SOMPO INTERNATIONAL

Audited Consolidated Financial Statements

Sompo International Holdings Ltd.

For the year ended December 31, 2018

With Report of Independent Auditors



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Independent Auditor's Report

The Audit Committee
Sompo International Holdings Ltd.

We have audited the accompanying consolidated financial statements of Sompo International Holdings Ltd., which comprise the consolidated balance sheet as of December 31, 2018, and the related consolidated statements of loss and comprehensive loss, changes in shareholders' equity and cash flows for the year then ended, and the related notes to the consolidated financial statements.

Management's Responsibility for the Financial Statements

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

Auditor's Responsibility

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

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

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

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Opinion

In our opinion, the financial statements referred to above present fairly, in all material respects, the consolidated financial position of Sompo International Holdings Ltd. at December 31, 2018, and the consolidated results of its operations and its cash flows for the year then ended in conformity with U.S. generally accepted accounting principles.

Required Supplementary Information

Accounting principles generally accepted in the United States require that the incurred and paid claims development prior to the most recent year and the average annual percentage payout of incurred claims disclosed on pages 29 through 38 be presented to supplement the financial statements. Such information, although not a part of the financial statements, is required by the Financial Accounting Standards Board who considers it to be an essential part of financial reporting for placing the 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, 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 financial statements, and other knowledge we obtained during our audit of the 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.

Adoption of ASU No. 2016-01, Recognition and Measurement of Financial Assets and Financial Liabilities

As discussed in Note 2 to the consolidated financial statements, the Company changed its method for recognition and measurement of equity investments as a result of the adoption of the amendments to the FASB Accounting Standards Codification resulting from Accounting Standards Update No. 2016-01, "Recognition and Measurement of Financial Assets and Financial Liabilities". Our opinion is not modified with respect to this matter.

Ernst + Young Ltd.

Hamilton, Bermuda
April 8, 2019

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SOMPO INTERNATIONAL HOLDINGS LTD.
CONSOLIDATED BALANCE SHEET
DECEMBER 31, 2018
(In thousands of United States dollars except share amounts)

ASSETS		
Investments		
Fixed maturity investments, trading at fair value (amortized cost: $896,955)	$	874,002
Fixed maturity investments, available for sale at fair value (amortized cost: $6,950,706)		6,880,277
Short-term investments, trading at fair value (amortized cost: $7,728)		7,625
Short-term investments, available for sale at fair value (amortized cost: $73,207)		73,180
Equity securities, at fair value (cost: $260,205)		245,443
Other investments		651,854
Total investments		8,732,381
Cash and cash equivalents		1,952,589
Premiums receivable, net		2,071,754
Insurance and reinsurance balances receivable		103,562
Deferred acquisition costs		358,028
Prepaid reinsurance premiums		1,048,442
Reinsurance recoverable on unpaid losses		3,171,037
Reinsurance recoverable on paid losses		912,093
Accrued investment income		50,418
Goodwill and intangible assets		1,793,741
Net receivable on sales of investments		70,001
Other assets		441,294
Total assets	$	20,705,340
LIABILITIES		
Reserve for losses and loss expenses	$	7,919,297
Reserve for unearned premiums		2,878,167
Reinsurance balances payable		1,460,578
Payable under repurchase agreements		80,883
Debt		721,213
Net payable on purchases of investments		155,628
Deferred tax liability		9,452
Other liabilities		513,183
Total liabilities		13,738,401
Commitments and contingent liabilities		—
SHAREHOLDERS' EQUITY		
Common shares, ordinary - 4 issued and outstanding)		—
Additional paid-in capital		7,461,742
Accumulated other comprehensive loss		(72,822)
Retained loss		(541,979)
Total shareholder's equity available to Sompo International		6,846,941
Non-controlling interests		119,998
Total shareholders' equity		6,966,939
Total liabilities and shareholders' equity	$	20,705,340

See accompanying notes to the consolidated financial statements.

SOMPO INTERNATIONAL HOLDINGS LTD.
CONSOLIDATED STATEMENT OF LOSS AND COMPREHENSIVE LOSS
FOR THE YEAR ENDED DECEMBER 31, 2018
(In thousands of United States dollars)

Revenues		
Gross premiums written	$	5,960,748
Ceded premiums written		(2,640,995)
Net premiums written		3,319,753
Change in unearned premiums		(233,515)
Net premiums earned		3,086,238
Net investment income		242,719
Net realized and unrealized losses		(101,375)
Net impairment losses recognized in net loss		(5,235)
Other underwriting income		6,328
Total revenues		3,228,675
Expenses		
Net losses and loss expenses		2,130,735
Acquisition expenses		559,516
General and administrative expenses		318,253
Corporate expenses		9,842
Amortization of goodwill and intangibles		375,623
Loss on impairment of intangibles		9,400
Net foreign exchange gains		(11,563)
Interest expense		31,134
Losses on defined benefit scheme and legal settlements		15,546
Total expenses		3,438,486
Loss before income taxes		(209,811)
Income tax benefit		2,097
Net loss		(207,714)
Net loss attributable to non-controlling interests		41,058
Net loss available to Sompo International	$	(166,656)
Comprehensive loss		
Net loss	$	(207,714)
Other comprehensive loss		
Net unrealized holding losses on investments arising during the period (net of other-than-temporary impairment losses recognized in other comprehensive loss, reclassification adjustment and applicable deferred income taxes of $736)		(73,003)
Foreign currency translation adjustments		(59,886)
Other comprehensive loss		(132,889)
Comprehensive loss		(340,603)
Comprehensive loss attributable to non-controlling interests		41,058
Comprehensive loss attributable to Sompo International	$	(299,545)

See accompanying notes to the consolidated financial statements.

SOMPO INTERNATIONAL HOLDINGS LTD.
CONSOLIDATED STATEMENT OF CHANGES IN SHAREHOLDERS' EQUITY
FOR THE YEAR ENDED DECEMBER 31, 2018
(In thousands of United States dollars)

Common shares	
Balance, beginning and end of year	—
Additional paid-in capital	
Balance, beginning of year	7,361,742
Contribution of capital received from the parent	100,000
Balance, end of year	7,461,742
Accumulated other comprehensive loss	
Cumulative foreign currency translation adjustments:	
Balance, beginning of year	71,712
Foreign currency translation adjustments	(59,886)
Balance, end of year	11,826
Unrealized holding gains (losses) on investments, net of deferred taxes:	
Balance, beginning of year	7,150
Cumulative effect of adoption of ASU 2018-02	(466)
Cumulative effect of adoption of ASU 2016-01	(18,329)
Net unrealized holding losses arising during the year, net of other-than-temporary impairment losses and reclassification adjustment	(73,003)
Balance, end of year	(84,648)
Total accumulated other comprehensive loss	(72,822)
Retained loss	
Balance, beginning of year	(387,572)
Cumulative effect of adoption of ASU 2018-02	466
Cumulative effect of adoption of ASU 2016-01	18,329
Net loss	(207,714)
Net loss attributable to non-controlling interests	41,058
Dividends to parent	(6,546)
Balance, end of year	(541,979)
Total shareholder's equity available to Sompo International	6,846,941
Non-controlling interests	119,998
Total shareholders' equity	$ 6,966,939

See accompanying notes to the consolidated financial statements.

SOMPO INTERNATIONAL HOLDINGS LTD.
CONSOLIDATED STATEMENT OF CASH FLOWS
FOR THE YEAR ENDED DECEMBER 31, 2018
(In thousands of United States dollars)

Cash flows provided by operating activities:		
Net loss	$	(207,714)
Adjustments to reconcile net loss to net cash provided by operating activities:		
Amortization of net premium on investments		22,755
Amortization of goodwill, intangibles and depreciation		393,846
Net realized and unrealized losses		101,375
Loss on impairment of intangible assets		9,400
Net impairment losses recognized in net loss		5,235
Deferred taxes		(8,382)
Equity in earnings of other investments		1,632
Premiums receivable, net		(167,809)
Deferred acquisition costs		(123,746)
Prepaid reinsurance premiums		(109,360)
Reinsurance recoverable		(937,102)
Reserve for losses and loss expenses		755,770
Reserve for unearned premiums		336,978
Reinsurance balances payable		394,745
Other		35,017
Net cash flows provided by operating activities		502,640
Cash flows used in investing activities		
Proceeds from sales and maturities of trading investments		984,829
Proceeds from sales and maturities of available for sale investments		3,916,048
Proceeds from the redemption of other investments		38,529
Purchases of trading investments		(145,869)
Purchases of available for sale investments		(4,749,981)
Purchases of other investments		(129,641)
Net purchases of other assets		(12,027)
Purchases of fixed assets		(21,396)
Proceeds from sale of fixed assets		1,835
Net cash paid for subsidiary acquisition		(303,937)
Net cash flows used in investing activities		(421,610)
Cash flows provided by financing activities		
Issuance of common shares		100,000
Net distributions to non-controlling interests		(15,256)
Proceeds from issuance of repurchase agreements		174,615
Repayment of repurchase agreements		(93,732)
Proceeds from issuance of debt		20
Repayment of debt		(5,034)
Dividends on common shares		(6,546)
Net cash flows provided by financing activities		154,067
Effect of exchange rate changes on cash and cash equivalents		(25,764)
Net increase in cash and cash equivalents		209,333
Cash and cash equivalents, beginning of year		1,743,256
Cash and cash equivalents, end of year	$	1,952,589

See accompanying notes to the consolidated financial statements.

1. Organization

Sompo International Holdings Ltd. ("Sompo International", together with its subsidiaries, the "Company") was organized as a Bermuda holding company on March 24, 2017, and is a wholly-owned subsidiary of Sompo Japan Nipponkoa Insurance Inc. ("SJNKI"). SJNKI is an insurer based in, and licensed under, the laws of Japan. SJNKI is a wholly-owned subsidiary of Sompo Holdings, Inc. ("Sompo Holdings"), a publicly-owned holding company, formed under the laws of Japan, whose capital stock is traded on the Tokyo Stock Exchange.

On March 28, 2017, (the "Closing Date"), Sompo Holdings completed its acquisition of Endurance Specialty Holdings Ltd. ("Endurance Holdings") following receipt of all shareholder and regulatory approvals. Pursuant to the agreement and plan of merger entered on October 5, 2016 (the "Merger Agreement"), Endurance Holdings ordinary shares ceased trading on the New York Stock Exchange and each Endurance Holdings issued and outstanding ordinary share was canceled and converted into the right to receive $93.00 per share. Under the terms of the Merger Agreement, the aggregate consideration for the acquisition was $6,288.7 million in cash.

On September 27, 2017, Sompo International entered into a Stock and Asset Purchase and Sale Agreement (the "Purchase and Sale Agreement") with Endurance Holdings. Pursuant to the terms of the Purchase and Sale Agreement, Endurance Holdings transferred substantially all of its assets and liabilities to Sompo International, effective September 27, 2017 (the "Asset Transfer Date"). The net assets of Endurance Holdings were transferred to Sompo International on the Asset Transfer Date at book value in accordance with accounting principles generally accepted in the United States ("U.S. GAAP") and were accounted for as a business combination with an entity under common control.

On December 31, 2017, Sompo International undertook an internal restructuring and as a result, Endurance U.S. Holdings Corp. ("Endurance U.S. Holdings"), a wholly-owned indirect subsidiary of Sompo International, merged with Sompo America Holdings Inc. ("Sompo America"), an affiliated wholly-owned subsidiary of SJNKI, at U.S. GAAP book value, with Endurance U.S. Holdings being the surviving entity. Consequently, three operating subsidiaries of Sompo America became wholly-owned subsidiaries of Endurance U.S. Holdings: Sompo America Insurance Company ("Sompo America Insurance"), Sompo America Fire & Marine Insurance Company ("Sompo America Fire & Marine"), and Sompo Seguros Mexico, S.A. de C.V. ("Sompo Mexico").

Furthermore, on May 1, 2018, Endurance Specialty Insurance Ltd. ("Endurance Bermuda"), a wholly-owned subsidiary of Sompo International, acquired Sompo Japan Nipponkoa Insurance Company of Europe Limited ("SJNKE") and Sompo Japan Nipponkoa Martin & Boulart SAS ("SJNK M&B"), affiliated wholly-owned subsidiaries of SJNKI. For additional information, see Note 3, Business combinations.

These transactions were considered as transactions with entities under common control and were recorded based on their carrying value as of the date of common control on March 28, 2017. The carrying value of Endurance Holdings included the purchase price allocations and related goodwill and intangible assets which resulted from applying push down accounting related to the acquisition of Endurance Holdings by Sompo Holdings. In accordance with current accounting guidance, the Company retrospectively adjusted its prior year balances to reflect the inclusion of SJNKE and SJNK M&B from March 28, 2017.

On June 1, 2018 (the "Lexon Acquisition Date"), the Company completed the acquisition of the operating subsidiaries of Lexon Surety Group LLC, comprising Lexon Insurance Company ("Lexon Insurance") and Bond Safeguard Insurance Company ("Bond Safeguard") (collectively, "Lexon"), which offer a broad array of commercial and contract surety bonds, court and probate bonds, and U.S. Custom bonds through a network of agents in the United States. The Company's Consolidated Statement of Loss and Comprehensive Loss for the year ended December 31, 2018 includes the results of operations of Lexon from June 1, 2018. For additional information on the acquisition of Lexon, see Note 3, Business combinations.

1. Organization, cont'd.

Sompo International writes specialty lines of insurance and reinsurance on a global basis through its wholly-owned operating subsidiaries:

Operating Subsidiaries	Domicile
Endurance Specialty Insurance Ltd. ("Endurance Bermuda")	Bermuda
Blue Capital Management Ltd. ("BCML"), manager of Blue Water Re Ltd.	Bermuda
Endurance Worldwide Insurance Limited ("Endurance U.K.")	England
Endurance at Lloyd's, managing agent for Lloyd's Syndicate 5151	England
Sompo Japan Nipponkoa Insurance Company of Europe Limited ("SJNKE")	England
SI Insurance (Europe), SA ("SIIE")	Luxembourg
Sompo Seguros Mexico, S.A. de C.V. ("Sompo Mexico")	Mexico
Endurance Assurance Corporation ("Endurance Assurance")	Delaware
Endurance American Insurance Company ("Endurance American")	Delaware
Endurance American Specialty Insurance Company ("Endurance American Specialty")	Delaware
Endurance Risk Solutions Assurance Co. ("Endurance Risk Solutions")	Delaware
Sompo America Insurance Company ("Sompo America Insurance")	New York
Sompo America Fire & Marine Insurance Company ("Sompo America Fire & Marine")	New York
Bond Safeguard Insurance Company ("Bond Safeguard")	South Dakota
American Agri-Business Insurance Company ("American Agri-Business"), managed by ARMtech Insurance Services, Inc. (together with American Agri-Business, "ARMtech")	Texas
Lexon Insurance Company ("Lexon Insurance")	Texas

In addition, as part of the collateralized reinsurance and third party asset management operations under the name "Blue Capital", Sompo International and Endurance Bermuda together own 33.2% of Blue Capital Reinsurance Holdings Ltd. ("BCRH") and Endurance Bermuda owns 28.5% of Blue Capital Alternative Income Fund Limited ("BCAI").

BCRH is a Bermuda-based exempted limited liability holding company managed by BCML that provides fully-collateralized property catastrophe reinsurance and invests in various insurance-linked securities through its wholly-owned Bermuda-based subsidiaries, Blue Capital Re. Ltd. ("Blue Capital Re") and Blue Capital Re ILS Ltd. ("Blue Capital Re ILS"). BCRH's shares are listed on the New York Stock Exchange and the Bermuda Stock Exchange.

BCAI is a closed-ended mutual fund incorporated in Bermuda and managed by BCML that serves as the feeder fund for the Blue Capital Global Reinsurance SA-1 cell (the "BCGR Cell"). BCAI's shares were listed on the Specialist Fund Market of the London Stock Exchange and on the Bermuda Stock Exchange. On May 9, 2018, the BCAI Board of Directors announced its intent to recommend the liquidation of BCAI at a Special General Meeting of shareholders held on July 25, 2018. At the Special General Meeting, the liquidation was approved and BCAI was subsequently de-listed from all exchanges.

BCML is a wholly-owned subsidiary that provides investment and insurance management services to the Blue Capital vehicles primarily through business written in Blue Water Re Ltd. ("Blue Water Re"), a wholly-owned special purpose insurer. See Note 4, Investments, for additional information with respect to the Blue Capital entities.

2. Significant accounting policies

The consolidated financial statements have been prepared on the basis of U.S. GAAP and include the accounts of Sompo International and its wholly-owned subsidiaries, BCRH and the BCGR Cell, for the year ended December 31, 2018. All intercompany transactions and balances have been eliminated in consolidation. The following are significant accounting and reporting policies adopted by the Company:

(a) Premiums and related expenses

The Company's insurance premiums are earned pro rata over the term of the applicable risk period specified in the insurance policy. The Company's insurance policies cover losses occurring or claims made during the term of the policy. Generally, the Company receives a fixed premium which is identified in the policy and is recorded on the inception date of the contract or when premiums are determinable and earned evenly over the policy term. This premium will only adjust if the underlying insured values adjust. Accordingly, the Company monitors the underlying insured values and records additional or return premiums in the period in which amounts are reasonably determinable.

