AXIS Specialty Limited

Consolidated Financial Statements and Independent Auditors' Report

December 31, 2019 and 2018

Deloitte Ltd.
Corner House
20 Parliament Street
P.O. Box HM 1556
Hamilton HM FX
Bermuda

Tel: + 1 (441) 292 1500
Fax: + 1 (441) 292 0961
www.deloitte.com

INDEPENDENT AUDITORS' REPORT

To the Board of Directors and Shareholders of AXIS Specialty Limited
Hamilton, Bermuda

We have audited the accompanying consolidated financial statements of AXIS Specialty Limited (the "Company"), which comprise the consolidated balance sheets as of December 31, 2019 and 2018, and the related consolidated statements of operations and comprehensive income, changes in shareholder's equity, and cash flows for the years then ended, and the related notes to the consolidated financial statements.

Management's Responsibility for the Consolidated Financial Statements

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

Auditors' Responsibility

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

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

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

Opinion

In our opinion, the consolidated financial statements referred to above present fairly, in all material respects, the financial position of AXIS Specialty Limited and its subsidiaries as of December 31, 2019 and 2018, and the results of their operations and their cash flows for the years then ended in accordance with accounting principles generally accepted in the United States of America.

Other Matter

Accounting principles generally accepted in the United States of America require that the disclosure of short-duration contracts included in Note 6 be presented to supplement the basic financial statements. Such information, although not part of the basic financial statements, is required by the Financial Accounting Standards Board who considers it to be an essential part of financial reporting for placing the basic financial statements in an appropriate operational, economic, or historical context. We have applied certain limited procedures to the required supplementary information in accordance with auditing standards generally accepted in the United States of America, which consisted of inquiries of management about the methods of preparing the information and comparing the information for consistency with management's responses to our inquiries, the basic financial statements, and other knowledge we obtained during our audit of the basic financial statements. We do not express an opinion or provide any assurance on the information because the limited procedures do no provide us with sufficient evidence to express an opinion or provide any assurance.

Deloitte Ltd.

May 1, 2020

AXIS SPECIALTY LIMITED
CONSOLIDATED BALANCE SHEETS
December 31, 2019 and 2018
(In thousands of U.S. dollars)

	2019	2018
Assets		
Investments:		
Fixed maturities, available for sale, at fair value	$ 5,781,175	$ 5,694,463
(Amortized cost 2019: $5,693,624, 2018: $5,808,606)		
Equity securities, at fair value	82,896	64,715
(Cost 2019: $55,826, 2018: $55,919)		
Other investments, at fair value	484,151	486,680
Short-term investments, at amortized cost and fair value	10,324	115,735
Total investments	6,358,546	6,361,593
Cash and cash equivalents	237,449	237,727
Restricted cash and cash equivalents	83,702	302,266
Accrued interest receivable	38,659	43,165
Insurance and reinsurance premium balances receivable	306,193	331,920
Deferred acquisition costs	184,415	215,152
Due from affiliates	2,054,018	1,967,351
Prepaid reinsurance premiums	103,750	76,032
Reinsurance recoverable on unpaid losses	693,104	570,885
Reinsurance recoverable on paid losses	31,496	102,877
Receivable for investments sold	15,317	25,098
Other assets	14,017	12,728
Total assets	$ 10,120,666	$ 10,246,794
Liabilities		
Reserve for losses and loss expenses	$ 5,051,482	$ 5,201,676
Unearned premiums	1,041,217	1,065,857
Insurance and reinsurance balances payable	278,670	344,570
Due to affiliates	238,436	84,148
Other liabilities	82,068	59,720
Payable for investments purchased	30,336	20,004
Total liabilities	6,722,209	6,775,975
Shareholder's Equity		
Common shares	1,200	1,200
(Authorized 12,000,000 common shares, par value $0.10		
Issued and outstanding 2019: 12,000,000 ; 2018: 12,000,000)		
Additional paid-in capital	2,114,237	2,114,237
Accumulated other comprehensive income (loss)	87,551	(114,143)
Retained earnings	1,195,469	1,469,525
Total shareholder's equity	3,398,457	3,470,819
Total liabilities and shareholder's equity	$ 10,120,666	$ 10,246,794

See accompanying notes to Consolidated Financial Statements.

