assets of $1.6 million. As of December 31, 2017, the net carrying value of the finite-lived intangible assets was comprised of distribution network intangible assets of $70.2 million and customer renewal intangible assets of $4.6 million.

The estimated amortization expense for each of the five succeeding fiscal years and thereafter related to the Company's finite-lived intangible assets is as follows:

	Amount
2019	$ 7.7
2020	6.5
2021	6.3
2022	6.3
2023	5.8
2024 and thereafter	32.2
Total	$ 64.8

10. DEBT AND FINANCING ARRANGEMENTS

a) Financing Structure

The following table shows the Company's financing structure:

	Outstanding[1]		Balance[2]	
December 31, 2018				
External surplus note due 2037		22.5		22.5
$900 million secured letter of credit facility — uncommitted		372.7		—
	$	395.2	$	22.5
December 31, 2017				
External surplus note due 2037		22.5		22.5
$900 million secured letter of credit facility — uncommitted		389.8		—
	$	412.3	$	22.5

[1] Indicates utilization of commitment amount, not drawn borrowings where applicable.

[2] Represents the principal amount borrowed, net of unamortized discount and debt issuance costs.

b) Senior Surplus Note Due 2037

In 2017, the reciprocal insurance entity that the Company consolidates issued a senior surplus note for $22.5 million with a floating interest rate equal to the applicable three-month U.S. Dollar LIBOR plus 7.0% effective interest per annum, in order to fund the formation of the reciprocal insurance entity (see note 2). Following the seventh anniversary of the issue date, the effective interest rate shall increase one percentage point each year not to exceed 12.0%. The interest payments are payable semi-annually and shall be made only after prior written approval is obtained from the Florida Office of Insurance Regulation. The outstanding balance of the note is included in "other long-term debt" on the consolidated balance sheet.

c) Credit Facilities

Allied World Bermuda has a collateralized amended letter of credit facility with Citibank Europe plc that has been and will continue to be used to issue standby letters of credit. The maximum aggregate amount available under this letter of credit facility as of December 31, 2018 and 2017 was $900.0 million on an uncommitted basis.

d) Debt Maturities

The following table reflects the Company's debt maturities, which includes its senior notes and other long-term debt:

	Amount	
2019	$	—
2020		—
2021		—
2022		—
2023		—
2024 and thereafter		22.5
Total	$	22.5

11. INCOME TAXES

Under current Bermuda law, Allied World Bermuda and its Bermuda subsidiaries are not required to pay taxes in Bermuda on either income or capital gains. Allied World Bermuda and Allied World Assurance Company, Ltd have received an assurance from the Bermuda Minister of Finance under the Exempted Undertakings Tax Protection Act 1966 of Bermuda, that in the event of any such taxes being imposed, Allied World Bermuda and Allied World Assurance Company, Ltd will be exempted until March 2035.

Certain subsidiaries of Allied World Bermuda file U.S. federal income tax returns and various U.S. state income tax returns, as well as income tax returns in Canada, Hong Kong, Ireland, Singapore, Switzerland and the United Kingdom. The Company has open tax years that are potentially subject to examinations by local tax authorities, in the following major tax jurisdictions: the U.S., 2011 to 2018; the United Kingdom, 2017 and 2018; Ireland, 2014 to 2018; Switzerland, 2017 to 2018; Hong Kong, 2012 to 2018; and Singapore, 2014 to 2018.

Management has deemed all material tax positions to have a greater than 50% likelihood of being sustained based on technical merits if challenged. The Company does not expect any material unrecognized tax benefits within 12 months of December 31, 2018.

The components of income tax expense are as follows:

	Year Ended December 31,	
	2018	2017
Current income tax (benefit) expense	$ 6.6	$ (13.3)
Deferred income tax expense (benefit)	(20.5)	6.5
Income tax benefit	$ (13.9)	$ (6.8)

Our income or loss is primarily sourced from our Bermuda, U.S., European, including Switzerland, and Asia Pacific operations. The income (loss) before income taxes for these operations are as follows:

	Year Ended December 31,	
	2018	2017
Bermuda	$ 33.3	$ (9.2)
United States	(83.2)	(197.9)
All other jurisdictions	13.9	(64.3)
Income (loss) before income taxes	$ (36.0)	$ (271.4)