The Company's reinsurance premiums are earned in proportion to the amount of reinsurance protection provided over the applicable risk period established in the reinsurance contract. Reinsurance contracts written on a losses occurring basis cover losses which occur during the term of the reinsurance contract, typically 12 months. Accordingly, the Company earns the premium on a losses occurring reinsurance contract evenly over the reinsurance contract term. Reinsurance contracts written on a policies attaching basis cover losses from the underlying insurance policies incepting during the terms of the reinsurance contracts. Losses under a policies attaching reinsurance contract may occur after the end date of the reinsurance contract, so long as they are losses from policies that began during the reinsurance contract period. The Company typically earns the premiums for policies attaching reinsurance contracts over a 24-month period in proportion to the amount of reinsurance protection provided to reflect the extension of the risk period past the term of the contract and the varying levels of reinsurance protection provided during the reinsurance contract period.

In addition to the applicable risk period, the Company's estimate of its reinsurance premiums written is based on the type of reinsurance contracts underwritten. For excess of loss reinsurance contracts, the deposit premium, as defined in the contract, is generally considered to be the best estimate of the reinsurance contract's written premium at inception. The Company earns reinstatement premiums upon the occurrence of a loss under the reinsurance contract. Reinstatement premiums are calculated in accordance with the contract terms based upon the ultimate loss estimate associated with each contract. For proportional reinsurance contracts, the Company estimates premium, commissions and related expenses based on broker and ceding company estimates and also utilizes judgment in establishing proportional reinsurance contract estimates.

Premiums on the Company's excess of loss and proportional reinsurance contracts are estimated at the time the business is underwritten. Accordingly, this is the amount the Company records as written premium in the period the reinsurance contract is underwritten. As actual premiums are reported by the ceding companies, management evaluates the appropriateness of the original premium estimates and any adjustments to these estimates are recorded in the period in which they become known.

Premiums receivable are recorded at amounts due less any allowance for estimated uncollectible premiums receivable. At December 31, 2018, the Company had an allowance for estimated uncollectible premiums receivable of $15.9 million.

Acquisition expenses are costs that vary with and are directly related to the successful production of new and renewal business, and consist principally of commissions and brokerage expenses. Acquisition and general and administrative expenses are shown net of commissions, other fees and expense allowances associated with and earned on ceded business. These costs are deferred and amortized over the periods in which the related premiums are earned. Deferred acquisition costs are limited to their estimated realizable value based on the related unearned premiums. Anticipated net investment income is considered in determining the recoverability of deferred acquisition costs.

2. Significant accounting policies, cont'd.

(b) Reserve for losses and loss expenses

The Company's reserve for losses and loss expenses includes case reserves and reserves for losses incurred but not reported (referred to as "IBNR reserves"). Case reserves are established for losses that have been reported, but not yet paid. IBNR reserves represent a provision for claims that have been incurred but not yet reported to the Company, as well as future loss development on losses already reported, in excess of the case reserves. Case reserves and IBNR reserves are established by management based on reports from reinsurance intermediaries, ceding companies and insureds, and consultations with independent legal counsel. In addition, reserves for IBNR losses and loss expenses are established by management based on reported losses and loss expenses, and actuarially determined estimates of ultimate losses and loss expenses.

The Company uses a variety of actuarial methods to estimate the ultimate losses and loss expenses incurred by the Company. One actuarial method used by the Company to estimate reserves for losses and loss expenses is the expected loss ratio approach, which is based on expected results independent of current loss reporting activity. This approach is typically used for immature loss periods (i.e., the current accident year). Another actuarial method used by the Company to estimate reserves for losses and loss expenses is known as the Bornhuetter-Ferguson method. The Bornhuetter-Ferguson method uses an initial loss estimate (expected loss technique) for each accident year by business line and type of contract. Under this method, IBNR is set equal to the initial loss estimate multiplied by the expected percent of loss yet to be reported at each valuation date. In a given quarter, if reported losses are less than expected, then the difference would result in a decrease in estimated ultimate losses. If losses are greater than expected, then the difference would result in an increase in estimated ultimate losses. A third actuarial method used by the Company to estimate reserves for losses and loss expenses is known as the loss development method. The loss development method extrapolates the current value of reported losses to ultimate expected losses by using selected reporting patterns of losses over time. The selected reporting patterns are based on historical information (organized into loss development triangles) and are adjusted to reflect the changing characteristics of the book of business written by the Company. Management uses these multiple actuarial methods, supplemented with professional judgment, to establish the best estimate of reserves for losses and loss expenses.

The Company's loss and loss expense reserves are reviewed regularly, and adjustments, if any, are reflected in earnings in the period in which they become known. The establishment of new loss and loss expense reserves or the adjustment of previously recorded loss and loss expense reserves could result in significant positive or negative changes to the Company's financial condition for any particular period. While management believes the Company's estimate of loss and loss expense reserves is reasonable, the ultimate loss experience may not be reliably predicted, and it is possible losses and loss expenses may be materially different than the total reserve for losses and loss expenses recorded by the Company.

(c) Reinsurance

Reinsurance recoverable on paid and unpaid losses represent estimates of losses and loss expenses that will be recovered from reinsurers. Amounts recoverable from reinsurers are estimated in a manner consistent with the provisions of the reinsurance agreements and consistent with the establishment of the Company's reserve for losses and loss expenses. Ceding commissions earned on ceded business are classified as an offset to acquisition and general and administrative expenses.

(d) Investments

The Company currently classifies its fixed maturity investments and short-term investments as trading or available for sale. Trading securities are carried at estimated fair value, with related net realized and unrealized gains or losses included in net loss. Available for sale securities are carried at estimated fair value, with related net unrealized gains or losses excluded from net loss and included in shareholders' equity as a component of accumulated other comprehensive loss. Investment transactions are recorded on a trade date basis.

Equity securities are carried at estimated fair value, with related net realized and unrealized gains or losses included in net loss.

2. Significant accounting policies, cont'd.

(d) Investments, cont'd.

The Company determines the fair value of its trading investments, available for sale investments and equity securities in accordance with current accounting guidance, which defines fair value and establishes a fair value hierarchy based on inputs to the various valuation techniques used for each fair value measurement. The use of valuation techniques for any given investment requires a significant amount of judgment and consideration of factors specific to the underlying investment. Fair value measurements determined by the Company seek to maximize observable inputs and minimize the use of unobservable inputs.

Current accounting guidance establishes three levels as follows:

Level 1: Unadjusted quoted prices in active markets for identical assets or liabilities.

Level 2: Quoted prices for similar assets in markets that are active, quoted prices for identical or similar assets in markets that are not active or inputs that are observable either directly or indirectly. Level 2 inputs include quoted prices for similar assets or liabilities other than quoted prices in Level 1; quoted prices in markets that are not active; or other inputs that are observable or can be derived principally from or corroborated by observable market data for substantially the full term of the assets or liabilities.

Level 3: Unobservable inputs that are supported by little or no market activity and are significant to the fair value of the assets or liabilities. Unobservable inputs reflect the Company's own views about the assumptions that market participants would use in pricing the asset or liability. Level 3 assets and liabilities include financial instruments whose values are determined using pricing models, discounted cash flow methodologies, or similar techniques, as well as instruments for which the determination of fair value requires significant judgment or estimation.

The Company determines the estimated fair value of each individual security utilizing the highest level inputs available.

If the Company has the intent to sell a fixed maturity or short-term security classified as available for sale in an unrealized loss position or it is more likely than not that the Company will be required to sell the available for sale security, the Company deems the security to be other-than-temporarily impaired and writes down the carrying value of the security to fair value, thereby establishing a new cost basis. The amount of the write-down is recognized in net loss as an other-than-temporary impairment ("OTTI") loss.

For fixed maturity and short-term investments classified as available for sale in an unrealized loss position for which a decision to sell has not been made and it is not more likely than not that the Company will be required to sell the security, the Company performs additional reviews to determine whether the investment will recover its amortized cost. If the amortized cost of the Company's fixed maturity and short-term investments classified as available for sale is, based upon the judgment of management, unlikely to be recovered, the Company writes down the investment by the amount representing the credit related portion of the decline in value, thereby establishing a new cost basis. The amount of the write-down is recognized in net loss as an OTTI loss. The new cost basis is not changed for subsequent recoveries in fair value.

To the extent the Company determines that the amortized cost of the Company's fixed maturity and short-term investments classified as available for sale is likely to be recovered and the decline in value is related to non-credit factors (such as interest rates, market conditions, etc.) and not due to credit related factors, that remaining non-credit portion of the unrealized loss is recorded as a part of accumulated other comprehensive loss in the shareholders' equity section of the Company's Consolidated Balance Sheet.

Other investments within the Company's investment portfolio are comprised of (i) hedge funds, private investment funds and other investment funds that generally invest in senior secured bank debt, high yield credit securities, distressed debt, macro strategies, multi-strategy, equity long/short strategies, distressed real estate, and energy sector private equity ("alternative funds") and (ii) an investment in a non-public entity where the Company has significant influence. Other investments are accounted for using the equity method of accounting whereby the initial investment is recorded at cost. The carrying values of these investments are increased or decreased to reflect the Company's share of income or loss, which is included in net investment income, and are decreased for dividends. Due to the timing of the delivery of the final valuations reported by the managers of certain of our alternative funds, our investments in those funds are estimated based on the most recently available information including period end valuation statements, period end estimates, or, in some cases, prior month or quarter valuation statements.

2. Significant accounting policies, cont'd.

(d) Investments, cont'd.

The Company has entered into investment repurchase agreements whereby the Company sells securities and repurchases them at a future date for a predetermined price. These investment repurchase agreements are accounted for as secured borrowings and are recorded at the contractual repurchase price plus accrued interest. The securities to be repurchased are the same, or substantially the same, as those sold. The fair value of the underlying securities is included in fixed maturity investments in the Company's Consolidated Balance Sheet. The use of the cash received by the Company from the counterparty pursuant to the repurchase agreement is not restricted. The obligation to return the cash is included in payable under repurchase agreements in the Consolidated Balance Sheet. In these repurchase transactions, the securities sold by the Company (pledged collateral) may be sold or repledged by the counterparties with whom the repurchase agreement is executed. For additional information, see Note 11, Commitments and contingencies.

(e) Cash equivalents and short-term investments

Cash equivalents include highly liquid short-term deposits and securities with maturities of 90 days or less at the time of purchase. Cash equivalents are valued at amortized cost, which approximates fair value due to the short-term, liquid nature of these securities. Deposits and securities with maturities greater than 90 days and less than 1 year are classified as short-term investments.

(f) Goodwill and intangible assets

The Company has elected to adopt an accounting alternative available to private companies to amortize goodwill over ten years and to test goodwill for impairment at the Company level rather than the reporting unit level. Identifiable intangible assets with finite lives are amortized on an accelerated or straight-line basis over their useful lives. Intangible assets with indefinite useful lives are not amortized but are tested for impairment annually at the beginning of the fourth quarter, or more often if impairment indicators arise. In making an assessment of the value of its goodwill and intangible assets, the Company uses both market based and non-market based valuations.

(g) Foreign exchange

Assets and liabilities of foreign operations whose functional currency is not the United States dollar are translated at exchange rates in effect at the balance sheet date. Revenues and expenses of such foreign operations are translated at weighted average exchange rates during the year. The effect of the translation adjustments for foreign operations is included in accumulated other comprehensive loss, net of applicable deferred income taxes. Other monetary assets and liabilities denominated in foreign currencies are revalued at the exchange rates in effect at the balance sheet date with the resulting net foreign exchange gains and losses included in net loss. Revenues and expenses denominated in foreign currencies are translated at the prevailing exchange rate on the transaction date.

(h) Derivatives

Current accounting guidance requires the recognition of all derivative financial instruments including embedded derivative instruments, as either assets or liabilities in the Consolidated Balance Sheet at fair value.

The Company may use various derivative instruments such as foreign exchange forward, future and option contracts; industry loss warranty swaps; interest rate futures, swaps, swaptions, and options; credit default swaps; LIBOR swaps; commodity futures and options; weather swaps and options; loss development covers; and to-be-announced mortgage-backed securities. These derivative instruments are used to manage exposure to interest rate and currency risk, to enhance the efficiency of the Company's investment portfolio, to economically hedge certain risks, and as part of its weather risk management business. Derivatives are recorded at fair value with changes in fair value and any gains or losses are recognized in net realized and unrealized losses, net foreign exchange gains, or other underwriting income in the Consolidated Statement of Loss and Comprehensive Loss.

Where the Company has entered into master netting agreements with counterparties, or the Company has the legal and contractual right to offset positions, the derivative positions may be netted by the counterparty.

2. Significant accounting policies, cont'd.

(i) Income taxes

The Company accounts for income taxes for its subsidiaries operating in taxable jurisdictions. Deferred income taxes reflect the net tax effect of temporary differences between the carrying amounts of assets and liabilities for financial reporting purposes and the amounts used for income tax purposes. A valuation allowance is provided when it is more likely than not that some portion of the deferred tax assets will not be realized. The accounting guidance allows for the recognition of tax benefits of uncertain tax positions only where the position is more likely than not to be sustained assuming examination by tax authorities. A liability is established for any tax benefit claimed in a tax return in excess of this threshold. Income tax related interest and penalties are included as an offset to income tax benefit.

(j) Use of estimates

The preparation of financial statements in conformity with U.S. GAAP requires management to make estimates and assumptions that affect the reported and disclosed 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.

(k) Variable interest entity

Entities that do not have sufficient equity at risk to allow the entity to finance its activities without additional financial support or in which the equity investors, as a group, do not have the characteristic of a controlling financial interest are referred to as variable interest entities ("VIE"). A VIE is consolidated by the variable interest holder that is determined to have the controlling financial interest (primary beneficiary) as a result of having both the power to direct the activities of a VIE that most significantly impact the VIE's economic performance and the obligation to absorb losses or right to receive benefits from the VIE that could potentially be significant to the VIE. The Company determines whether it is the primary beneficiary of an entity subject to consolidation based on a qualitative assessment of the VIE's capital structure, contractual terms, nature of the VIE's operations and purpose and the Company's relative exposure to the related risks of the VIE on the date it becomes initially involved in the VIE. The Company reassesses its VIE determination with respect to an entity on an ongoing basis. See also Note 4, Investments.

(l) Non-controlling interests

The Company accounts for non-controlling interests in the shareholders' equity section of the Company's Consolidated Balance Sheet in accordance with current accounting guidance regarding consolidation. Net loss attributable to non-controlling interest is presented separately in the Company's Consolidated Statement of Loss and Comprehensive Loss.

(m) Newly adopted accounting standards

In January 2016, the Financial Accounting Standards Board ("FASB") issued Accounting Standards Update ("ASU") No. 2016-01, "Recognition and Measurement of Financial Assets and Financial Liabilities" ("ASU 2016-01"). ASU 2016-01 requires equity investments (except those accounted for under the equity method of accounting or those that result in the consolidation of the investee) to be measured at fair value with changes in fair value recognized in net loss, simplifies the impairment assessment of equity investments without readily determinable values by requiring a qualitative assessment to identify impairment, eliminates the requirement to disclose the methods and significant assumptions used to estimate the fair value for financial instruments measured at amortized cost, requires the use of the exit price notion when measuring the fair value of financial instruments for disclosure purposes, requires separate presentation in other comprehensive income of the portion of the total change in the fair value of a liability resulting from a change in the instrument-specific credit risk when the organization has elected to measure the liabilities in accordance with the fair value option, requires the separate presentation of financial assets and financial liabilities by measurement category and form of financial asset on the balance sheet or the accompanying notes to the financial statements and clarifies that the reporting organization should evaluate the need for a valuation allowance on a deferred tax asset related to available for sale securities in combination with the organization’s other deferred tax assets. ASU 2016-01 is effective for non-public business entities in fiscal years beginning after December 15, 2018 with early adoption permitted for certain specific provisions of ASU 2016-01. The Company adopted this guidance effective January 1, 2018. On adoption of ASU 2016-01, $18.3 million of net unrealized gains on equity securities, net of taxes, was reclassified from accumulated other comprehensive loss to retained loss.

2. Significant accounting policies, cont'd.

(m) Newly adopted accounting standards, cont'd.

In February 2018, the FASB issued ASU No. 2018-02, "Income Statement - Reporting Comprehensive Income" ("ASU 2018-02"). ASU 2018-02 gives entities the option to reclassify tax effects that are stranded in accumulated other comprehensive income as a result of tax reform to retained earnings. ASU 2016-01 is effective for non-public business entities in fiscal years beginning after December 15, 2018 with early adoption permitted. ASU 2018-02 allows entities to choose whether to apply the amendments retrospectively or in the period of adoption. The Company adopted this guidance effective January 1, 2018. On adoption of ASU 2018-02, $0.5 million of tax effects stranded in accumulated other comprehensive loss as a result of the Tax Cuts and Jobs Act of 2017 (“TCJA”), which was enacted in the U.S. on December 22, 2017, was reclassified from accumulated other comprehensive loss to retained loss.

In October 2018, the Company's Audit Committee approved the adoption of International Financial Reporting Standards ("IFRS"), effective January 1, 2019. Accordingly, the conversion from U.S. GAAP to IFRS will be applicable to the Company's reporting for the year ended December 31, 2019, for which the current and comparative 2018 information will be prepared under IFRS. The transition to IFRS will impact accounting, financial reporting, internal controls over financial reporting, taxes, and information systems and processes. The Company has assessed the impact of the transition to IFRS in the above areas through the deployment of additional trained resources and formal project management practices and governance to ensure the appropriate conversion to IFRS.

3. Business combinations

Acquisition of Lexon

On June 1, 2018 (the "Lexon Acquisition Date"), the Company completed the acquisition of the operating subsidiaries of Lexon Surety Group LLC, comprising of all the outstanding voting shares of Lexon Insurance and Bond Safeguard (collectively, "Lexon"), which offer a broad array of commercial and contract surety bonds, court and probate bonds, and U.S. Custom bonds through a nationwide network of agents. The acquisition of Lexon will contribute to the Company's strategic expansion in the U.S.