AXIS SPECIALTY LIMITED
CONSOLIDATED STATEMENTS OF OPERATIONS AND COMPREHENSIVE INCOME
Years ended December 31, 2019 and 2018
(In thousands of U.S. dollars)

	2019	2018
Revenues		
Gross premiums written	$ 2,008,445	$ 1,418,396
Premiums ceded	(463,838)	(236,530)
Net premiums written	1,544,607	1,181,866
Change in net unearned premiums	52,368	486,961
Net premiums earned	1,596,975	1,668,827
Net investment income	239,946	257,155
Other insurance related income	3,083	4,645
Net investment gains (losses)		
Other-than-temporary impairment (OTTI) losses	(5,234)	(7,589)
Other realized and unrealized investment gains (losses)	26,272	(71,117)
Total net investment gains (losses)	21,038	(78,706)
Total revenues	1,861,042	1,851,921
Expenses		
Net losses and loss expenses	1,110,994	1,119,338
Acquisition costs	471,340	497,831
General and administrative expenses	59,255	53,403
Foreign exchange gains	(9,100)	(51,320)
Interest expense	2,609	—
Total expenses	1,635,098	1,619,252
Net income	225,944	232,669
Other comprehensive income (loss):		
Available for sale investments:		
Unrealized investment gains (losses) arising during the year	197,160	(201,893)
Adjustment for re-classification of net realized investment gains (losses) and OTTI losses recognized in net income (loss) (nil tax)	4,534	77,599
Unrealized investment gains (losses) arising during the year, net of reclassification adjustment (nil tax)	201,694	(124,294)
Total other comprehensive income (loss)	201,694	(124,294)
Comprehensive income	$ 427,638	$ 108,375

See accompanying notes to Consolidated Financial Statements.

AXIS SPECIALTY LIMITED
CONSOLIDATED STATEMENTS OF CHANGES IN SHAREHOLDER'S EQUITY
Years ended December 31, 2019 and 2018
(In thousands of U.S. dollars)

	2019	2018
Common shares		
Balance at beginning and end of year	$ 1,200	$ 1,200
Additional paid-in capital		
Balance at beginning of year	2,114,237	2,114,237
Share-based compensation expense	2,167	2,248
Return of additional paid-in capital	(2,167)	(2,248)
Balance at end of year	2,114,237	2,114,237
Accumulated other comprehensive income (loss)		
Unrealized gains (losses) on available for sale investments:		
Balance at beginning of year	(114,143)	25,199
Cumulative effect of adoption of ASU No. 2016-01 (nil tax)	—	(15,048)
Unrealized gains (losses) arising during the year, net of reclassification adjustment	201,694	(124,294)
Balance at end of year	87,551	(114,143)
Retained earnings		
Balance at beginning of year	1,469,525	1,621,808
Cumulative effect of adoption of ASU No. 2016-01 (nil tax)	—	15,048
Net income	225,944	232,669
Dividends paid to parent	(500,000)	(400,000)
Balance at end of year	1,195,469	1,469,525
Total shareholder's equity	$ 3,398,457	$ 3,470,819

See accompanying notes to Consolidated Financial Statements.

AXIS SPECIALTY LIMITED
CONSOLIDATED STATEMENTS OF CASH FLOWS

Years ended December 31, 2019 and 2018

(In thousands of U.S. dollars)