Deferred income taxes reflect the tax impact of temporary differences between the carrying amounts of assets and liabilities for financial reporting and income tax purposes, and are stated at the various enacted jurisdictional tax rates expected to be in effect when the reported amounts are recovered or settled. The significant components of the net deferred tax assets are as follows:

	December 31,	
	2018	2017
Deferred tax assets:		
Reserve for losses and loss expenses	$ 17.6	$ 12.9
Equity compensation	4.0	2.8
Unearned premium	31.1	10.2
Deferred acquisition costs	—	11.4
Mark-to-market losses	19.7	—
Tax credits	1.1	1.2
Net loss carryforward	34.9	41.0
Other	10.6	10.8
Total deferred tax assets	119.0	90.3
Deferred tax liabilities:		
Intangible assets	(13.3)	(14.8)
Depreciation	(1.7)	(2.0)
Deferred acquisition costs	(15.6)	—
Other	(1.0)	(0.6)
Total deferred tax liabilities	(31.6)	(17.4)
Net deferred taxes before valuation allowance	87.4	72.9
Valuation allowance	(30.2)	(36.4)
Net deferred tax assets	$ 57.2	$ 36.5

The valuation allowance reported in the current period relates to net operating loss carryforwards for the European and Asia Pacific operations as it is unlikely those operations will have sufficient income to utilize the net loss carryforwards in the near term. The valuation allowance decreased by $6.2 million during the year ended December 31, 2018 compared to the year ended December 31, 2017. The decrease in the valuation allowance was due to the decrease in the net loss carryforwards, which was caused by the significant catastrophe-related losses the Company incurred during the prior year. The net loss carryforwards from the United Kingdom and Asia Pacific operations do not expire.

Current tax receivable and payable has been included in “other assets” and “accounts payable and accrued liabilities” on the consolidated balance sheets, respectively. Current taxes receivable or payable was as follows:

	December 31,	
	2018	2017
Current tax receivable	$ 10.5	$ 10.9
Current tax payable	$ 3.4	$ 0.2

The expected tax provision has been calculated using the pre-tax accounting income in each jurisdiction multiplied by that jurisdiction’s applicable statutory tax rate. The statutory tax rates for our Bermuda, U.S. (for tax years 2018 and prior), Canada, Hong Kong, Ireland, Singapore and United Kingdom operations are 0%, 21%, 15%, 16.5%, 12.5%, 17% and 20%, respectively. The reconciliation between the Company’s effective tax rate on pre-tax accounting income and the expected tax rate is as follows:

	Year Ended December 31,	
	2018	2017
Expected tax rate	— %	— %
Income not subject to income tax	(1.5)%	— %
Valuation allowance	(17.2)%	(9.6)%
Foreign taxes at local expected tax rates	(33.3)%	11.7 %
Impact of U.S. Tax reform	— %	(11.2)%
Excess tax benefit	— %	6.1 %
Prior year refunds and adjustments	2.8 %	0.3 %
Provision for Base Erosion Anti-Abuse Tax (BEAT)	5.3 %	— %
Other	5.3 %	0.2 %
Effective tax rate	(38.6)%	(2.5)%

12. SHAREHOLDERS' EQUITY

a) Authorized shares

The issued share capital consists of the following:

	December 31,	
	2018	2017
Common shares issued and fully paid, par value $1 per share	1,000,000	1,000,000
Share capital at end of year	$ 1.0	$ 1.0

b) Dividends

Dividends declared on common stock were $225.7 million and $497.0 million for the years ended December 31, 2018 and 2017, respectively.

13. EMPLOYEE BENEFIT PLANS

a) Share based awards

The Company participates in the Fairfax Financial Restricted Share Plan, which generally provides officers, key employees and directors who were employed by or provided services to the Company with awards of restricted shares of Fairfax common stock. The restricted share awards generally vest over three or five years. The grant date fair value is measured based on the closing price of Fairfax's common shares on the date of grant, converted to United States dollars.