The aggregate consideration for the transaction was $199.8 million, which consisted of $224.1 million of cash, offset by contingent consideration held in escrow accounts of $24.3 million. The contingent consideration is recorded on the Consolidated Balance Sheet as other assets and consists of:

- General escrow - $16.0 million escrow to recover any indemnification claim by the Company, which may be due to the inaccuracy of any representation or warranty of the sellers or certificate delivered by sellers. The fair value estimate of the general escrow is $5.4 million, which is the discounted value of probability weighted scenarios between nil and $16.0 million of receipt of expected recoveries.
- Loss reserve escrow - $23.5 million escrow to recover any unfavorable loss reserve development within two years from the Lexon Acquisition Date. The fair value of the loss reserve escrow is $18.9 million, which is the discounted value of probability weighted scenarios between nil and $23.5 million of unfavorable loss reserve development.
- Bail bond escrow - $6.0 million escrow to satisfy any liabilities arising from the bail bond business, including costs and expenses incurred by the bail administrator after the Lexon Acquisition Date. The fair value of the bail bond escrow is nil as there are no expected recoveries.
- Specified indemnity escrow - $23.0 million escrow to satisfy any breach of covenant or agreement of the seller contained in the purchase and sale agreement. The fair value of the specified indemnity bond escrow is nil as there are no expected recoveries.

As new information is received, the Company may update the contingent consideration assets as part of it's measurement period adjustment, which cannot exceed 12 months from the acquisition date, and make a corresponding change in goodwill. No adjustments were made as of December 31, 2018.

In connection with the acquisition of Lexon, the Company incurred transaction-related expenses of $1.0 million, which were recognized in the Consolidated Statement of Loss and Comprehensive Loss as a component of corporate expenses.

3. Business combinations, cont'd.

Acquisition of Lexon, cont'd.

The aggregate consideration was allocated to the acquired assets and liabilities of Lexon based on estimated fair values on June 1, 2018, the Lexon Acquisition Date, as detailed below. The Company recognized goodwill of $29.1 million, which will be amortized over a period of 10 years. The allocation of the purchase price was based on information that was available to management at the time the 2018 consolidated financial statements were prepared. The allocation was subject to change as additional information became available within the measurement period, which cannot exceed 12 months from the acquisition date. The fair value recorded for these items may be subject to adjustments, which may impact the individual amounts recorded for assets acquired and liabilities assumed, as well as the residual goodwill. The Company identified finite lived intangible assets of $63.1 million, which will be amortized over a weighted average period of 3.6 years, identifiable indefinite lived intangible assets of $15.8 million, and certain other adjustments to the fair values of the assets acquired and liabilities assumed of Lexon at June 1, 2018 as summarized in the table below:

Lexon shareholder's equity attributable to controlling interest as of June 1, 2018	$	165,568
Adjustments for fair value, by applicable balance sheet caption:		
Assets:		
Deferred acquisition costs		(22,336)
Reinsurance recoverable on unpaid losses		(423)
Goodwill and Intangible assets		(9,281)
Other assets		(1,616)
Liabilities:		
Reserve for losses and loss expenses		(32,784)
Deferred tax liability		(7,294)
Total adjustments for fair value by applicable balance sheet caption		(73,734)
Adjustments for fair value of the identifiable intangible assets:		
Identifiable indefinite lived intangible assets (insurance licenses)		15,757
Identifiable finite lived intangible assets (agent, broker and customer relationships, renewal rights, non-compete agreements and value of business acquired ("VOBA"))		63,116
Total adjustments for fair value by applicable balance sheet caption and identifiable intangible assets		5,139
Estimated fair value of net assets acquired and identifiable intangible assets		170,707
Total consideration		199,798
Estimated total consideration over the fair value of net assets acquired assigned to goodwill	$	29,091

An explanation of the fair value adjustments is as follows:

- Deferred acquisition costs - To eliminate Lexon's deferred acquisition costs;
- Goodwill and intangible assets - To write off Lexon's goodwill and intangible assets;
- Other assets - To reflect the fair value of Lexon's fixed assets;
- Reserve for losses and loss expenses and reinsurance recoverable on unpaid losses - To reflect an increase in net losses and loss expenses due to the addition of a market based risk margin, which represents the cost of capital required by a market participant to assume the net losses and loss expenses of Lexon, offset by a deduction that represents the discount due to the present value calculation of the unpaid losses and loss expenses based on the expected payout of the net unpaid losses and loss expenses; and
- Deferred tax liability - To reflect the deferred tax liability on identifiable intangible assets.

3. Business combinations, cont'd.

Acquisition of Lexon, cont'd.

Identifiable intangible assets at Lexon Acquisition Date and December 31, 2018 consisted of the following, and are included in goodwill and other intangible assets on the Company's Consolidated Balance Sheet:

	Amount	Economic Useful Life
Agent, broker and customer relationships	$ 22,168	6 years
Renewal rights	931	6 years
Non-compete agreement	2,657	5 years
VOBA	37,360	2 years
Insurance licenses	15,757	Indefinite
Identifiable intangible assets at the Lexon Acquisition Date	78,873	
Amortization (from Lexon Acquisition Date through December 31, 2018)	(31,307)	
Net identifiable intangible assets at December 31, 2018 related to the acquisition of Lexon	$ 47,566	

An explanation of each identifiable intangible asset is as follows:

- Agent, broker, and customer relationships - these relationships included Lexon's agent, brokers, and customer relationships and consideration was given to the expectation of the renewal of these relationships and the associated expenses;
- Renewal rights - the value of policy renewal rights taking into consideration written premium on assumed retention ratios and the insurance cash flows and the associated equity cash flows from these renewal policies over the expected life of the renewals;
- Non-compete agreements - represents non-compete agreements with key employees of Lexon;
- VOBA - the expected future losses and expenses associated with the policies that were in-force as of the Lexon Acquisition Date were estimated and compared to the future premium remaining expected to be earned. The difference between the risk-adjusted future loss and expenses, discounted to present value and the unearned premium reserve, was estimated to be the VOBA; and
- Insurance licenses - the value of insurance licenses providing the ability to write insurance in fifty-two jurisdictions in the U.S.

The initial goodwill of $29.1 million represents future synergies expected to arise from the combined operations, the value of new business from internal agents, Lexon's assembled workforce and other future business not included in intangible assets. Goodwill amortization of $1.7 million was recognized during the year ended December 31, 2018. The goodwill recognized is not expected to be deductible for income tax purposes.

Acquisition of A&A

On March 27, 2018 (the "A&A Acquisition Date") the Company completed the acquisition of all the outstanding voting shares of A&A, S.r.l. ("A&A"), an Italian agriculture insurance broker. The acquisition of A&A supports the strategic objective of AgriSompo, Sompo International's global agriculture platform, to deliver innovative and coordinated risk management solutions tailored to local needs across the agri-business market.

The fair value of A&A's net assets was $0.9 million at the A&A Acquisition Date, and the total cash consideration paid was $12.6 million. No separately identifiable intangible assets were identified related to the acquisition of A&A. The Company recognized goodwill of $11.7 million, which will be amortized over a period of 10 years, and represents future synergies expected to arise from the combined operations and the value of future business from introducing new products and technologies in Italy. Goodwill amortization of $0.8 million was recognized during the year ended December 31, 2018. The goodwill recognized is not expected to be deductible for income tax purposes.

The Company has completed the accounting for the acquisition of A&A.

3. Business combinations, cont'd.

Transactions with entities under common control

On May 1, 2018, SJNKE and SJNK M&B were acquired by Endurance Bermuda, a wholly-owned subsidiary of Sompo International. The SJNKE and SJNK M&B net assets of $202.9 million and $3.8 million, respectively, were transferred to Endurance Bermuda on May 1, 2018 at U.S. GAAP book value and were accounted for as business combinations with an entity under common control since the ultimate parent of Sompo International, SJNKE and SJNK M&B was Sompo Holdings.

4. Investments

Composition of Net Investment Income and of Invested Assets

The components of net investment income for the year ended December 31, 2018 are as follows:

Fixed income investments	$	233,914
Equity securities		9,109
Other investments		(1,632)
Cash and cash equivalents		19,674
	$	261,065
Investment expenses		(18,346)
Net investment income	$	242,719

Contractual maturities of the Company's fixed maturity and short-term investments are shown below as of December 31, 2018. Expected maturities may differ from contractual maturities because borrowers may have the right to call or prepay obligations with or without call or prepayment penalties.

	Amortized Cost	Fair Value
Due within one year	$ 390,246	$ 388,538
Due after one year through five years	2,774,926	2,743,216
Due after five years through ten years	1,080,060	1,056,692
Due after ten years	34,748	34,216
Residential mortgage-backed securities	1,884,097	1,866,948
Commercial mortgage-backed securities	738,590	733,299
Collateralized loan and debt obligations	408,824	396,226
Asset-backed securities	617,105	615,949
Total	$ 7,928,596	$ 7,835,084

4. Investments, cont'd.

The following table summarizes the fair value of the fixed maturity investments and short-term investments classified as trading at December 31, 2018.

Fixed maturity investments		
U.S. government and agencies securities	$	43,662
U.S. state and municipal securities		1,074
Foreign government securities		40,137
Government guaranteed corporate securities		2,654
Corporate securities		409,918
Residential mortgage-backed securities		216,066
Commercial mortgage-backed securities		86,508
Collateralized loan and debt obligations		16,833
Asset-backed securities		57,150
Total fixed maturity investments		874,002
Short-term investments		7,625
Total fixed income investments	$	881,627

In addition to the Company's fixed maturity, short-term and equity investments, the Company invests in alternative funds and an investment in a non-public entity where the Company has significant influence. The Company's alternative funds and investment where it has significant influence are recorded on the Company's Consolidated Balance Sheet as "other investments". At December 31, 2018 the Company had invested, net of capital returned, a total of $648.0 million in other investments. At December 31, 2018 the carrying value of other investments was $651.9 million.

The following table summarizes the composition and redemption restrictions of other investments as of December 31, 2018:

	Market Value	Unfunded Commitments	Ineligible for Redemption in 2019
Alternative funds			
Hedge funds	$ 443,744	$ —	$ 115,622
Private investment funds	142,895	190,894	142,895
Other investment funds	54,359	—	54,291
Total investments in alternative funds	640,998	190,894	312,808
Investment with significant influence	10,856	4,000	10,856
Total other investments	$ 651,854	$ 194,894	$ 323,664

Hedge funds – The redemption frequency of the hedge funds range from monthly to biennially with notice periods from 30 to 180 days. Over one year, it is estimated that the Company can liquidate approximately 73.9% of the hedge fund portfolio, with the remainder over the following two years.

Private investment funds – The Company generally has no right to redeem its interest in any private investment funds in advance of dissolution of the applicable partnership. Instead, the nature of these investments is that distributions are received by the Company in connection with the distribution of income or the liquidation of the underlying assets of the applicable limited partnership. It is estimated that the majority of the underlying assets of the limited partnerships would liquidate over 5 to 10 years from inception of the limited partnership. A secondary market, with unpredictable liquidity, exists for limited partner interests in private investment funds.

Other investment funds – Other investment funds includes funds on deposit with Lloyd's, which are restricted, and the Company's investment in BCAI, which represents the net carrying value of the Company's investment in BCAI that has not been deployed into the BCGR cell.

4. Investments, cont'd.

Investment with significant influence – Investment with significant influence represents the Company's 23.9% ownership of a non-public software company in the U.S.

Net Realized and Unrealized Losses

Realized and unrealized gains and losses are recognized in earnings using the first in, first out method. The analysis of gross realized gains and losses, net unrealized losses on trading securities, and the change in the fair value of investment-related derivative financial instruments for the year ended December 31, 2018 are as follows:

Gross realized gains on investment sales	$	19,400
Gross realized losses on investment sales		(61,671)
Net unrealized losses on trading securities		(56,926)
Change in fair value of derivative financial instruments[(1)]		(2,178)
Net realized and unrealized losses	$	(101,375)

(1) For additional information on the Company's derivative financial instruments, see Note 9, Derivatives.

The net unrealized losses on equity investments held at December 31, 2018 is $33.3 million.

Unrealized Gains and Losses

The Company classifies some of its investments in fixed maturity investments and short-term investments as available for sale. The amortized cost, fair value and related gross unrealized gains and losses on the Company's securities classified as available for sale at December 31, 2018 are as follows:

	Amortized Cost	Gross Unrealized Gains	Gross Unrealized Losses	Fair Value
Fixed maturity investments				
U.S. government and agencies securities	$ 972,943	$ 5,696	$ (9,323)	$ 969,316
U.S. state and municipal securities	95,120	1,090	(897)	95,313
Foreign government securities	432,191	4,084	(6,529)	429,746
Government guaranteed corporate securities	55,083	2,106	(260)	56,929
Corporate securities	2,130,643	4,356	(41,891)	2,093,108
Residential mortgage-backed securities	1,662,756	9,991	(21,865)	1,650,882
Commercial mortgage-backed securities	651,007	5,407	(9,623)	646,791
Collateralized loan and debt obligations	391,430	43	(12,080)	379,393
Asset-backed securities	559,533	1,911	(2,645)	558,799
Total fixed maturity investments	$ 6,950,706	$ 34,684	$ (105,113)	$ 6,880,277
Short-term investments	73,207	1	(28)	73,180
Total fixed income investments	$ 7,023,913	$ 34,685	$ (105,141)	$ 6,953,457

4. Investments, cont'd.

The following table summarizes, for all available for sale securities in an unrealized loss position at December 31, 2018, the aggregate fair value and gross unrealized loss by length of time the security has continuously been in an unrealized loss position.

	Less than 12 months		12 months or greater		Total	
	Unrealized Losses[1]	Fair Value	Unrealized Losses[1]	Fair Value	Unrealized Losses[1]	Fair Value
Fixed maturity investments						
U.S. government and agencies securities	$ (482)	$ 113,394	$ (8,841)	$ 457,037	$ (9,323)	$ 570,431
U.S. state and municipal securities	(125)	17,650	(772)	28,880	(897)	46,530
Foreign government securities	(4,607)	153,753	(1,922)	80,594	(6,529)	234,347
Government guaranteed corporate securities	(260)	9,841	—	—	(260)	9,841
Corporate securities	(24,762)	1,051,654	(17,129)	594,830	(41,891)	1,646,484
Residential mortgage-backed securities	(7,217)	439,882	(14,648)	465,986	(21,865)	905,868
Commercial mortgage-backed securities	(3,403)	183,760	(6,220)	196,027	(9,623)	379,787
Collateralized loan and debt obligations	(12,069)	370,480	(11)	1,463	(12,080)	371,943
Asset-backed securities	(1,085)	211,675	(1,560)	125,569	(2,645)	337,244
Total fixed maturity investments	$ (54,010)	$ 2,552,089	$ (51,103)	$ 1,950,386	$ (105,113)	$ 4,502,475
Short-term investments	(24)	56,131	(4)	8,455	(28)	64,586
Total fixed income investments	$ (54,034)	$ 2,608,220	$ (51,107)	$ 1,958,841	$ (105,141)	$ 4,567,061

(1) Gross unrealized losses include unrealized losses on non-OTTI and non-credit OTTI securities recognized in accumulated other comprehensive loss at December 31, 2018.

As of December 31, 2018, 3,172 available for sale securities were in an unrealized loss position aggregating $105.1 million. Of those, 1,300 available for sale securities at December 31, 2018 had been in a continuous unrealized loss position for twelve months or greater.

During the year ended December 31, 2018, the Company impaired certain fixed maturity securities where the present value of the cash flows expected to be collected were less than the amortized cost, and therefore recognized in net loss total other-than-temporary impairments of $5.2 million. As of December 31, 2018, the Company had the intent to sell certain fixed maturity securities in an unrealized loss position, which are also included in the total other-than-temporary impairments for the year ended December 31, 2018.

Other Investments

The Company is involved in the normal course of business with VIEs primarily as a passive investor in residential and commercial mortgage-backed securities and through its interests in various other investments that are structured as limited partnerships considered to be third party VIEs. The Company determines whether it is the primary beneficiary of an entity subject to consolidation based on a qualitative assessment of the VIE's capital structure, contractual terms, nature of the VIE's operations and purpose, and the Company's relative exposure to the related risks of the VIE on the date it becomes initially involved in the VIE. The Company determined that it was not the primary beneficiary for any of these investments as of December 31, 2018. The Company believes its exposure to loss with respect to these investments is generally limited to the investment carrying amounts reported in the Company's Consolidated Balance Sheet and any unfunded investment commitments.

4. Investments, cont'd.

Collateralized Reinsurance Entities

As of December 31, 2018, Sompo International and Endurance Bermuda together owned 33.2% of BCRH. BCRH is considered a VIE under U.S. GAAP and the Company has determined that it is BCRH's primary beneficiary. As a result, the Company fully consolidates the assets, liabilities and operations of BCRH and its subsidiaries within its Consolidated Financial Statements. The interests in BCRH and its subsidiaries that the Company fully consolidates that are attributable to third-party investors are reported within the Company's Consolidated Financial Statements as non-controlling interests. BCRH's shareholder rights do not include redemption features within the control of the third party shareholders. The Company reassesses its VIE determination with respect to BCRH on an ongoing basis.