	2019	2018
Cash flows from operating activities:		
Net income	$ 225,944	$ 232,669
Adjustments to reconcile net income to net cash (used in) provided by operating activities:		
Net investment losses (gains)	(21,038)	78,706
Net realized and unrealized gains on other investments	(25,951)	(35,353)
Amortization of fixed maturities	13,482	15,406
Other amortization and depreciation	1,993	2,529
Share-based compensation expense, net of cash payments	2,167	2,248
Changes in:		
Accrued interest receivable	4,506	2,569
Insurance and reinsurance balances, net	(40,173)	(60,206)
Deferred acquisition costs	30,738	93,592
Due from affiliates	(93,895)	(24,697)
Prepaid reinsurance premiums	(27,718)	100,674
Reinsurance recoverable on unpaid and paid losses	(50,839)	(196,675)
Reserve for losses and loss expenses	(150,194)	(570,290)
Unearned premiums	(24,640)	(587,694)
Other items	19,004	55,991
Net cash used in operating activities	(136,614)	(890,531)
Cash flows from investing activities:		
Purchases of:		
Fixed maturities	(4,363,042)	(3,545,112)
Equity securities	—	(206)
Other investments	(79,156)	(93,559)
Short-term investments	(45,298)	(177,049)
Proceeds from the sale of:		
Fixed maturities	3,912,974	4,088,303
Equity securities	—	15
Other investments	93,351	266,623
Short-term investments	151,340	49,225
Proceeds from the redemption of fixed maturities	589,904	683,467
Proceeds from the redemption of short-term investments	—	23,987
Net cash provided by investing activities	260,073	1,295,694
Cash flows from financing activities:		
Advances and payments on behalf of parent and ultimate parent companies	(494,939)	(328,739)
Short term advances and loans from affiliates	154,288	81,476
Net cash used in financing activities	(340,651)	(247,263)
Effect of exchange rates changes on foreign currency cash and cash equivalents and restricted cash	(1,650)	(825)
Increase (decrease) in cash and cash equivalents and restricted cash	(218,842)	157,075
Cash and cash equivalents and restricted cash, beginning of year	539,993	382,918
Cash and cash equivalents and restricted cash, end of year	$ 321,151	$ 539,993

Non-cash operating and financing activities: The Company declared dividends of $500,000 in 2019 (2018: $400,000) and returned additional paid-in capital of $2,167 in 2019 (2018: $2,248). The dividends and returns of additional paid-in capital were net settled against balances due from AXIS Capital Holdings Limited, the Company's ultimate holding company and AXIS Specialty Holdings Bermuda Limited, the Company's parent company .

See accompanying notes to Consolidated Financial Statements.

1. History

AXIS Specialty Limited (the "Company") was incorporated on November 8, 2001 under the laws of Bermuda. Pursuant to an exchange offer consummated on December 31, 2002, the Company became a wholly owned subsidiary of AXIS Capital Holdings Limited ("AXIS Capital", the "ultimate parent company"). On December 12, 2011, AXIS Capital assigned all of its shares of the Company to AXIS Specialty Holdings Bermuda Limited ("AXIS Specialty Holdings"). AXIS Specialty Holdings was incorporated under the laws of Bermuda on September 22, 2011 and is a wholly owned subsidiary of AXIS Capital.

The Company is licensed under the Bermuda Insurance Act 1978, amendments thereto and related regulations, to write general business as a Class 4 insurer and commenced operations on November 20, 2001, providing a broad range of insurance and reinsurance products on a worldwide basis.

The Company also provides reinsurance protection to other subsidiaries of AXIS Capital through quota share and stop loss agreements.

The Company formed a branch in Singapore (the "Branch") on June 19, 2008 and obtained a license on August 12, 2008 to carry on general insurance business in Singapore.

On February 5, 2015, AXIS Specialty Holdings contributed all of its shares of AXIS Bermuda Services Limited ("Bermuda Services") to the Company. Bermuda Services was repurposed as a special purpose investment company. On August 15, 2017, Bermuda Services was renamed AXIS Specialty Investments Limited ("Investments I").

On January 6, 2016, AXIS Specialty Holdings transferred all of its shares of AXIS Specialty Investments II Limited ("Investments II") to the Company. Investments II was repurposed as a special purpose investment company.

2. Significant Accounting Policies

Basis of Presentation and Consolidation

These Consolidated Financial Statements have been prepared in accordance with accounting principles generally accepted in the United States ("U.S. GAAP") and include the results of operations and the financial position of the Branch, Investments I and Investments II. All transactions and balances between the Company, the Branch, Investments I and Investments II have been eliminated.

2. Significant Accounting Policies (continued)

Use of Estimates

The preparation of these Consolidated Financial Statements requires management to make estimates and assumptions that affect the reported amount of assets and liabilities and disclosure of contingent assets and liabilities at the date of the Consolidated Financial Statements and the reported amounts of revenues and expenses during the reporting period. While management believes that the amounts included in the Consolidated Financial Statements reflect its best estimates and assumptions, actual results could differ from those estimates. The Company's principal estimates include:

- reserve for losses and loss expenses;
- reinsurance recoverable on unpaid losses, including the provision for uncollectible amounts;
- gross and net premiums written and net premiums earned;
- other-than-temporary impairments ("OTTI") in the carrying value of available-for-sale securities; and
- fair value measurements for financial assets and liabilities.