The activity related to the Company's restricted share awards is as follows:

	Year Ended December 31, 2018	
	Number of Awards	Weighted Average Grant Date Fair Value
Outstanding at beginning of year	46,434	$ 430.71
Restricted share awards granted	51,315	503.12
Restricted share awards forfeited	(3,430)	503.12
Restricted share awards fully vested	—	—
Outstanding restricted share awards at end of year	94,319	$ 470.28

The Company recorded compensation expense of $9.1 million and $2.3 million during the year ended December 31, 2018 and December 31, 2017, respectively, for these awards. The remaining vesting period for these awards is 3.5 years as of December 31, 2018. No restricted share awards are vested as of December 31, 2018.

b) Pension Plans

The Company provides defined contribution retirement plans for its employees and officers. Contributions are made by the Company, and in some locations, these contributions are supplemented by the local plan participants. Contributions are based on a percentage of the participant’s base salary depending upon competitive local market practice and vesting provisions meeting legal compliance standards. The amount that an individual employee or officer can contribute may also be subject to regulatory requirements relating to the country of which the individual is a citizen. The Company incurred expenses for these defined contribution arrangements of $11.4 million and $11.8 million for the years ended December 31, 2018 and 2017, respectively.

c) Employee Share Purchase Plan

Under the Allied World Assurance Company Holdings, GmbH (Non-Qualified) Employee Share Purchase Plan (“ESPP”), eligible employees are given the election to purchase Fairfax common shares in an amount up to 10% of their annual base salary. The Company matches these contributions by purchasing, on the employee's behalf, a number of Fairfax common shares equal in value to 30% of the employee's contribution. In the event that the Company achieves a net combined ratio in any calendar year that is less than 100%, then the Company allocates an additional contribution in an amount equal to 20% of the aggregate amount of the participant contributions during the calendar year. The Company recognized compensation expense under the ESPP of $2.1 million for the year ended December 31, 2018.

14. COMMITMENTS AND CONTINGENCIES

a) Concentrations of Credit Risk

Credit risk arises out of the failure of a counterparty to perform according to the terms of the contract.

The Company’s investment portfolio is managed pursuant to guidelines that follow prudent standards of diversification. The guidelines limit the allowable holdings of a single issue and issuers. The Company believes that there are no significant concentrations of credit risk associated with its investment portfolio. As of December 31, 2018 and 2017, substantially all of the Company’s cash and investments were held with one custodian.

Insurance balances receivable primarily consist of net premiums due from insureds and reinsureds. The Company believes that the counterparties to these receivables are able to meet, and will meet, all of their obligations. The Company’s credit risk is further reduced by the contractual right to offset loss obligations or unearned premiums against premiums receivable. The insurance balances receivable that are outstanding greater than 90 days was $13.6 million as of December 31, 2018, which represented 1.9% of the total receivable balance. Given the trend of writing more retail business, the Company has recorded an allowance for doubtful accounts against insurance balances receivable of $3.4 million as of December 31, 2018.

b) Operating Leases

The Company leases office space under operating leases expiring in various years through 2032. The following are future minimum rental payments as of December 31, 2018:

	Amount
2019	$ 19.2
2020	19.8
2021	18.6
2022	15.2
2023	13.1
2024 and thereafter	69.3
	$ 155.2

Total rent expense for the years ended December 31, 2018, and 2017 was $18.1 million, and $19.9 million, respectively. The rent expense for the years ended December 31, 2018 and 2017 are net of sublease income of $1.5 million and $1.4 million, respectively.

c) Producers

The three largest individual producers as a percentage of gross premiums written are as follows:

	Year Ended December 31,	
	2018	2017
Marsh & McLennan Companies, Inc.	18%	20%
Aon Corporation	12%	13%
Willis Group Holdings	8%	9%

d) Legal Proceedings

The Company, in common with the insurance industry in general, is subject to litigation and arbitration in the normal course of its business. These legal proceedings generally relate to claims asserted by or against the Company in the ordinary course of insurance or reinsurance operations. Estimated amounts payable under these proceedings are included in the reserve for losses and loss expenses in the Company’s consolidated balance sheets. As of December 31, 2018, the Company was not a party to any material legal proceedings arising outside the ordinary course of business that management believes will have a material adverse effect on the Company’s results of operations, financial position or cash flow.

e) Guarantee

In August 2011, the Company agreed to guarantee all of the insurance and reinsurance contracts of Allied World AG, where such obligations have become due and payable in accordance with their terms. The guarantee has been provided so that Allied World AG may obtain financial strength ratings similar to that of the Company.

This guarantee shall terminate after twelve months written notice to Standard & Poor’s (“S&P”), with a copy of such notice published in a national newspaper in Switzerland nominated by the Guarantor, of a) the date in which all of the guaranteed obligations are paid in full or b) the date on which the Primary Obligor obtains A+ or higher insurer financial strength ratings from S&P without the assistance of the guarantee.