As of December 31, 2018, Sompo International owned 28.5% of BCAI. BCAI is considered a "voting interest entity" under U.S. GAAP and, because the Company owns less than 50% of its outstanding ordinary shares, the Company does not consolidate BCAI's assets, liabilities or operations within its Consolidated Financial Statements. However, the BCGR Cell and Blue Water Re, the Company's wholly-owned Bermuda-based special purpose insurance vehicle, are considered VIEs under U.S. GAAP and the Company has determined that it is the primary beneficiary of these entities. Therefore, as funds held in BCAI are deployed into the BCGR Cell, and ultimately into Blue Water Re, they are included in the Company's consolidated financial statements. Conversely, as funds previously deployed by BCAI and the BCGR Cell into Blue Water Re are returned to BCAI, they are no longer included in the Company's consolidated financial statements. The interests in the BCGR Cell and Blue Water Re that the Company fully consolidate that are attributable to third-party investors are reported within the Company's consolidated financial statements as non-controlling interests. BCAI's shareholder rights do not include redemption features within the control of the third party shareholders. The Company reassesses its VIE determinations with respect to the BCGR Cell and Blue Water Re on an ongoing basis.

The following table summarizes the movements in the non-redeemable non-controlling interests balance for the year ended December 31, 2018:

Non-controlling interests, beginning of year	$	176,301
Non-controlling interests acquired		11
Loss attributable to third-party investments in the BCGR Cell		(21,942)
Loss attributable to third-party investments in BCRH		(19,108)
Loss attributable to third-party investments in Fortress National		(8)
Net loss attributable to non-controlling interests		(41,058)
Net preferred share redemption attributable to third-party investments in the BCGR Cell [(1)]		(10,057)
Net investments attributable to third-parties in BCRH		76
Net change in third-party investments in non-controlling interests		(9,981)
Dividends declared by BCRH attributable to non-controlling interests		(5,275)
Non-controlling interests, end of year	$	119,998

(1) The redemption from the BCGR Cell was required to fund expenses, settle redemption shares and fund dividends by BCAI.

5. Fair value measurement

The Company determines the fair value of its fixed maturity investments, short-term investments, equity securities, and other assets and liabilities in accordance with current accounting guidance, which defines fair value and establishes a fair value hierarchy based on inputs to the various valuation techniques used for each fair value measurement. The Company determines the estimated fair value of each individual security utilizing the highest level inputs available. Valuation inputs by security type may include the following:

- Government and agencies fixed maturity securities – These securities are generally priced by pricing services or index providers. The pricing services or index providers may use current market trades for securities with similar quality, maturity and coupon. If no such trades are available, the pricing service typically uses analytical models which may incorporate option adjusted spreads, daily interest rate data and market/sector news. The Company generally classifies the fair values of government and agencies securities in Level 2. Current issue U.S. government securities are generally valued based on Level 1 inputs, which use the market approach valuation technique.
- Government guaranteed corporate fixed maturity securities – These securities are generally priced by pricing services or index providers. The pricing service or index providers may use current market trades for securities with similar quality, maturity and coupon. If no such trades are available, the pricing service typically uses analytical spread models which may incorporate inputs from the U.S. treasury curve or LIBOR. The Company generally classifies the fair values of its government guaranteed corporate securities in Level 2.
- Corporate fixed maturity securities – These securities are generally priced by pricing services or index providers. The pricing services or index providers typically use discounted cash flow models that incorporate benchmark curves for treasury, swap and high issuance credits. Credit spreads are developed from current market observations for like or similar securities. The Company generally classifies the fair values of its corporate securities in Level 2.
- Equity securities – These securities are generally priced by pricing services or index providers. Depending on the type of underlying equity security or equity fund, the securities are priced by pricing services or index providers based on quoted market prices in active markets or through a discounted cash flow model that incorporates benchmark curves for treasury, swap and credit for like or similar securities. The Company generally classifies the fair values of its equity securities in Level 1 or 2.
- Structured securities including agency and non-agency, residential and commercial mortgage, asset-backed securities and collateralized loan and debt obligations – These securities are generally priced by broker/dealers. Broker/dealers may use current market trades for securities with similar qualities. If no such trades are available, inputs such as bid and offer, prepayment speeds, the U.S. treasury curve, swap curve and cash settlement may be used in a discounted cash flow model to determine the fair value of a security. The Company generally classifies the fair values of its structured securities in Level 2.
- Other assets and liabilities – A portion of other assets and liabilities are composed of a variety of derivative instruments used to enhance the efficiency of the investment portfolio and economically hedge certain risks. These instruments are generally priced by pricing services, broker/dealers and/or recent trading activity. The market value approach valuation technique is used to estimate the fair value for these derivatives based on significant observable market inputs. Certain derivative instruments are priced by pricing services based on quoted market prices in active markets. These derivative instruments are generally classified in Level 1. Other derivative instruments are priced using industry valuation models and are considered Level 2, as the inputs to the valuation model are based on observable market inputs. Also included in this line item are proprietary, non-exchange traded derivative-based risk management products primarily used to address weather and energy risks. The trading market for these weather derivatives are generally linked to energy and agriculture commodities, weather and other natural phenomena. In instances where market prices are not available, the Company uses industry or internally developed valuation techniques such as spread option, Black Scholes, quanto and simulation modeling to determine fair value and classifies these in Level 3. These models may reference prices for similar instruments.

5. Fair value measurement, cont'd.

The carrying values of cash and cash equivalents, accrued investment income, other investments, net receivable on sales of investments, net payable on purchases of investments, payable under repurchase agreements and other financial instruments not described above approximated their fair values at December 31, 2018.

The following table sets forth the Company's fixed maturity investments, equity securities, short-term investments and other assets and liabilities categorized by the level within the hierarchy in which the fair value measurements fall at December 31, 2018:

	Total at December 31, 2018	Quoted Prices in Active Markets for Identical Assets (Level 1)	Significant Other Observable Inputs (Level 2)	Significant Unobservable Inputs (Level 3)
Assets				
Fixed maturity investments				
U.S. government and agencies securities	$ 1,012,978	$ 22,000	$ 990,978	$ —
U.S. state and municipal securities	96,387	—	96,387	—
Foreign government securities	469,883	—	469,883	—
Government guaranteed corporate securities	59,583	—	59,583	—
Corporate securities	2,503,026	—	2,339,547	163,479
Residential mortgage-backed securities	1,866,948	—	1,866,948	—
Commercial mortgage-backed securities	733,299	—	733,299	—
Collateralized loan and debt obligations	396,226	—	396,226	—
Asset-backed securities	615,949	—	615,949	—
Total fixed maturity investments	7,754,279	22,000	7,568,800	163,479
Equity securities				
Equity investments	245,443	72,640	172,803	—
Total equity securities	245,443	72,640	172,803	—
Short-term investments	80,805	—	80,805	—
Other assets (see Note 9)	201,250	512	138,039	62,699
Total assets	$ 8,281,777	$ 95,152	$ 7,960,447	$ 226,178
Liabilities				
Other liabilities (see Note 9)	$ 143,690	$ 5	$ 68,841	$ 74,844

During the year ended December 31, 2018, no investments were transferred into Level 3, and no investments were transferred out of Level 3 to Level 2. During the year ended December 31, 2018, $7.4 million of U.S. government and agencies securities were transferred from Level 1 to Level 2 as they no longer qualified as on the run U.S. treasury securities.

Level 3 assets represented 2.7% of the Company's total available for sale and trading investments and derivative assets at December 31, 2018. As of December 31, 2018, Level 3 securities were primarily comprised of corporate securities and weather derivatives. There were no material changes in the Company's valuation techniques during the year ended December 31, 2018.

5. Fair value measurement, cont'd.

Other assets and other liabilities measured at fair value included assets of $63.2 million and liabilities of $74.8 million related to proprietary, non-exchange traded derivative-based risk management products used in the Company's weather risk management business, and hedging and trading activities related to these risks. In instances where market prices are not available, the Company may use industry or internally developed valuation techniques such as historical analysis and simulation modeling to determine fair value and are considered Level 3.

Observable and unobservable inputs to these valuation techniques vary by contract requirements and commodity type, are validated using market-based or independently sourced parameters where applicable and may typically include the following:

- Observable inputs: contract price, notional, option strike, term to expiry, interest rate, contractual limits, temperature, rainfall, windspeed, wave height, snow fall, cyclone category;
- Unobservable inputs: correlation, composite weather variable; and
- Both observable and unobservable: forward commodity price.

The Company's weather curves are determined by taking the average payouts for each transaction within its portfolio utilizing detrended historical weather measurements. The Company's commodity curves are determined using historical market data scaled to currently observed market prices. The range of each unobservable input could vary based on the specific commodity, including, but not limited to natural gas, electricity, crude, liquids, temperature or precipitation. Due to the diversity of the portfolio, the range of unobservable inputs could be wide-spread. The unobservable inputs are validated at each reporting period and are only changed when corroborated by evidence such as similar market transactions, third-party pricing services and/or broker or dealer quotations or other empirical market data.

The following table presents a reconciliation of the beginning and ending balances for all assets and liabilities measured at fair value on a recurring basis using Level 3 inputs during the year ended December 31, 2018.

	Fixed maturity investments	Other assets	Total assets	Other liabilities
Level 3, beginning of year	$ 173,961	$ 58,770	$ 232,731	$ (43,970)
Total equity income and losses and realized and unrealized gains and losses included in losses	(6,930)	—	(6,930)	—
Total income and losses included in other underwriting income	—	5,409	5,409	1,059
Change in unrealized gains and losses included in other comprehensive loss	(2,102)	—	(2,102)	—
Purchases	73,941	—	73,941	—
Issues	—	37,874	37,874	(55,658)
Sales	(75,391)	—	(75,391)	—
Settlements	—	(39,354)	(39,354)	23,725
Transfers into Level 3	—	—	—	—
Transfers out of Level 3	—	—	—	—
Level 3, end of year	$ 163,479	$ 62,699	$ 226,178	$ (74,844)

6. Reserve for losses and loss expenses

Activity in the reserve for losses and loss expenses for the year ended December 31, 2018 is summarized as follows:

Gross reserve for losses and loss expenses, beginning of year	$	7,075,626
Reinsurance recoverable on unpaid losses		2,612,752
Net reserve for losses and loss expenses, beginning of year		4,462,874
Incurred related to:		
Current year		2,148,751
Prior years		(18,016)
Total incurred		2,130,735
Paid related to:		
Current year		(517,121)
Prior years		(1,358,316)
Total paid		(1,875,437)
Acquired reserves		82,973
Foreign currency translation and other		(52,885)
Net reserve for losses and loss expenses, end of year		4,748,260
Reinsurance recoverable on unpaid losses		3,171,037
Gross reserve for losses and loss expenses, end of year	$	7,919,297

During the year ended December 31, 2018, the Company's estimated ultimate losses for prior accident years were reduced by $18.0 million due to lower claims emergence than originally estimated by the Company.

Reserves for losses and loss expenses are based in part upon the estimation of losses resulting from catastrophic events. Estimation of these losses and loss expenses are based upon the Company's historical claims experience and is inherently difficult because of the Company's short operating history and the possible severity of catastrophe claims. Therefore, the Company uses both proprietary and commercially available models, as well as historical reinsurance industry catastrophe claims experience in addition to its own historical data for purposes of evaluating trends and providing an estimate of ultimate claims costs.

A significant portion of the Company's contracts and policies cover excess layers for high severity exposures. Underwriting results and ultimate claims payments for this type of coverage are therefore not typically reported to the Company until later in the contract and policy lives. As a result, the level of losses reported to date is not necessarily indicative of expected future results.

The Company monitors the performance of its underwriting operations through review of discrete information related to its two reportable segments, Insurance and Reinsurance. Within each of these segments, the Company writes a variety of different types of insurance and reinsurance. For reporting purposes, management has combined its many business units, including within the Insurance segment - agriculture, casualty and other specialty, professional lines and property, marine/energy and aviation; and within the Reinsurance segment - catastrophe, property, casualty, professional lines and specialty. Management believes that the businesses combined within these business lines have similarities that make it appropriate to evaluate each as a group.

The Company has included reserves acquired on a retrospective basis within its existing lines of business. In addition, the Company has restated all periods reflected in the various tables at the foreign exchange rates as of December 31, 2018.

6. Reserve for losses and loss expenses, cont'd.

The Company incorporates a variety of actuarial methods and judgments in its reserving process. Two key inputs in the various actuarial methods employed by the Company are initial expected loss ratios and expected loss reporting patterns. These key inputs impact the potential variability in the estimate of the reserve for losses and loss expenses and are applicable to each of the Company's business segments. The Company's loss and loss expense reserves consider and reflect, in part, deviations resulting from differences between expected loss and actual loss reporting as well as judgments relating to the weights applied to the reserve levels indicated by the actuarial methods. Expected loss reporting patterns are based upon internal and external historical data and assumptions regarding claims reporting trends over a period of time that extends beyond the Company's own operating history.

IBNR Reserves and Claims Frequency

The Company establishes loss and loss expense reserves to provide for the estimated costs of paying claims under insurance policies and reinsurance contracts underwritten by the Company. These reserves include estimates for both claims that have been reported and those that have been incurred but not reported and include estimates of all expenses associated with processing and settling these claims. Estimating the ultimate cost of future claims and claim adjustment expenses is based on management judgment and thus, actual losses incurred may vary significantly from management's estimates.

For insurance policies, the Company generally receives claims notices that are recorded by the claims staff within our underwriting, financial and claims systems. When we are notified of insured losses or discover potential losses as part of our claims audits, claims personnel record a case reserve as appropriate for the estimated amount of the exposure at that time. Reserves are also established to provide for the estimated expense of settling claims, including legal and other fees and the general expenses of administering the claims adjustment process.

The Company counts an insurance claim when either an indemnity or allocated adjustment expense amount has been paid, or at any quarter end, the Company recorded a case reserve.

The Company's Reinsurance segment and lines of business include contracts written on a proportional or excess of loss basis. For proportional reinsurance business, the Company receives a bordereau indicating the Company's share of losses as well as other financial items. The Company does not have direct access to claims frequency information, and as such, the number of claims represented by the losses reported cannot be determined by the Company. The Company has determined that it is impracticable to provide claims frequency information related to its reinsurance contracts written on a proportional basis. The amount of IBNR related to proportional reinsurance contracts was $700.9 million at December 31, 2018.

For Reinsurance contracts written on an excess of loss basis, the Company has developed claims frequency information. The Company determines claims frequency for excess of loss contracts when either a loss has been paid or at any quarter-end, the Company recorded a case reserve. Claims are counted by contract.

6. Reserve for losses and loss expenses, cont'd.

The following tables show, by segment by line of business, the incurred losses and loss expenses and cumulative paid losses and loss expenses, net of reinsurance, as of December 31, 2018. The following also includes the amount of IBNR reserves recorded as well as the cumulative number of reported claims for the Insurance segment lines of business and only excess of loss reinsurance contracts for the Reinsurance segment lines of business. Information for years prior to 2018 are presented as required supplementary information and is unaudited.

Insurance Segment - Agriculture

Incurred losses and loss expenses, net of reinsurance												
	For the years ended December 31,										December 31, 2018	
Accident Year	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	IBNR reserves	Cumulative number of reported claims
	(unaudited)	(unaudited)	(unaudited)	(unaudited)	(unaudited)	(unaudited)	(unaudited)	(unaudited)	(unaudited)			
2009	$ 298,914	$ 284,277	$ 280,798	$ 281,667	$ 281,594	$ 281,365	$ 281,365	$ 281,365	$ 281,365	$ 281,365	$ —	26,540
2010	—	305,131	280,330	280,409	280,166	280,008	280,008	280,008	280,008	280,008	—	18,331
2011	—	—	520,388	509,531	508,424	507,930	507,847	507,847	507,847	507,847	—	37,061
2012	—	—	—	581,455	576,836	573,376	572,995	572,469	572,469	572,469	—	38,297
2013	—	—	—	—	566,483	563,158	562,122	562,826	562,048	562,048	—	44,045
2014	—	—	—	—	—	451,710	451,843	449,705	449,942	450,278	—	53,808
2015	—	—	—	—	—	—	241,501	227,634	223,142	223,491	—	37,360
2016	—	—	—	—	—	—	—	200,353	198,956	192,564	—	29,954
2017	—	—	—	—	—	—	—	—	288,956	274,347	100	36,502
2018	—	—	—	—	—	—	—	—	—	280,699	22,732	41,966
Total										$ 3,625,116		

Cumulative paid losses and loss expenses, net of reinsurance										
	For the years ended December 31,									
Accident Year	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
	(unaudited)	(unaudited)	(unaudited)	(unaudited)	(unaudited)	(unaudited)	(unaudited)	(unaudited)	(unaudited)	
2009	$ 178,206	$ 281,996	$ 280,468	$ 280,991	$ 281,058	$ 281,365	$ 281,365	$ 281,365	$ 281,365	$ 281,365
2010	—	144,296	279,397	279,768	279,859	280,008	280,008	280,008	280,008	280,008
2011	—	—	461,335	506,905	507,790	507,918	507,847	507,847	507,847	507,847
2012	—	—	—	478,797	573,781	572,885	572,995	572,469	572,469	572,469
2013	—	—	—	—	438,034	562,046	562,075	561,652	562,048	562,048
2014	—	—	—	—	—	352,202	448,046	449,705	449,942	450,278
2015	—	—	—	—	—	—	122,696	222,212	223,093	223,447
2016	—	—	—	—	—	—	—	75,894	198,890	192,560
2017	—	—	—	—	—	—	—	—	133,055	252,720
2018	—	—	—	—	—	—	—	—	—	167,392
Total										$ 3,490,134
									Reserve for losses and loss expenses, net of reinsurance	$ 134,982