Significant accounting policies are as follows:

a) Investments

Fixed Maturities, available for sale, at fair value

Fixed maturities classified as available for sale are reported at fair value at the balance sheet date (see Note 4 – Fair Value Measurements). The change in fair values (net unrealized investment gains (losses)) of fixed maturities, net of tax, is recognized in accumulated other comprehensive income (loss) ("AOCI") in the Consolidated Statement of Changes in Shareholder's Equity.

Net investment income includes interest income and the amortization of market premiums and discounts and is presented net of investment expenses. Investment income is recognized when earned. Purchases and sales of fixed maturities are recorded on a trade-date basis and realized investment gains (losses) on sales of fixed maturities are determined based on the specific identification method. Realized investment gains (losses) on fixed maturities are included in net investment gains (losses) in the Consolidated Statements of Operations.

The Company recognizes investment income from fixed maturities based on the constant effective yield method, which includes an adjustment for estimated principal repayments, if applicable. The effective yield used to determine the amortization for fixed maturities subject to prepayment risk (e.g. asset-backed, mortgage-backed and other structured securities) is recalculated and adjusted periodically based upon actual historical and/or projected future cash flows. Adjustments to the yield for highly-rated prepayable fixed maturities are accounted for using the retrospective method. Adjustments to the yield for other prepayable fixed maturities are accounted for using the prospective method.

2. Significant Accounting Policies (continued)

A fixed maturity is impaired if the fair value of the investment is below amortized cost. On a quarterly basis, the Company assesses whether unrealized investment losses on fixed maturities represent impairments that are other-than-temporary. The Company's impairment review process begins with a quantitative analysis to identify securities to be evaluated for potential OTTI. For identified securities, fundamental analysis is performed that considers the following quantitative and qualitative factors:

(i) the duration and the extent of the decline;
(ii) the financial condition, near-term and long-term prospects of the issuer of the security;
(iii) the reason for the decline (e.g. credit spread widening, credit event, foreign exchange rate movements);
(iv) the historical and implied future volatility of the fair value; and
(v) the collateral structure and credit support of the security, if applicable.

If a fixed maturity is impaired and the Company intends to sell the security or it is more likely than not that the Company will be required to sell the security before its anticipated recovery, the impairment is considered other-than-temporary. In these instances, the full amount of the impairment is charged to net income and is included in net investment gains (losses).

In instances where the Company intends to hold the impaired fixed maturity, the Company estimates the anticipated credit loss of the security and recognizes this component of the impairment in net income with a corresponding adjustment to amortized cost (new cost basis) of the security. The new cost basis is not adjusted for subsequent increases in fair value. The difference between the new cost basis and the expected cash flows to be collected is accreted or amortized on a quarterly basis to net investment income over the remaining life of the fixed maturity.

The Company recognizes the non-credit component of the impairment (i.e. related to interest rates, market conditions, etc.) in other comprehensive income.

Equity Securities, at fair value

Equity securities are reported at fair value (see Note 4 – Fair Value Measurements). Subsequent to the adoption of Accounting Standards Update ("ASU") 2016-01, "Financial Instruments - Overall (Subtopic 825-10) - Recognition and *Measurement of Financial Assets and Financial Liabilities,*" on January 1, 2018, the change in the fair values (net unrealized investment gains (losses)) of equity securities, net of tax, is recognized in net investment gains (losses) in the Consolidated Statements of Operations.

Net investment income includes dividend income and is presented net of investment expenses. Investment income is recognized when earned. Purchases and sales of equity securities are recorded on a trade-date basis and realized investment gains (losses) on sales of equity securities are determined based on the specific identification method. Realized investment gains (losses) on equity securities are included in net investment gains (losses) in the Consolidated Statements of Operations.