15. STATUTORY CAPITAL AND SURPLUS

The minimum required statutory capital and surplus is the amount of statutory capital and surplus necessary to satisfy regulatory requirements based on the Company's current operations. The statutory capital and surplus and minimum required statutory capital and surplus for the Company's most significant regulatory jurisdictions at December 31, 2018 and 2017 were as follows:

	December 31, 2018		December 31, 2017	
	Statutory Capital and Surplus	Minimum Required Statutory Capital and Surplus	Statutory Capital and Surplus	Minimum Required Statutory Capital and Surplus
Bermuda	$ 2,673.2	$ 525.4	$ 2,741.1	$ 785.5
United States	1,000.2	306.9	1,165.3	310.5
Ireland	380.6	95.2	410.3	92.8

There were no state-prescribed or permitted regulatory accounting practices for any of our insurance entities that resulted in reported statutory surplus that differed from that which would have been reported under the prescribed practices of the respective regulatory authorities, including the National Association of Insurance Commissioners. Statutory accounting under the prescribed practices of the respective regulatory authorities differs from U.S. GAAP accounting in the treatment of various items, including reporting of investments, acquisition costs and deferred income taxes.

The statutory net income (loss) for the Company's most significant regulatory jurisdictions for the years ended December 31, 2018 and 2017 was as follows:

	Year Ended December 31,	
	2018	2017
Bermuda	$ (22.0)	$ (214.0)
United States	(76.4)	(30.3)
Ireland	10.3	11.5

At December 31, 2018, the maximum amount of ordinary dividends or distributions that can be paid, without prior regulatory approval, for the Company's most significant regulatory jurisdictions, were as follows:

	December 31, 2018
Bermuda	$ 668.3
United States	—
Ireland	17.3

a) Bermuda

The Company's Bermuda subsidiary, Allied World Assurance Company, Ltd, is registered under the Bermuda Insurance Act 1978 and Related Regulations as amended. As a Class 4 insurer, Allied World Assurance Company, Ltd is required to maintain minimum solvency standards and to hold available statutory capital and surplus equal to or exceeding the enhanced capital requirements as determined by the Bermuda Monetary Authority under the Bermuda Solvency Capital Requirement model ("BSCR model"). The BSCR model is a risk-based capital model that provides a method for determining an insurer's minimum required capital taking into account the risk characteristics of different aspects of the insurer's business. In addition, this subsidiary is required to maintain a minimum liquidity ratio. As of December 31, 2018 and 2017, this subsidiary met the requirements.

b) United States

The Company's U.S. insurance subsidiaries are subject to the insurance laws and regulations of the states in which they are domiciled, and also states in which they are licensed or authorized to transact business. These laws also restrict the amount of ordinary shareholder dividends the subsidiaries can pay. The restrictions are generally based on statutory surplus and/or statutory net income as determined in accordance with the relevant statutory accounting requirements of the individual domiciliary states. The U.S. subsidiaries are required to file annual statements with insurance regulatory authorities prepared on an accounting basis prescribed or permitted by such authorities. The U.S. subsidiaries are also required to maintain minimum levels of solvency and liquidity as determined by law, and comply with capital requirements and licensing rules. As of December 31, 2018 and 2017, the actual levels of solvency, liquidity and capital of each U.S. subsidiary were in excess of the minimum levels required.

c) Ireland

The Company's Irish insurance subsidiary is regulated by the Central Bank of Ireland pursuant to the Insurance Acts 1909 to 2018 (as amended) the Central Bank Acts 1942 to 2018 and all statutory instruments relating to insurance made or adopted under the European Communities Acts 1972 to 2012, including the European Union (Insurance and Reinsurance) Regulations, 2015 (as amended). This subsidiary is required to maintain a minimum level of capital. As of December 31, 2018 and 2017, these requirements were met. The amount of dividends that this subsidiary is permitted to distribute is restricted to accumulated realized profits that have not been capitalized or distributed, less accumulated realized losses that have not been written off. The solvency and capital requirements must still be met following any distribution.

d) Branch Offices

The Company's insurance subsidiaries maintain branch offices in Australia, Canada, Hong Kong, Labuan, Singapore, Switzerland and the United Kingdom. As branch offices are not considered separate legal entities, the required and actual statutory capital and surplus amounts for each jurisdiction in the table above include amounts related to the branch offices. These branch offices are subject to additional minimum capital or asset requirements in their countries of domicile. At December 31, 2018 and 2017, the actual capital and surplus for each of these branches exceeded the relevant local regulatory requirements.