6. Reserve for losses and loss expenses, cont'd.

Insurance Segment - Casualty & Other Specialty

Incurred losses and loss expenses, net of reinsurance

Accident Year	For the years ended December 31, 2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	December 31, 2018 IBNR reserves	Cumulative number of reported claims
	(unaudited)	(unaudited)	(unaudited)	(unaudited)	(unaudited)	(unaudited)	(unaudited)	(unaudited)	(unaudited)			
2009	$ 301,739	$ 337,438	$ 342,972	$ 353,378	$ 347,583	$ 335,539	$ 323,130	$ 310,536	$ 306,725	$ 303,223	$ 13,894	8,301
2010	—	244,207	276,583	281,292	272,596	259,574	234,995	223,668	215,047	216,196	16,911	8,576
2011	—	—	239,606	260,524	312,501	313,942	286,192	272,395	265,547	250,777	20,487	10,610
2012	—	—	—	289,038	318,884	321,707	312,950	304,608	264,748	263,659	30,372	13,621
2013	—	—	—	—	291,736	302,549	335,783	352,572	348,733	333,497	57,445	14,701
2014	—	—	—	—	—	245,087	254,853	262,363	249,363	263,352	58,818	15,990
2015	—	—	—	—	—	—	268,214	271,884	280,943	284,696	63,976	17,454
2016	—	—	—	—	—	—	—	304,018	289,070	285,005	94,287	18,494
2017	—	—	—	—	—	—	—	—	352,136	336,802	176,865	25,288
2018	—	—	—	—	—	—	—	—	—	359,979	279,909	33,959
Total										$ 2,897,186		

Cumulative paid losses and loss expenses, net of reinsurance

Accident Year	For the years ended December 31, 2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
	(unaudited)	(unaudited)	(unaudited)	(unaudited)	(unaudited)	(unaudited)	(unaudited)	(unaudited)	(unaudited)	
2009	$ 36,333	$ 89,882	$ 141,906	$ 184,065	$ 232,133	$ 238,947	$ 253,259	$ 266,422	$ 270,391	$ 273,885
2010	—	20,966	42,519	85,520	134,849	160,276	171,822	184,333	187,454	189,874
2011	—	—	12,329	46,537	78,518	112,295	156,707	164,227	197,783	216,175
2012	—	—	—	33,945	78,132	116,267	149,257	177,419	199,687	215,655
2013	—	—	—	—	27,896	70,950	164,148	205,369	234,242	261,801
2014	—	—	—	—	—	21,340	61,786	98,015	127,623	178,103
2015	—	—	—	—	—	—	40,105	92,135	152,868	187,490
2016	—	—	—	—	—	—	—	41,578	91,452	133,727
2017	—	—	—	—	—	—	—	—	32,023	88,754
2018	—	—	—	—	—	—	—	—	—	32,586
Total										$ 1,778,050
									Reserve for losses and loss expenses from accident year 2008 and prior, net of reinsurance	148,855
									Adjustment for unallocated claim expenses	76,574
									Reserve for losses and loss expenses, net of reinsurance	$ 1,344,565

6. Reserve for losses and loss expenses, cont'd.

Insurance Segment - Professional Lines

Incurred losses and loss expenses, net of reinsurance

Accident Year	For the years ended December 31, 2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	December 31, 2018 IBNR reserves	Cumulative number of reported claims
	(unaudited)	(unaudited)	(unaudited)	(unaudited)	(unaudited)	(unaudited)	(unaudited)	(unaudited)	(unaudited)			
2009	$ 100,497	$ 118,015	$ 104,004	$ 106,180	$ 109,024	$ 99,556	$ 91,748	$ 93,386	$ 107,954	$ 110,648	$ 5,810	1,014
2010	—	108,434	105,676	101,656	92,996	82,486	74,921	69,452	75,761	77,185	5,713	1,622
2011	—	—	102,465	98,806	99,919	80,441	99,442	106,073	118,238	122,952	9,524	1,289
2012	—	—	—	102,182	103,668	101,736	79,901	69,643	94,080	86,516	11,890	1,281
2013	—	—	—	—	79,700	80,444	71,276	62,211	64,206	67,660	11,330	1,292
2014	—	—	—	—	—	65,011	67,097	58,020	66,416	65,777	20,465	2,869
2015	—	—	—	—	—	—	74,800	72,536	100,870	114,196	24,964	4,295
2016	—	—	—	—	—	—	—	110,304	120,138	140,613	60,802	5,160
2017	—	—	—	—	—	—	—	—	106,679	137,652	92,687	5,138
2018	—	—	—	—	—	—	—	—	—	172,489	158,951	5,413
Total										$ 1,095,688		

Cumulative paid losses and loss expenses, net of reinsurance

Accident Year	For the years ended December 31, 2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
	(unaudited)	(unaudited)	(unaudited)	(unaudited)	(unaudited)	(unaudited)	(unaudited)	(unaudited)	(unaudited)	
2009	$ 1,046	$ 8,756	$ 32,194	$ 38,001	$ 56,127	$ 73,073	$ 77,629	$ 80,202	$ 79,268	$ 80,457
2010	—	1,941	16,023	27,566	36,515	46,992	48,987	51,894	65,118	69,005
2011	—	—	2,596	11,996	21,495	33,869	72,012	85,233	103,210	109,502
2012	—	—	—	2,321	12,924	21,976	29,593	35,417	64,479	68,358
2013	—	—	—	—	2,357	13,971	21,452	26,946	38,038	49,148
2014	—	—	—	—	—	1,178	7,093	20,032	41,699	39,713
2015	—	—	—	—	—	—	1,247	7,135	32,777	58,114
2016	—	—	—	—	—	—	—	2,310	32,820	59,006
2017	—	—	—	—	—	—	—	—	7,005	24,280
2018	—	—	—	—	—	—	—	—	—	3,877
Total										$ 561,460
									Reserve for losses and loss expenses from accident year 2008 and prior, net of reinsurance	15,983
									Adjustment for unallocated claim expenses	35,267
									Reserve for losses and loss expenses, net of reinsurance	$ 585,478

6. Reserve for losses and loss expenses, cont'd.

Insurance Segment - Property, Marine/Energy & Aviation

Incurred losses and loss expenses, net of reinsurance

	For the years ended December 31,										December 31, 2018	
Accident Year	**2009**	**2010**	**2011**	**2012**	**2013**	**2014**	**2015**	**2016**	**2017**	**2018**	**IBNR reserves**	**Cumulative number of reported claims**
	(unaudited)	(unaudited)	(unaudited)	(unaudited)	(unaudited)	(unaudited)	(unaudited)	(unaudited)	(unaudited)			
2009	$ 86,610	$ 70,660	$ 43,308	$ 41,490	$ 39,208	$ 37,708	$ 37,813	$ 37,500	$ 39,723	$ 38,609	$ 39	8,852
2010	—	123,876	80,146	69,735	67,349	65,287	66,608	66,633	62,938	62,599	352	9,270
2011	—	—	208,647	187,056	168,921	166,496	171,819	175,100	167,674	165,558	108	9,957
2012	—	—	—	218,727	181,006	167,528	168,047	168,146	174,432	175,517	2,563	9,556
2013	—	—	—	—	160,995	140,999	127,538	120,534	122,683	120,677	2,880	11,571
2014	—	—	—	—	—	188,881	161,577	141,974	144,500	141,610	2,455	16,103
2015	—	—	—	—	—	—	236,760	226,736	228,753	224,554	3,316	20,425
2016	—	—	—	—	—	—	—	283,096	256,169	245,316	10,022	23,949
2017	—	—	—	—	—	—	—	—	446,515	429,431	22,264	28,559
2018	—	—	—	—	—	—	—	—	—	335,474	79,660	20,198
Total										$ 1,939,345		

Cumulative paid losses and loss expenses, net of reinsurance

	For the years ended December 31,									
Accident Year	**2009**	**2010**	**2011**	**2012**	**2013**	**2014**	**2015**	**2016**	**2017**	**2018**
	(unaudited)	(unaudited)	(unaudited)	(unaudited)	(unaudited)	(unaudited)	(unaudited)	(unaudited)	(unaudited)	
2009	$ 20,171	$ 33,418	$ 36,352	$ 37,055	$ 37,338	$ 36,973	$ 37,272	$ 37,095	$ 39,025	$ 38,541
2010	—	23,235	47,399	52,985	56,553	59,703	62,100	64,078	61,851	61,968
2011	—	—	34,055	92,814	119,183	141,833	156,892	163,659	164,678	164,032
2012	—	—	—	32,360	113,132	125,431	142,615	150,313	168,377	169,819
2013	—	—	—	—	34,757	83,950	97,975	104,930	112,210	114,474
2014	—	—	—	—	—	42,040	87,438	110,851	123,207	129,444
2015	—	—	—	—	—	—	65,609	160,402	195,934	209,427
2016	—	—	—	—	—	—	—	86,268	178,510	209,394
2017	—	—	—	—	—	—	—	—	141,535	316,812
2018	—	—	—	—	—	—	—	—	—	104,695
Total										$ 1,518,606
									Reserve for losses and loss expenses from accident year 2008 and prior, net of reinsurance	6,124
									Adjustment for unallocated claim expenses	20,629
									Reserve for losses and loss expenses, net of reinsurance	$ 447,492

6. Reserve for losses and loss expenses, cont'd.

Reinsurance Segment - Catastrophe

Incurred losses and loss expenses, net of reinsurance

	For the years ended December 31,										December 31, 2018	
Accident Year	**2009**	**2010**	**2011**	**2012**	**2013**	**2014**	**2015**	**2016**	**2017**	**2018**	**IBNR reserves**	**Cumulative number of reported claims**
	(unaudited)	(unaudited)	(unaudited)	(unaudited)	(unaudited)	(unaudited)	(unaudited)	(unaudited)	(unaudited)			
2009	$ 103,319	$ 75,725	$ 59,960	$ 56,842	$ 56,138	$ 57,852	$ 59,818	$ 61,697	$ 58,112	$ 58,535	$ 166	164
2010	—	273,034	235,515	226,999	227,147	232,471	238,616	225,262	190,319	195,522	348	234
2011	—	—	626,771	596,386	594,034	608,100	616,695	628,869	591,664	593,401	659	557
2012	—	—	—	245,104	180,238	163,201	154,332	151,095	151,093	149,358	1,760	330
2013	—	—	—	—	157,586	129,958	128,473	124,800	122,987	122,839	148	300
2014	—	—	—	—	—	141,554	127,203	126,893	126,630	126,941	587	255
2015	—	—	—	—	—	—	61,019	47,809	53,233	52,755	519	252
2016	—	—	—	—	—	—	—	140,147	139,223	132,147	3,514	208
2017	—	—	—	—	—	—	—	—	347,996	374,384	81,658	219
2018	—	—	—	—	—	—	—	—	—	185,556	34,207	195
Total										$ 1,991,438		

Cumulative paid losses and loss expenses, net of reinsurance

	For the years ended December 31,									
Accident Year	**2009**	**2010**	**2011**	**2012**	**2013**	**2014**	**2015**	**2016**	**2017**	**2018**
	(unaudited)	(unaudited)	(unaudited)	(unaudited)	(unaudited)	(unaudited)	(unaudited)	(unaudited)	(unaudited)	
2009	$ 27,741	$ 46,634	$ 49,311	$ 50,718	$ 51,884	$ 55,060	$ 58,423	$ 60,737	$ 57,525	$ 58,288
2010	—	59,311	125,076	153,018	174,096	194,095	208,471	209,084	185,350	191,747
2011	—	—	234,790	389,475	499,522	566,035	598,002	619,675	585,716	588,467
2012	—	—	—	56,607	105,739	126,796	134,282	136,856	139,703	140,300
2013	—	—	—	—	34,276	83,299	107,023	117,036	118,855	120,460
2014	—	—	—	—	—	49,519	107,728	117,222	122,719	124,723
2015	—	—	—	—	—	—	20,092	31,858	41,026	50,693
2016	—	—	—	—	—	—	—	43,702	105,370	117,592
2017	—	—	—	—	—	—	—	—	219,231	247,134
2018	—	—	—	—	—	—	—	—	—	121,517
Total										$ 1,760,921
									Reserve for losses and loss expenses from accident year 2008 and prior, net of reinsurance	(59)
									Adjustment for unallocated claim expenses	9,247
									Reserve for losses and loss expenses, net of reinsurance	$ 239,705

6. Reserve for losses and loss expenses, cont'd.

Reinsurance Segment - Property

Incurred losses and loss expenses, net of reinsurance

	For the years ended December 31,										December 31, 2018	
Accident Year	**2009**	**2010**	**2011**	**2012**	**2013**	**2014**	**2015**	**2016**	**2017**	**2018**	**IBNR reserves**	**Cumulative number of reported claims**
	(unaudited)	(unaudited)	(unaudited)	(unaudited)	(unaudited)	(unaudited)	(unaudited)	(unaudited)	(unaudited)			
2009	$ 151,757	$ 123,537	$ 116,500	$ 114,523	$ 114,729	$ 115,497	$ 115,599	$ 112,168	$ 112,810	$ 113,449	$ 52	277
2010	—	222,437	217,683	191,279	187,774	189,473	189,261	175,909	195,500	196,178	647	332
2011	—	—	346,268	337,119	314,619	314,531	307,820	337,481	364,785	363,370	751	389
2012	—	—	—	316,067	260,895	242,070	241,212	245,793	241,532	240,902	1,497	329
2013	—	—	—	—	256,658	240,871	218,688	200,221	192,447	189,914	1,754	434
2014	—	—	—	—	—	213,250	213,369	199,242	191,007	186,445	4,684	448
2015	—	—	—	—	—	—	188,056	185,231	178,511	177,055	4,313	482
2016	—	—	—	—	—	—	—	170,763	166,475	168,577	3,091	316
2017	—	—	—	—	—	—	—	—	178,787	196,861	19,076	84
2018	—	—	—	—	—	—	—	—	—	166,747	55,965	235
Total										$ 1,999,498		

Cumulative paid losses and loss expenses, net of reinsurance

	For the years ended December 31,									
Accident Year	**2009**	**2010**	**2011**	**2012**	**2013**	**2014**	**2015**	**2016**	**2017**	**2018**
	(unaudited)	(unaudited)	(unaudited)	(unaudited)	(unaudited)	(unaudited)	(unaudited)	(unaudited)	(unaudited)	
2009	$ 27,929	$ 71,362	$ 90,179	$ 97,615	$ 103,926	$ 107,260	$ 110,035	$ 107,848	$ 108,979	$ 110,783
2010	—	50,146	117,964	142,052	163,876	176,623	181,259	171,070	190,981	192,636
2011	—	—	78,538	174,337	256,314	287,723	293,619	328,227	358,532	359,041
2012	—	—	—	53,938	147,121	192,472	215,161	231,134	228,410	229,719
2013	—	—	—	—	55,879	139,051	174,099	176,932	178,916	179,592
2014	—	—	—	—	—	51,782	134,810	158,913	163,950	168,972
2015	—	—	—	—	—	—	37,765	100,409	138,634	152,208
2016	—	—	—	—	—	—	—	33,859	111,430	138,127
2017	—	—	—	—	—	—	—	—	37,794	122,139
2018	—	—	—	—	—	—	—	—	—	26,894
Total										$ 1,680,111
									Reserve for losses and loss expenses from accident year 2008 and prior, net of reinsurance	4,720
									Adjustment for unallocated claim expenses	4,777
									Reserve for losses and loss expenses, net of reinsurance	$ 328,884

6. Reserve for losses and loss expenses, cont'd.

Reinsurance Segment - Casualty

Incurred losses and loss expenses, net of reinsurance

Accident Year	For the years ended December 31, 2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	December 31, 2018 IBNR reserves	Cumulative number of reported claims
	(unaudited)	(unaudited)	(unaudited)	(unaudited)	(unaudited)	(unaudited)	(unaudited)	(unaudited)	(unaudited)			
2009	$ 116,608	$ 127,062	$ 124,311	$ 128,064	$ 126,597	$ 122,061	$ 115,410	$ 114,994	$ 106,779	$ 109,998	$ 5,350	436
2010	—	186,906	180,130	176,312	171,177	172,938	160,382	159,648	150,319	150,822	11,703	511
2011	—	—	198,733	199,609	197,713	204,761	195,668	197,520	193,830	192,587	13,722	628
2012	—	—	—	196,632	192,086	193,813	184,162	175,275	175,954	177,316	14,012	745
2013	—	—	—	—	179,677	173,881	171,420	165,262	159,125	159,486	19,857	944
2014	—	—	—	—	—	126,875	121,881	120,503	131,049	126,293	22,497	739
2015	—	—	—	—	—	—	121,587	121,841	118,630	119,209	23,152	329
2016	—	—	—	—	—	—	—	150,342	144,526	147,241	37,684	183
2017	—	—	—	—	—	—	—	—	150,733	158,862	56,109	53
2018	—	—	—	—	—	—	—	—	—	186,899	127,899	109
Total										$ 1,528,713		