2. Significant Accounting Policies (continued)

Prior to the adoption of ASU 2016-01

Equity securities are reported at fair value. Prior to the adoption of ASU 2016-01, the change in the fair values (net unrealized investment gains (losses)) of equity securities, net of tax, was recognized in AOCI in the Consolidated Statement of Changes in Shareholders' Equity. An equity security was impaired if the fair value of the investment was below cost. On a quarterly basis, the Company assessed whether unrealized investment losses on equity securities represented impairments that were other-than-temporary and recognized impairments on equity securities in an unrealized loss position when the Company did not have the ability and intent to hold the security for a reasonable period of time to allow for a full recovery. The full amount of the impairment was charged to net income and was included in net realized investment gains (losses) in the Consolidated Statements of Operations. Upon recognition of an other-than-temporary impairment ("OTTI") charge, the new cost basis for the equity security was the cost for an equity security less the OTTI charge recognized in net income. The new cost basis is not adjusted for subsequent increases in fair value.

Other Investments

Other investments are recorded at fair value (see Note 4 – Fair Value Measurements), with both changes in fair value and realized investment gains (losses) reported in net investment income in the Consolidated Statements of Operation.

Short-Term Investments

Short-term investments primarily comprise highly-liquid debt securities with maturities greater than three months but less than one year from the date of purchase. These investments are carried at amortized cost, which approximates fair value.

b) Cash and Cash Equivalents

Cash equivalents include money-market funds, fixed interest deposits and reverse repurchase agreements with a maturity of under 90 days when purchased. Cash and cash equivalents are recorded at amortized cost, which approximates fair value due to the short-term, liquid nature of these securities. Restricted cash consists of cash and cash equivalents held in trust primarily to secure obligations under reinsurance agreements.

c) Premiums and Acquisition Costs

Premiums

Insurance premiums written are recorded in accordance with the terms of the underlying policies.

Reinsurance premiums are recorded at the inception of the contract and are estimated based upon information received from ceding companies. For multi-year contracts (re)insurance premiums are recorded at the inception of the contract based on management's best estimate of total premiums to be received. Premiums are recognized on an annual basis for multi-year contracts where the cedant has the ability to unilaterally commute or cancel coverage within the term of the contract. The remaining annual premiums are included as written at each successive anniversary date within the multi-year term.

2. Significant Accounting Policies (continued)

Any adjustments to insurance and reinsurance premium estimates are recognized in the period in which they are determined.

(Re)insurance premiums are earned evenly over the period during which the Company is exposed to the underlying risk, which is generally one to two years with the exception of multi-year contracts. Unearned premiums represent the portion of premiums written which relates to the unexpired risks under contracts in force.

Reinstatement premiums are recognized and earned at the time a loss event occurs and losses are recorded, where the coverage limits for the remaining life of the contract are reinstated under pre-defined contract terms. The recognitionl of reinstatement premiums is based on estimates of losses and loss adjustment expenses, which reflects management's judgment, as described in Note 2(d) – Losses and Loss Expenses below.

Premiums receivable balances are reviewed for impairment at least quarterly and an allowance is established for amounts considered uncollectible.

Acquisition Costs

Acquisition costs vary with and are directly related to the successful acquisition efforts of acquiring new or renewing existing (re)insurance contracts and consist primarily of fees and commissions paid to brokers and premium taxes. Acquisition costs are shown net of commissions earned on ceded reinsurance. Net acquisition costs are deferred and charged to expense as the related premium is earned. Insurance and Reinsurance premiums receivable are presented net of applicable acquisition costs when contract terms provide for the right of offset.

Anticipated losses and loss expenses, other costs and investment income related to these premiums are considered in assessing the recoverability of deferred acquisition costs. If deferred amounts are estimated to be unrecoverable, they are expensed. Compensation expenses for personnel involved in contract acquisition, as well as advertising costs, are expensed as incurred.

d) Losses and Loss Expenses

Reserve for losses and loss expenses represents an estimate of the unpaid portion of the ultimate liability for losses and loss expenses for (re)insured events that have occurred at or before the balance sheet date. These amounts reflect both claims that have been reported ("case reserves") and claims that have been incurred but not yet reported ("IBNR") and are reduced for estimated amounts of salvage and subrogation recoveries.