16. RELATED PARTY TRANSACTIONS

The Company has entered into various assumed and ceded reinsurance contracts with several entities that are controlled by Fairfax. The following summarizes the balances and activity from the date of acquisition by Fairfax to December 31, 2018:

	As of December 31, 2018 and for the year ended December 31, 2018	As of December 31, 2017 and for the period from July 6, 2017 to December 31, 2017
Balance Sheet:		
Assets:		
Reinsurance recoverables	$ 108.8	$ 80.3
Insurance balances receivable	4.3	—
Prepaid reinsurance	17.6	11.3
Reinsurance recoverables on paid losses	11.9	3.8
Liabilities:		
Reserve for losses and loss expenses	14.0	12.1
Unearned premiums	4.5	0.1
Deferred ceding commission income	4.5	3.4
Reinsurance balances payable	16.4	3.6
Income Statement:		
Assumed written premiums	13.7	—
Assumed earned premiums	9.3	0.2
Ceded written premiums	(44.4)	(9.3)
Ceded earned premiums	(38.1)	(12.0)
Assumed losses and loss expenses	(6.7)	(1.0)
Ceded losses and loss expenses	55.2	14.3
Ceding commission income earned	7.5	3.2
Investment management fees	(21.4)	(6.0)

The Company's subsidiaries have entered into investment management agreements with Fairfax and its wholly-owned subsidiary, Hamblin Watsa Investment Counsel Ltd. These agreements generally provide for an annual base fee, calculated and paid quarterly based upon each subsidiary's average invested assets for the preceding three months, and an incentive fee, which is payable if realized gains on equity investments exceed certain benchmarks. These agreements may be terminated by either party on 30 days notice. During the year ended December 31, 2018 and December 31, 2017, the Company incurred $21.4 million and $6.0 million in investment management fees, and were included as a reduction to net investment income in the consolidated financial statements.

Effective in 2018, the Company entered into an agreement to act as the fronting company for non-U.S. Fairfax affiliate companies that participate in the Fairfax Internal Reinsurance Vehicle (the "FIRV"). The agreement provides that certain Fairfax affiliate companies cede activity to the fronting company who then cedes that activity to another Fairfax designated entity. The Company receives a fronting fee for the administration of the cessions. The assumed and ceded activity related to the FIRV is recorded in insurance balances receivable, reinsurance payable, and ceding commission income earned. The fronting fee for the year ended December 31, 2018 is $0.3 million and is recorded in "acquisition costs" in the consolidated income statement.

The Company has also entered into various assumed reinsurance contracts with several entities that are controlled by Allied World Switzerland but are not consolidated by the Company. The following summarizes the balances and activity for the year ended December 31, 2018 and December 31, 2017:

	As of December 31, 2018 and for the year ended December 31, 2018	As of December 31, 2017 and for the year ended December 31, 2017
Balance Sheet:		
Assets:		
Reinsurance recoverables	$ 9.8	$ 10.2
Liabilities:		
Reserve for losses and loss expenses	114.5	135.5
Unearned premiums	27.9	7.6
Deferred ceding commission income	9.6	7.5
Income Statement:		
Assumed written premiums	49.7	72.3
Assumed earned premiums	29.4	64.9
Assumed losses and loss expenses	(9.5)	(81.0)
Acquisition cost expenses	(18.5)	(19.8)

17. RESTRICTED CASH

The following table provides a reconciliation of cash, cash equivalents, and restricted cash reported within the consolidated balance sheets that sum to the total of the same amounts shown in the statement of cash flows.

	December 31, 2018	December 31, 2017
Cash and cash equivalents	477.4	931.5
Restricted cash	151.8	97.2
Total cash, cash equivalents, and restricted cash shown in the statement of cash flows	629.2	1,028.7

Restricted cash primarily relates to cash held in trust accounts in favor of cedents, other counterparties or government authorities, as well as accounts that are pledged as collateral for the Company’s letter of credit facilities.

18. SUBSEQUENT EVENTS

The Company considers events or transactions that occur after the consolidated balance sheet date but before the consolidated financial statements are available to be issued to provide additional evidence relative to certain estimates or to identify matters that require additional disclosure. Subsequent events have been evaluated through April 26, 2019, the date that the consolidated financial statements were available to be issued.