Cumulative paid losses and loss expenses, net of reinsurance

Accident Year	For the years ended December 31, 2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
	(unaudited)	(unaudited)	(unaudited)	(unaudited)	(unaudited)	(unaudited)	(unaudited)	(unaudited)	(unaudited)	
2009	$ 7,382	$ 21,857	$ 34,786	$ 51,592	$ 61,631	$ 70,573	$ 76,479	$ 83,908	$ 89,760	$ 91,266
2010	—	14,923	34,566	57,095	75,387	92,480	104,135	114,972	123,920	128,533
2011	—	—	28,038	51,002	77,751	104,398	116,523	141,453	153,714	161,126
2012	—	—	—	30,687	54,477	75,475	92,091	105,228	117,835	129,082
2013	—	—	—	—	18,586	35,817	56,574	71,686	94,130	109,312
2014	—	—	—	—	—	10,425	33,250	49,986	66,100	79,112
2015	—	—	—	—	—	—	15,821	34,400	50,340	64,655
2016	—	—	—	—	—	—	—	18,857	46,887	65,131
2017	—	—	—	—	—	—	—	—	21,311	54,297
2018	—	—	—	—	—	—	—	—	—	22,652
Total										$ 905,166
									Reserve for losses and loss expenses from accident year 2008 and prior, net of reinsurance	94,775
									Adjustment for unallocated claim expenses	11,400
									Reserve for losses and loss expenses, net of reinsurance	$ 729,722

6. Reserve for losses and loss expenses, cont'd.

Reinsurance Segment - Professional Lines

Incurred losses and loss expenses, net of reinsurance

Accident Year	For the years ended December 31, 2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	December 31, 2018 IBNR reserves	Cumulative number of reported claims
	(unaudited)	(unaudited)	(unaudited)	(unaudited)	(unaudited)	(unaudited)	(unaudited)	(unaudited)	(unaudited)			
2009	$ 41,444	$ 43,017	$ 41,695	$ 40,777	$ 35,785	$ 36,573	$ 36,487	$ 38,733	$ 37,110	$ 37,594	$ 605	195
2010	—	58,156	58,571	67,339	62,189	53,829	46,665	45,028	42,340	42,059	884	114
2011	—	—	55,838	56,561	55,313	44,948	36,717	31,417	32,895	31,462	821	60
2012	—	—	—	43,539	42,463	43,446	36,727	30,596	32,065	41,397	1,087	136
2013	—	—	—	—	48,941	49,522	45,391	41,412	29,890	34,841	2,646	59
2014	—	—	—	—	—	92,136	89,109	90,907	79,274	84,723	7,884	81
2015	—	—	—	—	—	—	130,487	130,724	128,270	118,068	16,637	91
2016	—	—	—	—	—	—	—	148,926	150,741	150,013	66,089	21
2017	—	—	—	—	—	—	—	—	156,824	157,252	114,941	17
2018	—	—	—	—	—	—	—	—	—	166,391	157,174	17
Total										$ 863,800		

Cumulative paid losses and loss expenses, net of reinsurance

Accident Year	For the years ended December 31, 2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
	(unaudited)	(unaudited)	(unaudited)	(unaudited)	(unaudited)	(unaudited)	(unaudited)	(unaudited)	(unaudited)	
2009	$ 1,030	$ 3,327	$ 7,960	$ 15,663	$ 19,181	$ 23,466	$ 27,036	$ 32,326	$ 34,716	$ 34,881
2010	—	2,232	7,331	14,464	24,493	31,296	36,083	36,164	37,998	38,592
2011	—	—	1,685	4,943	9,405	15,168	20,124	22,142	24,682	26,475
2012	—	—	—	965	1,929	4,204	9,147	13,757	20,071	23,212
2013	—	—	—	—	998	2,562	6,694	11,637	18,548	25,438
2014	—	—	—	—	—	1,149	6,446	22,822	39,926	58,393
2015	—	—	—	—	—	—	2,936	14,351	37,370	67,154
2016	—	—	—	—	—	—	—	1,923	16,845	47,184
2017	—	—	—	—	—	—	—	—	1,459	17,286
2018	—	—	—	—	—	—	—	—	—	2,489
Total										$ 341,104
									Reserve for losses and loss expenses from accident year 2008 and prior, net of reinsurance	8,083
									Adjustment for unallocated claim expenses	7,667
									Reserve for losses and loss expenses, net of reinsurance	$ 538,446

6. Reserve for losses and loss expenses, cont'd.

Reinsurance Segment - Specialty

Incurred losses and loss expenses, net of reinsurance

Accident Year	For the years ended December 31, 2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	December 31, 2018 IBNR reserves	Cumulative number of reported claims
	(unaudited)	(unaudited)	(unaudited)	(unaudited)	(unaudited)	(unaudited)	(unaudited)	(unaudited)	(unaudited)			
2009	$ 98,334	$ 81,173	$ 73,290	$ 69,594	$ 67,508	$ 65,236	$ 62,738	$ 62,404	$ 57,785	$ 55,936	$ 1,152	115
2010	—	123,803	107,692	97,780	87,011	85,314	84,879	82,999	80,833	78,881	313	143
2011	—	—	111,699	100,821	87,014	82,696	83,166	82,196	79,155	78,104	561	180
2012	—	—	—	135,839	112,204	100,091	92,553	86,243	79,920	80,936	723	195
2013	—	—	—	—	103,537	93,858	92,642	84,328	73,083	72,504	971	207
2014	—	—	—	—	—	121,491	117,798	109,548	95,492	93,420	2,275	213
2015	—	—	—	—	—	—	154,322	153,508	144,745	136,724	7,503	255
2016	—	—	—	—	—	—	—	161,686	164,215	144,681	14,099	96
2017	—	—	—	—	—	—	—	—	185,841	183,179	40,653	133
2018	—	—	—	—	—	—	—	—	—	179,579	128,279	131
Total										$ 1,103,944		

Cumulative paid losses and loss expenses, net of reinsurance

Accident Year	For the years ended December 31, 2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
	(unaudited)	(unaudited)	(unaudited)	(unaudited)	(unaudited)	(unaudited)	(unaudited)	(unaudited)	(unaudited)	
2009	$ 13,277	$ 33,133	$ 39,430	$ 43,795	$ 47,546	$ 52,472	$ 52,626	$ 55,059	$ 53,625	$ 53,144
2010	—	15,134	48,066	57,845	64,222	68,938	72,095	74,820	76,956	75,831
2011	—	—	22,841	44,581	61,105	68,955	73,816	75,846	75,859	76,217
2012	—	—	—	29,823	53,761	64,308	72,576	74,583	73,960	77,249
2013	—	—	—	—	14,740	37,666	52,060	62,503	62,946	67,014
2014	—	—	—	—	—	23,735	50,003	66,969	71,742	76,475
2015	—	—	—	—	—	—	19,077	70,742	100,458	109,638
2016	—	—	—	—	—	—	—	19,454	70,720	98,053
2017	—	—	—	—	—	—	—	—	25,612	85,299
2018	—	—	—	—	—	—	—	—	—	18,116
Total										$ 737,036
									Reserve for losses and loss expenses from accident year 2008 and prior, net of reinsurance	24,558
									Adjustment for unallocated claim expenses	7,520
									Reserve for losses and loss expenses, net of reinsurance	$ 398,986

6. Reserve for losses and loss expenses, cont'd.

Reconciliation of Claims Development Tables to Gross Reserve for Losses and Loss Expenses

The following is a reconciliation of the net incurred and paid claims development tables to the reserve for losses and loss expenses in the Consolidated Balance Sheet at December 31, 2018.

	December 31, 2018		
	Net reserve for losses and loss expenses	Reinsurance recoverable on unpaid losses	Gross reserve for losses and loss expenses
Insurance			
Agriculture	$ 134,982	$ 200,956	$ 335,938
Casualty & other specialty	1,344,565	1,158,600	2,503,165
Professional lines	585,478	534,129	1,119,607
Property, marine/energy & aviation	447,492	723,157	1,170,649
Reinsurance			
Catastrophe	239,705	412,710	652,415
Property	328,884	18,563	347,447
Casualty	729,722	3,267	732,989
Professional lines	538,446	4,832	543,278
Specialty	398,986	114,823	513,809
Total	$ 4,748,260	$ 3,171,037	$ 7,919,297

Historical Claims Duration

The following is unaudited required supplementary information about historical average claims duration by line of business.

	Average annual percentage payout of incurred claims by age, net of reinsurance (number of years)									
	1	2	3	4	5	6	7	8	9	10
Insurance Segment										
Agriculture	70.4%	28.2%	0.2%	—%	—%	—%	—%	—%	—%	—%
Casualty & other specialty	10.3%	15.6%	18.1%	13.8%	13.8%	5.5%	7.4%	4.5%	1.2%	1.2%
Professional lines	2.4%	12.2%	18.5%	10.5%	15.4%	15.6%	7.4%	7.1%	1.6%	1.1%
Property, marine/ energy & aviation	30.2%	39.5%	12.9%	8.3%	5.6%	5.2%	1.1%	1.1%	2.0%	1.3%
Reinsurance Segment										
Catastrophe	43.5%	27.5%	15.1%	9.4%	4.8%	3.9%	2.9%	2.2%	1.3%	1.3%
Property	22.7%	37.7%	18.0%	7.1%	3.7%	3.7%	2.6%	2.7%	0.9%	1.6%
Casualty	12.3%	14.9%	13.1%	12.0%	9.6%	9.3%	6.4%	5.2%	4.0%	1.4%
Professional lines	2.0%	8.7%	17.1%	20.6%	16.6%	13.0%	6.1%	8.0%	3.7%	0.4%
Specialty	18.3%	33.6%	17.7%	8.6%	4.5%	3.7%	2.1%	2.3%	1.9%	0.9%

7. Reinsurance

The effects of reinsurance on premiums earned and written during the year ended December 31, 2018 are as follows:

	Earned	Written
Direct	$ 3,729,930	$ 3,964,743
Assumed	1,875,463	1,996,005
Ceded	(2,519,155)	(2,640,995)
	$ 3,086,238	$ 3,319,753

The Company purchases reinsurance to reduce its exposure to risk of loss in certain insurance and reinsurance lines of business. Reinsurance recoverables are recorded as assets if the reinsurer is deemed able to meet its obligations. Ceded reinsurance contracts do not relieve the Company from its obligations to policyholders. The Company remains primarily liable to its policyholders for the portion reinsured to the extent that any reinsurer does not meet the obligations assumed under the reinsurance agreements. At December 31, 2018, the Company had an allowance for estimated uncollectible reinsurance recoverables of $0.7 million.

During the year ended December 31, 2018, the Company recorded ceded losses of $2,111.2 million .

8. Debt and financing arrangements

Credit Facilities

On November 2, 2017, Sompo International and certain designated subsidiaries entered into a $200.0 million Uncommitted Letter of Credit and Reimbursement Agreement with Mizuho Bank, Ltd. (the "Mizuho Credit Facility"). As of December 27, 2017, the size of the Mizuho Credit Facility was increased from $200.0 million to $350.0 million of uncommitted capacity. The Mizuho Credit Facility requires the compliance with certain customary restrictive covenants. The Obligors (as defined in the Mizuho Credit Facility) are required to pay a fee of 0.2% on the daily aggregate amount of letters of credit issued payable quarterly in arrears. As of December 31, 2018, there were letters of credit outstanding under the Mizuho Credit Facility of $217.2 million.

On December 21, 2017, Sompo International and certain designated subsidiaries became an applicant under the Continuing Letter of Credit Agreement (for Standby Letters of Credit) with Bank of Tokyo-Mitsubishi UFJ, Ltd. (the "BTMU Credit Facility"). The BTMU Credit Facility is a $100.0 million unsecured letter of credit facility. The BTMU Credit Facility requires the compliance with certain customary restrictive covenants. Each applicant is required to pay a fee of 0.2% on the daily aggregate amount of letters of credit issued payable quarterly in arrears. As of December 31, 2018, there were $53.9 million letters of credit outstanding under the BTMU Credit Facility.

On March 23, 2016, Endurance Holdings and certain designated subsidiaries entered into a $450.0 million five-year letter of credit facility with JPMorgan Chase Bank, N.A. ("JPMorgan") as administrative agent (the "JPM Credit Facility"). Effective September 27, 2017, the JPM Credit Facility was amended to replace Endurance Holdings with Sompo International. Sompo International assumed all the rights, duties and obligations of Endurance Holdings as the Parent Borrower pursuant to the terms of the JPM Credit Facility, including the Parent Borrower Guaranty as defined in the JPM Credit Facility. Effective October 30, 2017, Endurance Holdings ceased to be a party to the JPM Credit Facility. In January, 2018, the Company notified JPMorgan of its intent to reduce the size of the commitment under the JPM Credit Facility to $100.0 million. The JPM Credit Facility requires the compliance with certain customary restrictive covenants. The Company is required to pay a fee of 0.4% per annum on the daily stated amount of outstanding letters of credit issued under the JPM Credit Facility. In addition, the JPM Credit Facility requires the Company to pay to the Lenders a commitment fee of 0.125% per annum on the average daily amount of the unused commitments of the Lenders. The JPM Credit Facility permits a Lender, if requested and in its discretion, to issue a letter of credit pursuant to which it fronts for the other Lenders. For such letters of credit, such fronting lenders may receive certain fronting fees from the Company. As of December 31, 2018, there were no outstanding borrowings under the JPM Credit Facility.

8. Debt and financing arrangements, cont'd.

Other Uncommitted Letter of Credit Agreements

The Company is party to certain uncommitted letter of credit reimbursement agreements (the "LOC Agreements") that allow for the issuance of letters of credit in a variety of currencies, including U.S. dollars. The fees paid under the LOC Agreements depend on the amount of the outstanding letters of credit and vary from 0.3% to 0.45% on the principal amount of letters of credit outstanding to a fee negotiated at the time of issuance of the individual letters of credit. As of December 31, 2018, there were letters of credit outstanding under the LOC Agreements of $26.1 million.

7% Senior Notes

In July 2004, Endurance Holdings issued $335.0 million principal amount of 7% Senior Notes due July 15, 2034 (the "7% Senior Notes"). All rights, duties and obligations related to the 7% Senior Notes were transferred to Sompo International as part of the net asset transfer on September 27, 2017. The 7% Senior Notes are senior unsecured obligations of the Company and rank equally with all of Sompo International existing and future unsecured and unsubordinated debt. The 7% Senior Notes are junior to claims of creditors of Sompo International's subsidiaries, including policyholders, trade creditors, debt holders, and taxing authorities.

The indentures governing the 7% Senior Notes contain customary covenants and events of default for senior unsecured indebtedness, including events of default for non-payment of principal or interest, breaches of covenants, insolvency of the Company or a default by the Company under other outstanding indebtedness. The Company was in compliance with all covenants contained within the indentures governing the 7% Senior Notes as of December 31, 2018.

4.7% Senior Notes

In October 2012, $300.0 million in aggregate principal amount of 4.7% senior unsecured notes due October 15, 2022 (the “4.7% Senior Notes”) were issued by a predecessor company to Endurance Holdings. All rights, duties and obligations related to the 4.7% Senior Notes were transferred from Endurance Holdings to Sompo International as part of the net asset transfer on September 27, 2017. The 4.7% Senior Notes are senior unsecured obligations of Sompo International and rank equally with all of Sompo International's existing and future unsecured and unsubordinated debt. The 4.7% Senior Notes are junior to claims of creditors of Sompo International's subsidiaries, including policyholders, trade creditors, debt holders, and taxing authorities.

The indentures governing the 4.7% Senior Notes contain customary covenants and events of default for senior unsecured indebtedness, including events of default for non-payment of principal or interest, breaches of covenants, insolvency of the Company or a default by the Company under other outstanding indebtedness. The Company was in compliance with all covenants contained within the indentures governing the 4.7% Senior Notes as of December 31, 2018.

Interest Payments

The Company made aggregate interest payments of $37.6 million during the year ended December 31, 2018.

BCRH Credit Agreement

On May 6, 2016, the Company, through a wholly-owned subsidiary, entered into a credit facility agreement with BCRH (the "BCRH Credit Facility"). The BCRH Credit Facility provides BCRH with an unsecured $20.0 million revolving credit facility for working capital and general corporate purposes and was due to expire on September 30, 2018. Effective July 31, 2018 the BCRH Credit Facility was amended to expire on September 30, 2020. Borrowings under the BCRH Credit Facility bear interest, set at the time of the borrowing, at a rate equal to the applicable LIBOR rate plus 150 basis points. The BCRH Credit Facility contains covenants that limit BCRH's ability, among other things, to grant liens on its assets, sell assets, merge or consolidate, or incur debt. If BCRH fails to comply with any of these covenants, the Company could terminate the BCRH Credit Facility and exercise remedies against BCRH. In addition, in the event of a default in the performance of any of the agreements or covenants under certain management agreements with BCML by BCRH, the Company has the right to terminate the BCRH Credit Facility. As of December 31, 2018, there were borrowings of $4.0 million outstanding under the BCRH Credit Facility.

8. Debt and financing arrangements, cont'd.

BCAI Credit Agreement

On May 16, 2016, the Company, through a wholly-owned subsidiary, entered into a credit facility agreement with BCAI (the "BCAI Credit Facility"). The BCAI Credit Facility provides BCAI with an unsecured $20.0 million revolving credit facility for working capital and general corporate purposes and expired on September 30, 2018 and was not extended. Borrowings under the BCAI Credit Facility bear interest, set at the time of the borrowing, at a rate equal to the applicable LIBOR rate plus 150 basis points. The BCAI Credit Facility contained covenants that limited BCAI's ability, among other things, to grant liens on its assets, sell assets, merge or consolidate, or incur debt. If BCAI failed to comply with any of these covenants, the Company could terminate the BCAI Credit Facility and exercise remedies against BCAI. In addition, in the event of a default in the performance of any of the agreements or covenants under certain management agreements with BCML by BCAI, the Company had the right to terminate the BCAI Credit Facility.

9. Derivatives

The Company regularly transacts in certain derivative-based weather risk management products primarily to address weather and energy risks on behalf of third parties. The markets for these derivatives are generally linked to energy and agriculture commodities, weather and other natural phenomena. Generally, the Company's current portfolio of such derivative contracts is of short duration and such contracts are predominantly seasonal in nature. The Company also invests a portion of its investments with third party investment managers with investment guidelines that permit the use of derivative instruments. The Company may enter into derivative transactions directly or as part of strategies employed by its external investment managers.