The Company reviews its reserve for losses and loss expenses on a quarterly basis. Case reserves are primarily established based on amounts reported from insureds and/or their brokers. Management estimates IBNR after reviewing detailed actuarial analyses and applying informed judgment regarding qualitative factors that may not be fully captured in the actuarial estimates. A variety of actuarial methods are utilized in this process, including the Expected Loss Ratio, Bornhuetter Ferguson and Chain Ladder methods. The Company's estimate is highly dependent on management's judgment as to which method(s) are most appropriate for a particular accident year and line of business. Historical claims data is often supplemented with industry benchmarks when applying these methodologies.

2. Significant Accounting Policies (continued)

Any adjustments to reserve for losses and loss expenses estimates are recognized in the period in which they are determined. While the Company believes that its reserves for losses and loss expenses are adequate, this estimate requires significant judgment and new information, events or circumstances may result in ultimate losses that are materially greater or less than provided for in the Consolidated Balance Sheets.

e) Ceded Reinsurance

In the normal course of business, the Company purchases reinsurance protection to limit its ultimate losses from catastrophic events and to reduce its loss aggregation risk. The premiums paid to reinsurers (i.e. ceded premiums written) are expensed over the coverage period. Prepaid reinsurance premiums represent the portion of premiums ceded which relate to the unexpired term of the contracts in force. Reinstatement premiums ceded are recognized and earned at the time a loss event occurs, where coverage limits for the remaining life of a contract are reinstated under pre-defined contract terms.

Reinsurance recoverable related to case reserves is estimated on a case-by-case basis by applying the terms of any applicable reinsurance cover to individual case reserve estimates. Reinsurance recoverable related to IBNR is generally developed as part of the loss reserving process therefore, its estimation is subject to similar risks and uncertainties as the estimation of IBNR.

Reinsurance recoverable is presented net of a provision for uncollectible amounts, reflecting the amount the Company believes ultimately will not be recovered due to reinsurer insolvency, contractual disputes and/or some other reason. The Company applies case-specific provisions against reinsurance recoverable on unpaid and paid losses that are deemed unlikely to be collected in full. In addition, the Company uses a default analysis to estimate the provision for uncollectible amounts on the remainder of the reinsurance recoverable balance.

The estimates of reinsurance recoverable and the associated provision for uncollectible amounts require management's judgment and are reviewed in detail on a quarterly basis. Any adjustments to the provision for uncollectible amounts are recognized in the period in which they are determined.

Retroactive Reinsurance

Retroactive reinsurance reimburses a ceding company for liabilities incurred as a result of past insurable events covered under contracts subject to the reinsurance. In certain instances, reinsurance contracts cover losses both on a prospective basis and on a retroactive basis and where practical the Company bifurcates the prospective and retrospective elements of these reinsurance contracts and accounts for each element separately. Initial gains in connection with retroactive reinsurance contracts are deferred and amortized into income over the settlement period while losses are recognized immediately. When changes in the estimated amount recoverable from the reinsurer or in the timing of receipts related to that amount occur, a cumulative amortization adjustment is recognized in net income in the period of the change so that the deferred gain reflects the balance that would have existed had the revised estimate been available at the inception of the reinsurance transaction.

2. Significant Accounting Policies (continued)

f) Foreign Currency Transactions

The functional currency of the Company is the U.S. dollar. Transactions in currencies other than the functional currency are measured in U.S. dollars at the exchange rate prevailing at the date of the transaction.

Monetary assets and liabilities denominated in foreign currencies are remeasured to functional currency at exchange rates in effect at the balance sheet date while non-monetary assets and liabilities are converted at historical rates. Realized and changes in unrealized gains and losses from non-functional currencies are recognized in the Consolidated Statements of Operations, with the exception of those related to foreign-denominated available for sale investments. For these investments, exchange rate fluctuations represent an unrealized appreciation/depreciation in the value of the securities and are included in the related component of AOCI. Non-monetary assets and liabilities denominated in a foreign currency are not subsequently remeasured.

g) Share-Based Compensation

Share-based compensation expense includes share-settled and cash-settled service and performance based awards. The fair value of these awards is measured based on the market value of AXIS Capital's common shares at the grant date and is expensed over the requisite service period. The fair value of the liability associated with service and performance based cash-settled awards is re-measured at each balance sheet date, with the change in fair value recognized as an increase or decrease to share-based compensation expense for the period in which it is determined. The Company recognizes forfeitures when they occur.

h) Derivative Instruments

The Company may enter into derivative instruments such as futures, options, interest rate swaps and foreign currency forward contracts as part of its overall foreign currency risk management strategy, to obtain exposure to a particular financial market or for yield enhancement.

From time to time, the Company may also enter into (re)insurance contracts that meet the Financial Accounting Standards Board's ("FASB") definition of a derivative contract.

The Company measures all derivative instruments at fair value (see Note 4 – Fair Value Measurements) and recognizes them as either assets or liabilities in the Consolidated Balance Sheets. Subsequent changes in fair value and any realized gains or losses are recognized in the Consolidated Statements of Operations.

2. Significant Accounting Policies (continued)

i) Income Tax

The Branch is subject to taxation. Current and deferred income taxes are charged or credited to net income, or in certain cases to AOCI, based upon enacted tax laws and rates applicable in Singapore in the period in which the tax becomes accruable or realizable. Deferred income taxes are provided for all temporary differences between the bases of assets and liabilities used in the Consolidated Balance Sheets and those used in the tax returns. When it is more likely than not that a portion of a deferred tax asset will not be realized in the foreseeable future, a valuation allowance against deferred tax assets is recorded. The Company recognizes the tax benefits of uncertain tax positions only when the position is more-likely-than-not to be sustained upon audit by the relevant taxing authorities.

j) New Accounting Standards Adopted in 2019

Premium Amortization on Purchased Callable Debt Securities

Effective January 1, 2019, the Company adopted ASU 2017-08, "Receivables - Nonrefundable Fees and Other Costs (Subtopic 310-20) - *Premium Amortization on Purchased Callable Debt Securities,"* which shortens the amortization period for certain purchased callable debt securities held at a premium. The adoption of this guidance did not impact the Company's results of operations, financial condition or liquidity.

Changes to Disclosures on Fair Value Measurement

Effective January 1, 2019, the Company adopted ASU 2018-13, "Fair Value Measurement (Topic 820) - Disclosure Framework - *Changes to the Disclosure Requirements for Fair Value Measurement,*" which aims to improve the effectiveness of fair value measurement disclosures. The adoption of this guidance did not impact the Company's results of operations, financial condition, or liquidity.

k) Recently Issued Accounting Standards Not Yet Adopted

Leases

In February 2016, the FASB issued ASU 2016-02, "Leases (Topic 842)" which provides a new comprehensive model for lease accounting. Topic 842 will require a lessee to recognize a liability to make lease payments (the lease liability) and a right-of-use asset representing its right to use the underlying asset for the lease term.

In July 2018, the FASB issued ASU 2018-11, "Leases (Topic 842) - Targeted Improvements" which provides an additional (and optional) transition method to adopt the new lease guidance. A company electing this additional (and optional) transition method must provide the required Topic 840 disclosures for all periods that continue to be in accordance with Topic 840. However, these amendments do not change the existing disclosure requirements in Topic 840, in particular these amendments do not create interim disclosure requirements. On November 15, 2019, the FASB issued ASU 2019-10 which amends the effective dates for certain major new accounting standards. ASU 2019-10 amends the effective date for ASU 2016-02 for non public enterprises following which this guidance is effective for annual reporting periods beginning after December 15, 2020 and for interim periods beginning after December 15, 2021, with early adoption permitted.

2. Significant Accounting Policies (continued)

The Company will adopt Topic 842 effective January 1, 2020, by electing the additional transition method provided in ASU 2018-11. The Company will also elect the package of practical expedients permitted under the transition guidance of Topic 842, which must be elected as a package and applied consistently to all leases. The package of practical expedients permits the Company not to reassess the following:

1. whether any expired or existing contracts are or contain leases;
2. the lease classification for any expired or existing leases; and
3. initial direct costs for any existing leases.

In addition to electing the package of practical expedients, the Company will make an accounting policy election not to record leases with an initial term of 12 months or less (short-term) in the Company's Consolidated Balance Sheets. The Company will recognize expense for short-term lease payments on a straight-line basis over the lease term in the Company's Consolidated Statements of Operations. At December 31, 2019, the Company expects the adoption of this guidance will result in the recognition of lease assets and lease liabilities of approximately $10 million in the Company's Consolidated Balance Sheets at January 1, 2020, related to existing office property and equipment leases. The adoption of this guidance will not impact the Company's results of operations and liquidity.