The Company's objectives for holding these derivatives are as follows:

Interest Rate Futures, Swaps, Swaptions and Options - to manage exposure to interest rate risk, which can include increasing or decreasing its exposure to this risk through modification of the portfolio composition and duration.

Industry Loss Warranty ("ILW") Swaps - to manage underwriting risk. The Company has entered into ILW swap contracts which provide reinsurance-like protection to the Company for specific loss events associated with certain lines of its business. The Company has also sold ILW protection, which provides reinsurance-like protection to third parties for specific loss events.

Foreign Exchange Forwards, Futures and Options - as part of its overall currency risk management and investment strategies.

Credit Default Swaps - to manage market exposures. The Company may assume or economically hedge credit risk through credit default swaps to replicate or hedge investment positions. The original term of these credit default swaps is generally five years or less.

To-Be-Announced Mortgage-backed Securities ("TBAs") - to enhance investment performance and as part of the overall investment strategy. TBAs represent commitments to purchase or sell a future issuance of agency mortgage-backed securities. For the period between the purchase of a TBA and issuance of the underlying securities, the Company's position is accounted for as a derivative.

Energy and Weather Contracts - to address weather and energy risks. The Company may purchase or sell contracts with financial settlements based on the performance of an index linked to a quantifiable weather element, such as temperature, precipitation, snowfall or windspeed, and structures with multiple risk triggers indexed to a quantifiable weather element and a weather sensitive commodity price, such as temperature and electrical power or natural gas. Generally, the Company's current portfolio of energy and weather derivative contracts is of comparably short duration and such contracts are predominantly seasonal in nature.

Loss Development Cover – as part of the sale of Montpelier U.S. Insurance Company ("MUSIC") to Selective Insurance Group, Inc. ("Selective"), Montpelier Reinsurance Ltd. (now Endurance Bermuda) entered into a loss development cover with MUSIC which ensures that MUSIC's reserve for losses and loss expenses relating to retained business written on or prior to December 31, 2011 remains adequate. Under the loss development cover, any future adverse development associated with such retained reserves will be protected by Endurance Bermuda and any future favorable development associated with such retained reserves will benefit Endurance Bermuda.

9. Derivatives, cont'd.

The fair values and the related notional values of derivatives at December 31, 2018 are noted below.

	Fair Value	Notional Principal Amount
Derivatives recorded in other assets		
Foreign exchange forward contracts	$ 182	$ 11,749
Credit default swaps	26	1,900
Interest rate swaps	685	25,900
Interest rate futures	927	219,600
TBAs	136,219	133,900
Energy and weather contracts	63,211	134,971
Total recorded in other assets	$ 201,250	
Derivatives recorded in other liabilities		
Foreign exchange forward contracts	$ 202	$ 13,091
Credit default swaps	161	3,500
Interest rate swaps	88	10,269
Interest rate swaptions	32	15,800
Interest rate futures	738	37,300
TBAs	66,782	65,600
Loss development cover	838	24,221
Energy and weather contracts	74,849	265,760
Total recorded in other liabilities	$ 143,690	
Net derivative asset	$ 57,560	

At December 31, 2018, derivative assets of $200.3 million and liabilities of $143.0 million were subject to master netting agreements, which provide for the ability to settle the derivative asset and liability with each counterparty on a net basis. Interest rate futures are not subject to master netting agreements. At December 31, 2018, the Company's derivative instruments were recorded on a gross basis in the Consolidated Balance Sheet.

The gains and losses on the Consolidated Statement of Loss and Comprehensive Loss for derivatives for the year ended December 31, 2018 were as follows:

Total gain included in net foreign exchange gains from foreign exchange forward contracts	$ 742
Interest rate futures	413
Credit default swaps	(52)
Interest rate swaps	(149)
Interest rate swaptions	56
ILWs	(119)
TBAs	(2,327)
Total losses included in net realized and unrealized losses	(2,178)
Energy and weather contracts	6,302
Total gain included in other underwriting income	6,302
Total gains from derivatives	$ 4,866

10. Goodwill and intangible assets

The following table shows an analysis of goodwill and intangible assets for the year ended December 31, 2018:

	Goodwill	Intangible assets with indefinite lives	Intangible assets with finite lives	Total
Net balance, beginning of year	$ 1,248,362	$ 132,400	$ 691,008	$ 2,071,770
Additions	40,767	15,760	63,122	119,649
Amortization	(137,155)	—	(238,468)	(375,623)
Impairment	—	(9,400)	—	(9,400)
Foreign currency translation	(9,397)	—	(3,258)	(12,655)
Net balance at December 31, 2018	$ 1,142,577	$ 138,760	$ 512,404	$ 1,793,741
Gross balance	$ 1,377,332	$ 148,160	$ 1,202,622	$ 2,728,114
Accumulated amortization	(237,846)	—	(694,178)	(932,024)
Accumulated impairment losses	—	(9,400)	—	(9,400)
Accumulated foreign currency translation	3,091	—	3,960	7,051
Net balance at December 31, 2018	$ 1,142,577	$ 138,760	$ 512,404	$ 1,793,741

For the year ended December 31, 2018, management performed a qualitative assessment of the impairment of the fair value of the Company's intangible assets with indefinite lives. Certain asset management contracts were found to be impaired due to a decline in asset management fees earned as a result of the liquidation of BCAI. A valuation was performed using the discounted cash flow method, resulting in an impairment loss of $9.4 million which was recognized in loss on impairment of intangibles in the Consolidated Statement of Loss and Comprehensive Loss for the year ended December 31, 2018.

No impairment of the Company's goodwill asset was noted following the annual impairment review during the year ended December 31, 2018.

The useful life of intangible assets with finite lives, including goodwill, ranges from one to 15 years, with a weighted average amortization period of 8.2 years. The Company expects the amortization of the intangible assets with finite lives to approximate $129.2 million in 2019, $97.9 million in 2020, $93.4 million in 2021, $50.8 million in 2022, $34.3 million in 2023 and $106.8 million thereafter. The Company expects the amortization of goodwill to approximate $137.9 million per year for the next five years and $453.1 million thereafter.

11. Commitments and contingencies

Concentrations of credit risk. The areas where significant concentrations of credit risk may exist include reinsurance recoverables, investments and cash and cash equivalents. The Company's reinsurance recoverables on paid and unpaid losses at December 31, 2018 amounted to $4,083.1 million, and resulted from reinsurance arrangements entered into in the normal course of operations. A credit exposure exists with respect to reinsurance recoverables as they may become uncollectible. The Company manages its credit risk in its reinsurance relationships by transacting with reinsurers that it considers financially sound and, if necessary, the Company may hold collateral in the form of cash, trust accounts and/or irrevocable letters of credit. This collateral can be drawn on for amounts that remain unpaid beyond specified time periods on an individual reinsurer basis.

As of December 31, 2018, substantially all the Company's cash and investments were held by ten custodians.

The Company's investment guidelines limit the amount of credit exposure to any one issuer other than the U.S. Treasury and certain other foreign government obligations rated AAA.

11. Commitments and contingencies, cont'd.

Major production sources. The following table shows the percentage of gross premiums written generated through the Company's largest brokers for the year ended December 31, 2018:

Broker	
Marsh & McLennan Companies, Inc.	22.2%
Aon Benfield	14.5%
Willis Companies	9.0%
Total of largest brokers	45.7%

Letters of credit. As of December 31, 2018, the Company had issued letters of credit of $297.3 million under its credit facilities and letter of credit reimbursement agreements in favor of certain ceding companies to collateralize obligations.

Investment commitments. As of December 31, 2018, the Company had pledged cash and cash equivalents and fixed maturity investments of $763.7 million, respectively, in favor of certain ceding companies to collateralize obligations. As of December 31, 2018, the Company had also pledged $31.4 million of its cash and fixed maturity investments as required to meet collateral obligations for $26.1 million in secured letters of credit outstanding under its credit facilities. In addition, at December 31, 2018, cash and fixed maturity investments with fair values of $167.6 million were on deposit with U.S. state regulators.

The Company is subject to certain commitments with respect to other investments at December 31, 2018. See Note 4, Investments.

Investment assets held in trust. Blue Water Re does not operate with a financial strength rating and, instead, fully collateralizes its reinsurance obligations through cash and cash equivalents held in trust funds established by Blue Water Re (the "Blue Water Trust") for the benefit of ceding companies. As of December 31, 2018, the fair value of assets held in the Blue Water Trust was $300.7 million, which met the minimum values required on that date.

As of December 31, 2018, Blue Capital Re had pledged $150.4 million of its cash and cash equivalents to trust accounts established for the benefit of Blue Water Re.

Blue Capital Re ILS fully collateralizes its insurance-linked security obligations through cash and cash equivalents held in trust funds established by Blue Capital Re ILS (the "Blue Capital Re ILS Trusts") for the benefit of third parties. As of December 31, 2018, the fair value of assets held in the Blue Capital Re ILS Trusts was nil, which met the minimum value required on that date.

During 2015, Endurance Bermuda established a multi-beneficiary reinsurance trust (the "Endurance Reinsurance Trust") domiciled in Delaware. The Endurance Reinsurance Trust was established as a means of providing statutory credit to Endurance Bermuda's U.S. cedants. As of December 31, 2018, the fair value of the assets held in the Endurance Reinsurance Trust exceeded $586.7 million, the minimum value required on that date.

During 2015, Endurance Bermuda also established a second multi-beneficiary reinsurance trust (the "Reduced Collateral Trust") domiciled in Delaware. The Reduced Collateral Trust was established as a means of providing statutory credit to Endurance Bermuda's U.S. cedants in connection with a reduction in collateral requirements in certain states. As of December 31, 2018, the fair value of the assets held in the Reduced Collateral Trust exceeded $53.3 million, the minimum value required on that date.

Endurance Bermuda is party to a reinsurance trust (the "MUSIC Trust"). The MUSIC Trust was established as a means of providing statutory credit to MUSIC in support of the business retained in connection with the 2011 sale of MUSIC to Selective. As of December 31, 2018, the fair value of the assets held in the MUSIC Trust was $19.3 million, the minimum value required on that date.

The Company is party to a Lloyd's Deposit Trust Deed (the "Lloyd's Capital Trust") in order to meet Endurance Corporate Capital Limited ("ECCL")'s ongoing funds at Lloyd's ("FAL") requirements. The minimum value of cash and investments held by the Lloyd's Capital Trust is determined on the basis of ECCL's Individual Capital Assessment, which is used to determine the required amount of FAL. As of December 31, 2018, the fair value of assets held in the Lloyd's Capital Trust was $169.3 million, which met the minimum value required on that date.

11. Commitments and contingencies, cont'd.

Premiums received by Syndicate 5151 are required to be received into the Lloyd's Premiums Trust Funds (the "Premiums Trust Funds"). Under the Premiums Trust Funds' deeds, assets may only be used for the payment of claims and valid expenses for a stated period of time. As of December 31, 2018, the fair value of assets held in the Premiums Trust Funds was $407.2 million.

The Company's investment assets held in trust appear on the Company's Consolidated Balance Sheet as cash and cash equivalents, fixed maturity investments, short-term investments and accrued investment income, as appropriate.

Lloyd's New Central Fund. The Lloyd's New Central Fund is available to satisfy claims if a member of Lloyd's is unable to meet its obligations to policyholders. The Lloyd's New Central Fund is funded by an annual levy imposed on members, which is determined annually by Lloyd's as a percentage of each member's gross written premiums (0.35% with respect to 2018). In addition, the Council of Lloyd's has power to call on members to make an additional contribution to the Lloyd's New Central Fund of up to 3% of their underwriting capacity each year should it decide that such additional contributions are necessary. The Company currently estimates that its 2018 obligation to the Lloyd's New Central Fund will be approximately $1.7 million and accrues for this obligation ratably throughout the year on a quarterly basis.

Lloyd's also imposes other charges on its members and the syndicates on which they participate, including an annual subscription charge (0.36% of gross written premiums with respect to 2018), a market modernization levy (2018 - 0.09%) and an overseas business charge, levied as a percentage of gross international premiums (defined as business outside the U.K. and the Channel Islands), with the percentage depending on the type of business written. Lloyd's also has power to impose additional charges under Lloyd's Powers of Charging Byelaw. The Company currently estimates that its 2018 obligation to Lloyd's for such charges will be approximately $4.0 million and accrues for this obligation ratably throughout the year on a quarterly basis.

Investment repurchase agreements. At December 31, 2018, the Company's investment repurchase agreement obligations of $80.9 million were fully collateralized. The following table presents the fair value of collateral pledged under repurchase agreements by investment category. The remaining contractual maturity of the repurchase agreements is less than 30 days.

Collateral pledged under repurchase agreements		Amount
U.S. government and agencies securities	$	32,585
Residential mortgage-backed securities		50,408
	$	82,993
Gross amount of recognized liabilities for repurchase agreements	$	80,883

Pledged collateral levels are monitored daily and are generally maintained at an agreed-upon percentage of the fair value of the amounts borrowed during the life of the transaction. In the event of a decline in the fair value of the pledged collateral under these agreements, the Company may be required to transfer cash or additional securities as pledged collateral under these agreements. Upon termination of the transactions, the Company and its counterparties are obligated to return the amounts borrowed and the securities transferred, respectively. The Company's securities pledged under repurchase agreements appear on the Company's Consolidated Balance Sheet as fixed maturity investments.

Reinsurance commitments. In the ordinary course of business, the Company enters into reinsurance agreements that may include terms which could require the Company to collateralize certain of its obligations.

Employment agreements. The Company has entered into employment agreements with certain officers that provide for long term incentive awards, executive benefits and severance payments under certain circumstances.

11. Commitments and contingencies, cont'd.

Operating leases. The Company leases office space and office equipment under operating leases. Future minimum lease commitments at December 31, 2018 are as follows:

Year ending December 31,	Amount
2019	$ 32,143
2020	31,500
2021	26,640
2022	20,436
2023	16,532
2024 and thereafter	92,956
	$ 220,207

Total lease expense under operating leases for the year ended December 31, 2018 was $27.6 million. Total sublease income, included in total lease expense under operating leases, for the year ended December 31, 2018 was $0.6 million.

Legal Proceedings. The Company is party to various legal proceedings generally arising in the normal course of its business. While any proceeding contains an element of uncertainty, the Company does not believe that the eventual outcome of any litigation or arbitration proceeding to which it is presently a party could have a material adverse effect on its financial condition, results of operations or business. Pursuant to the Company's insurance and reinsurance agreements, disputes are generally required to be finally settled by arbitration.

12. Shareholders' equity

The Company's share capital at December 31, 2018 is comprised as follows:

Common shares	
Authorized - $1.00 par value each	1,000
Issued, outstanding and fully paid:	
Ordinary common shares - $1.00 par value each	4

Accumulated other comprehensive loss

The following table presents the changes in accumulated other comprehensive loss balances by component for the year ended December 31, 2018:

	Unrealized losses on available for sale securities	Foreign currency translation adjustments	Total
Beginning balance	$ 7,150	$ 71,712	$ 78,862
Cumulative effect of adoption of ASU 2018-02[(1)]	(466)	—	(466)
Cumulative effect of adoption of ASU 2016-01[(1)]	(18,329)	—	(18,329)
Other comprehensive loss before reclassifications	(110,647)	(59,886)	(170,533)
Amounts reclassified from accumulated other comprehensive loss [(2)]	37,644	—	37,644
Net current period other comprehensive loss	(73,003)	(59,886)	(132,889)
Ending balance	$ (84,648)	$ 11,826	$ (72,822)

(1) See Note 2 (m), Significant Accounting Policies
(2) All amounts are net of tax.

12. Shareholders' equity, cont'd.

The following table presents the significant items reclassified out of accumulated other comprehensive loss during the year ended December 31, 2018:

Details about accumulated other comprehensive loss components	Amount reclassified from accumulated other comprehensive loss	Affected line item in the Consolidated Statement of Loss and Comprehensive Loss
Unrealized holding losses on available for sale securities	$ 34,552	Net realized and unrealized losses
	5,235	Net impairment losses recognized in net loss
	39,787	Total before income taxes
	(2,143)	Income tax benefit
	$ 37,644	Total net of income taxes

13. Related party transactions

Affiliates of the Company during the year ended December 31, 2018 included Sompo Holdings, its ultimate parent company, and the following subsidiary companies of Sompo Holdings:

Affiliates	Domicile
Sompo Seguros S.A.	Brazil
Sompo Insurance China Co., Ltd.	China
Sompo Insurance (Hong Kong) Company Limited	Hong Kong
SJNK Asset Management	Japan
Sompo Japan Nipponkoa Insurance	Japan
Berjaya Sompo Insurance Berhand	Malaysia
Sompo Insurance Singapore Pte. Ltd	Singapore
SOMPO Taiwan Brokers Co., Ltd.	Taiwan
Sompo Insurance (Thailand) Public Company Limited	Thailand
Sompo Japan Sigorta Anonim Sirketi	Turkey

Intercompany reinsurance arrangements

The Company reinsured affiliates for property and casualty risks on an excess-of-loss and quota share basis. The Company also ceded a portion of it's direct and assumed business to affiliates.

The following table presents the impact in the Consolidated Statement of Loss and Comprehensive Loss of the related party reinsurance arrangements during the year ended December 31, 2018:

Gross premiums written	$ 22,252
Ceded premiums written	(184,437)
Net premiums earned	(176,293)
Net losses and loss expenses	154,041
Acquisition expenses	47,154
Other underwriting income	11,116

13. Related party transactions, cont'd.

The following table presents the impact in the Consolidated Balance Sheet of the related party reinsurance arrangements at December 31, 2018:

Premiums receivable	$	396
Insurance and reinsurance balances receivable		3,136
Deferred acquisition costs		(28,796)
Prepaid reinsurance premiums		53,529
Reinsurance recoverable on unpaid losses		326,862
Reinsurance recoverable on paid losses		5,094
Reserve for losses and loss expenses		5,372
Reserve for unearned premiums		4,755
Reinsurance balances payable		33,126

14. Pension plan

Defined contribution plan

The Company provides pension benefits to eligible employees through various defined contribution plans sponsored by the Company. Under the Company's defined contribution plans, the Company makes contributions to its employees' accounts in amounts ranging from 3% to 12% of its employees' eligible earnings. In addition, under certain defined contribution plans, employee contributions may be supplemented by matching contributions made by the Company based on the level of employee contribution. Lastly, the Company may provide additional contributions, depending on its annual financial performance. The employee and Company contributions in the defined contribution plans are invested at the election of each employee in one or more of several investment portfolios offered by third party investment advisors. Company contributions for the year ended December 31, 2018 resulted in an expense of $23.1 million being recorded in net loss.

Defined benefit scheme

SJNKE operated a defined benefit pension scheme (the "SJNKE Defined Benefit Scheme"). Assets of the SJNKE Defined Benefit Scheme were held separately from those of the Company, and the SJNKE Defined Benefit Scheme was closed to new members on January 1, 2007. In November 2018, the Company executed a pension buy-out with respect to the SJNKE Defined Benefit Scheme and recognized a loss on settlement of $10.5 million within the Losses on defined benefit scheme and legal settlements line of the Statement of Consolidated Loss and Comprehensive Loss.

15. Statutory requirements and dividend restrictions

The Company's insurance and reinsurance operations are subject to insurance and/or reinsurance laws and regulations in the jurisdictions in which they operate, the most significant of which are Bermuda, the United States, the United Kingdom, Singapore and Luxembourg. These regulations include certain restrictions on the amount of dividends or other distributions, such as loans or cash advances, available to shareholders without prior approval of the insurance regulatory authorities.

The combined statutory capital and combined statutory net income (loss) for the Company's principal operating subsidiaries, excluding Syndicate 5151, in their respective jurisdictions were as follows:

Statutory capital	Bermuda	United States	U.K. [1]	Singapore	Luxembourg
	2018	2018	2018	2018	2018
Required statutory capital	$ 2,296,525	$ 459,208	$ 252,151	$ 3,668	$ 27,624
Actual statutory capital	4,424,126	1,937,980	638,059	68,408	100,262

Statutory net income (loss)	Bermuda	United States	U.K.	Singapore	Luxembourg
Year Ended 31 December, 2018	$ 335,038	$ 11,443	$ 14,173	$ (14,693)	$ (4,180)

(1) U.K. includes the statutory capital of Endurance U.K. and SJNKE.

Bermuda

As a Bermuda holding company, Sompo International is subject to the Bermuda Companies Act 1981, which limits the Company's ability to pay dividends and make distributions to its shareholders. The Company's retained earnings are unrestricted; however, the Company is not permitted to declare or pay a dividend, or make a distribution out of contributed surplus, if it is, or would after the payment be, unable to pay its liabilities as they come due, or if the realizable value of its assets would be less than its liabilities. Sompo International had, as of December 31, 2018, $7,461.7 million in contributed surplus, less a retained loss of $542.0 million, available to declare or pay a dividend, or make a distribution out of contributed surplus, so long as Sompo International remained in compliance with the Bermuda Companies Act 1981 following such dividend or distribution. Sompo International relies on dividends from Endurance Bermuda to provide cash flow required for debt service and dividends to shareholders.

Endurance Bermuda

Endurance Bermuda is a registered Class 4 insurer under the Insurance Act 1978 ("Bermuda Insurance Act") and related regulations as amended (the "Insurance Act"). Endurance Bermuda is required to maintain minimum solvency standards and to hold available statutory capital and surplus equal to or exceeding the Enhanced Capital Requirement as determined by the Bermuda Monetary Authority ("BMA") based upon a standard mathematical model that correlates the risk underwritten to the capital that is dedicated to the business. The required capital noted in the table above has been based on the Enhanced Capital Requirement. In addition to the Enhanced Capital Requirement, Endurance Bermuda is required to maintain a minimum statutory liquidity ratio and solvency margin. At December 31, 2018, Endurance Bermuda materially exceeded these minimum requirements.

Endurance Bermuda's ability to pay dividends and make capital distributions is subject to certain regulatory restrictions based on the Enhanced Capital Requirement, limits on the amount of Endurance Bermuda's premiums written and net reserves for losses and loss expenses and a minimum general capital and surplus requirement of $100.0 million. At December 31, 2018, Endurance Bermuda can pay dividends of $1,103.4 million to Sompo International without prior approval under Bermuda law.

Blue Water Re

Blue Water Re is registered with the BMA as a Special Purpose Insurer and is not subject to the BMA's Bermuda Solvency Capital Requirement ("BSCR"); however, the Bermuda Insurance Act limits the maximum amount of annual dividends and distributions that may be paid by Blue Water Re. There is no minimum solvency margin or liquidity ratio that must be maintained by Blue Water Re so long as the value of their assets exceed the value of their liabilities. At December 31, 2018, Blue Water Re's assets exceeded the value of its liabilities by $108.7 million. Blue Water Re did not declare or pay any dividends to it's parent, BCML, during 2018.

15. Statutory requirements and dividend restrictions, cont'd.

Blue Capital Re

Blue Capital Re is registered with the BMA as a Class 3A insurer. The Bermuda Insurance Act requires Blue Capital Re to maintain minimum levels of statutory capital and surplus to maintain minimum liquidity ratios and to meet minimum solvency margins. At December 31, 2018, Blue Capital Re exceeded these minimum requirements. At December 31, 2018, Blue Capital Re can pay dividends of $22.6 million to its parent without prior approval under Bermuda law.

BCML

BCML is licensed and supervised by the BMA to carry on investment business and as an insurance agent/manager. BCML is not subject to any material minimum solvency requirements.

United States

Endurance Assurance, Endurance American, Endurance American Specialty and Endurance Risk Solutions are subject to regulation by the Delaware Department of Insurance. American Agri-Business and Lexon Insurance are subject to regulation by the Texas Department of Insurance. Sompo American Insurance and Sompo America Fire & Marine are subject to regulation by the New York Department of Insurance. Bond Safeguard is subject to regulation by the South Dakota Division of Insurance. Sompo International's Delaware, Texas, New York and South Dakota domiciled entities must maintain a minimum level of statutory capital as established by such jurisdictions. The amount of required capital is determined through the use of the Risk Based Capital model established by the National Association of Insurance Commissioners and adopted by Delaware, Texas, New York and South Dakota. The required capital noted in the table above has been based on the Risk Based Capital model and represents the authorized control level risk based capital for these entities.

Dividends are limited to the greater of 10% of policyholders' surplus or statutory net income, excluding realized capital gains for the Company's Delaware domiciled entities, the greater of 10% of policyholders' surplus of the preceding year or statutory net income of the preceding year for the Company's Texas domiciled entities, the lesser of 10% of policyholders' surplus without exceeding unassigned surplus or net investment income of record for the Company's New York domiciled entities, and the greater of 10% of policyholders' surplus or statutory net income of the preceding year which includes net realized capital gains in an amount not to exceed 20% of net unrealized capital gains for the Company's South Dakota domiciled entity. In addition, dividends may only be declared or distributed out of earned surplus.

At December 31, 2018, Endurance Assurance, Endurance American, Endurance Risk Solutions and Endurance American Specialty did not have earned surplus and thus are precluded from declaring or distributing dividends during 2019 without the prior approval of the applicable insurance regulator. If the parent company is also an insurer, as is the case with Endurance American, Endurance American Specialty and Endurance Risk Solutions, the parent company or companies must also meet their own dividend eligibility requirements in order to pass along any dividends received from subsidiary insurance companies. During 2018, American Agri-Business paid a dividend of $2.5 million. At December 31, 2018, American Agri-Business (with notice to the Texas Department of Insurance) could pay dividends of $4.1 million without prior regulatory approval. During 2018, Sompo American Insurance and Sompo American Fire & Marine paid dividends of $17.0 million and $0.8 million, respectively. At December 31, 2018, Sompo America Insurance could pay dividends of $36.5 million and Sompo America Fire & Marine could pay dividends of $1.4 million. At December 31, 2018, Bond Safeguard could pay dividends of $4.2 million and Lexon Insurance could pay dividends of $6.9 million. No dividends were paid during 2018 by Bond Safeguard or Lexon Insurance.

U.K.

Endurance U.K. and SJNKE

The required and actual statutory capital amounts in the "U.K." category in the table above include amounts related to Endurance U.K and SJNKE. Under the jurisdiction of the United Kingdom's Prudential Regulation Authority ("PRA"), Endurance U.K. and SJNKE must maintain a margin of solvency at all times under the Solvency II Directive from the European Insurance and Occupational Pensions Authority which was effective January 1, 2016. The regulations stipulate that insurers are required to calculate their minimum capital requirement ("MCR") and solvency capital requirement ("SCR"). Insurers can either apply for approval of an internal model to calculate the SCR or adopt the standard formula. Endurance U.K. and SJNKE have utilized the standard formula for the SCR since transition to Solvency II regime from December 31, 2016. As of December 31, 2018, the provisional SCR of Endurance U.K. was $217.1 million and there was surplus capital of $254.8 million

15. Statutory requirements and dividend restrictions, cont'd.

with actual Own Funds Available of $471.8 million. As of December 31, 2018, the provisional SCR of SJNKE was $35.1 million and there was surplus capital of $131.1 million with actual Own Funds Available of $166.2 million.

The PRA regulatory requirements impose no explicit restrictions on Endurance U.K. and SJKNE's ability to pay a dividend, but Endurance U.K and SJNKE would have to notify the PRA 28 days prior to any proposed dividend payment. Dividends may only be distributed from profits available for distribution. At December 31, 2018, Endurance U.K had $21.3 million of profits available for distribution. At December 31, 2018, SJNKE did not have retained profits available for distribution.

Endurance at Lloyd's

The Company participates in the Lloyd's market through Syndicate 5151, which is managed by Endurance at Lloyd's and is capitalized through ECCL. As a corporate member of Lloyd's, ECCL is subject to the oversight of the Council of Lloyd's.

ECCL is required to deposit cash, securities or letters of credit (or a combination of these assets) with Lloyd's in order to satisfy its FAL requirements, which are met through the Lloyd's Capital Trust. At December 31, 2018, ECCL had total tier 1 capital of $280.9 million which is made up of Funds At Lloyds of $169.3 million and the syndicate’s reconciliation reserve less foreseeable distributions, deficit of $111.6 million.

Singapore

Endurance Bermuda's Singapore branch ("Singapore Branch") is subject to Fund Solvency and Capital Adequacy requirements by the Monetary Authority of Singapore as a foreign company in Singapore and is regulated by the Monetary Authority of Singapore pursuant to the Insurance Act in Singapore. At December 31, 2018, the Singapore Branch complied with the capital requirements promulgated by the Monetary Authority of Singapore.

Switzerland

In 2008, Endurance Bermuda established a branch in Zurich, Switzerland named Endurance Specialty Insurance Ltd. Pembroke (Bermuda) Zurich Branch. In 2015, Endurance U.K. established a branch in Zurich named Endurance Worldwide Insurance Limited, London, Zurich Branch. Swiss law does not impose additional regulation upon a Swiss branch of a foreign reinsurer.

Luxembourg

In 2018, SIIE was established under the laws of the Grand Duchy in Luxembourg. Under the jurisdiction of the Commissariat aux Assurances, SIIE must maintain a margin of solvency at all times under the Solvency II Directive. SIIE has utilized the standard formula for the SCR. As of December 31, 2018, the provisional SCR was $27.6 million and there was surplus capital of $72.7 million with actual Own Funds Available of $100.3 million. At December 31, 2018, SIIE did not have retained profits available for distribution.

16. Taxes

The Company has operating subsidiaries and branch operations in the United States, United Kingdom, Switzerland, Luxembourg, Belgium, France, Germany, Italy, Spain, Mexico, and Singapore, which are subject to the relevant taxes in those jurisdictions.

In January 2017, the Switzerland tax authority issued a tax assessment for the Swiss branch of Endurance Bermuda for years 2013 and 2014. The Company disagreed with the assessment and is appealing the assessment. Although the timing and ultimate resolution of the Swiss assessment is uncertain, the Company does not expect the resolution of the examinations to result in a material change to the Company's financial position, results of operations or cash flows. As of December 31, 2018, none of the Company's other operating subsidiaries or branch operations were under examination in any of the jurisdictions in which they operate. The Company remains subject to examination for tax years 2008 through 2018.

Sompo International and Endurance Bermuda are not required to pay any income or capital gains taxes in Bermuda. Endurance Bermuda has received written assurance dated May 16, 2011 and Sompo International has received written assurance dated March 24, 2017 from the Minister of Finance of Bermuda under the Exempted Undertakings Tax Protection Act of 1966 of Bermuda, as amended, that in the event any legislation is enacted in Bermuda imposing any tax computed on profits or income, or computed on any capital asset, gain or appreciation or any tax in the nature of estate duty or inheritance tax, such tax shall not be applicable to the Company until March 31, 2035 provided that the assurance is subject to the condition that it will not prevent the application of any taxes payable by the Company in respect of real property or leasehold interests in Bermuda held

16. Taxes, cont'd.

by it. Sompo International and Endurance Bermuda intend to operate in a manner such that they will owe no United States tax other than premium excise tax and withholding taxes on certain investments.

The income tax benefit was as follows for the year ended December 31, 2018:

Current income tax expense	$	(6,729)
Deferred income tax benefit		8,826
Income tax benefit	$	2,097

Of the 2018 current income tax expense, $4.7 million related to taxes incurred in the United States, $0.6 million related to taxes incurred in Mexico, $0.3 million related to taxes incurred in the United Kingdom, $0.7 million related to taxes incurred in Switzerland, and $0.4 million related to taxes incurred in Italy. Of the deferred income tax benefit, $5.5 million related to a deferred income tax benefit in the United States, $0.1 million related to deferred income tax expense in Mexico, $2.5 million related to a deferred income tax benefit in the United Kingdom, $0.1 million related to deferred income tax expense in Switzerland, and $1.0 million related to a deferred income tax benefit in Bermuda including its branches.

The actual income tax benefit attributable to the loss for the year ended December 31, 2018 differed from the amount computed by applying the combined effective rate of 0% under Bermuda law to loss before income taxes, as a result of the following:

Computed expected tax expense	$	—
Tax benefit effect on foreign taxes		(2,454)
Contribution of accrued interest		(30,451)
Change in valuation allowance		35,002
Income tax benefit	$	2,097

Deferred income taxes represent the tax effect of the differences between the book and tax bases of assets and liabilities. Net deferred income tax assets and liabilities consisted of the following as of December 31, 2018:

Deferred income tax assets:		
Unearned premium	$	44,975
Loss reserves		30,086
Net operating loss carryforward		47,950
Deferred compensation		7,577
Deferred interest		884
Unrealized investment losses		4,843
Realized investment losses		4,601
Syndicate losses declared in future periods		7,531
Other		4,845
Total deferred income tax assets		153,292
Deferred income tax liabilities:		
Deferred acquisition costs		(32,360)
Loss reserves		(6,966)
Fixed asset timing differences		(1,197)
Temporary differences related to acquisition		(109,598)
Other		(2,771)
Total deferred income tax liabilities		(152,892)
Valuation allowance		(9,852)
Net deferred income tax liability	$	(9,452)

16. Taxes, cont'd.

Net income tax payments for the year ended December 31, 2018 totaled $5.3 million. Net operating loss carryforwards gross of tax in the amount of $111.0 million, $64.6 million, $37.5 million, and $2.5 million are available for application against future taxable income in the United States, United Kingdom, Endurance Bermuda's Singapore branch, and Europe respectively. These net operating loss carry forwards have no expiration date in the United Kingdom, Singapore, and Europe. In the United States, the net operating loss carry forwards expire through 2037.

A valuation allowance is provided when it is more likely than not that some portion of the deferred tax assets will not be realized. At December 31, 2018, management has established a valuation allowance of $9.9 million against net deferred tax assets of the Company. The valuation allowance was $5.6 million against certain of the United States subsidiaries deferred tax assets and a full valuation allowance of $3.6 million and $0.7 million against Endurance Bermuda's Singapore branch and certain European subsidiaries and branches, respectively.

Effective December 22, 2017, the U.S. enacted tax legislation which is referred to as the Tax Cuts and Jobs Act of 2017 ("TCJA"). The TCJA made significant changes to the Internal Revenue Code effective January 1, 2018 including but not limited to a reduction in the corporate tax rate from 35% to 21%, changes in the loss reserve discounting methodology, and implementation of a base erosion and anti-abuse tax.

Subsequent to reviewing the guidance from the U.S. Treasury and FASB, the Company determined that all the necessary adjustments to provisional amounts have been made, including an update for the transitional loss reserve discounting adjustment.

As of December 31, 2018 the Company had no material uncertain tax positions.

17. Subsequent events

Management has reviewed all events occurring since the date of the financial statements to April 8, 2019, the date at which the attached statements were issued, to determine if any such events should be disclosed. No events arose during the period indicated which were determined to require disclosure.