Measurement of Credit Losses on Financial Instruments

In June 2016, the FASB issued ASU 2016-13, "Financial Instruments - Credit Losses (Topic 326) - Measurement of Credit Losses on Financial Instruments" ("ASU 2016-13") which replaces the "incurred loss" impairment methodology with an approach based on "expected losses" to estimate credit losses on certain types of financial instruments and requires consideration of a broader range of reasonable and supportable information to inform credit loss estimates. The Company's insurance and reinsurance premium balances receivable and its reinsurance recoverables on unpaid and paid losses and loss expenses are its more significant financial assets within the scope of ASU 2016-13. The guidance requires financial assets to be presented at the net amount expected to be collected. The allowance for credit losses is a valuation account that is deducted from the cost of the financial asset to present the net carrying value at the amount expected to be collected on the financial asset. This guidance is effective for interim and annual periods beginning after December 15, 2022 for non public enterprises, with early adoption permitted. The Company will adopt ASU 2016-13 effective January 1, 2020. The Company does not anticipate that the adoption of this guidance will have a material impact on its results of operations, financial condition or liquidity.

(In thousands of U.S. dollars)

3. Investments

a) Fixed Maturities and Equity Securities

Fixed Maturities

The amortized cost and fair values of the Company's fixed maturities classified as available for sale were as follows:

	2019			
	Amortized Cost	**Gross Unrealized Gains**	**Gross Unrealized Losses**	**Fair Value**
Fixed maturities:				
U.S. government and agency	$ 844,786	$ 7,655	$ (3,140)	$ 849,301
Non-U.S. government	252,716	8,237	(1,767)	259,186
Corporate debt	2,130,690	63,298	(5,096)	2,188,892
Agency RMBS(1)	923,899	15,940	(2,382)	937,457
CMBS(2)	622,582	10,847	(3,698)	629,731
Non-Agency RMBS	38,264	843	(816)	38,291
ABS(3)	823,562	1,425	(4,186)	820,801
Municipals(4)	57,125	474	(83)	57,516
Total fixed maturities	$ 5,693,624	$ 108,719	$ (21,168)	$ 5,781,175

	2018			
	Amortized Cost	**Gross Unrealized Gains**	**Gross Unrealized Losses**	**Fair Value**
Fixed maturities:				
U.S. government and agency	$ 397,907	$ 1,093	$ (703)	$ 398,297
Non-U.S. government	266,100	954	(10,055)	256,999
Corporate debt	2,373,597	10,218	(79,822)	2,303,993
Agency RMBS(1)	1,188,971	4,651	(21,532)	1,172,090
CMBS(2)	546,400	851	(9,068)	538,183
Non-Agency RMBS	24,846	527	(1,267)	24,106
ABS(3)	945,374	842	(10,586)	935,630
Municipals(4)	65,411	451	(697)	65,165
Total fixed maturities	$ 5,808,606	$ 19,587	$ (133,730)	$ 5,694,463

(1) Residential mortgage-backed securities ("RMBS") originated by U.S. government-sponsored agencies.
(2) Commercial mortgage-backed securities ("CMBS").
(3) Asset-backed securities ("ABS") include debt tranched securities collateralized primarily by auto loans, student loans, credit card receivables and collateralized loan obligations ("CLOs").
(4) Municipals include bonds issued by states, municipalities, and political subdivisions.

(In thousands of U.S. dollars)

3. Investments (continued)

Equity Securities

The cost and fair values of the Company's equity securities were as follows:

	2019			
	Cost	Gross Unrealized Gains	Gross Unrealized Losses	Fair Value
Equity securities:				
Exchange-traded funds	$ 55,538	$ 27,170	$ —	$ 82,708
Common stocks	288	77	(177)	188
Total equity securities	$ 55,826	$ 27,247	$ (177)	$ 82,896

	2018			
	Cost	Gross Unrealized Gains	Gross Unrealized Losses	Fair Value
Equity securities:				
Exchange-traded funds	$ 55,538	$ 8,842	$ —	$ 64,380
Common stocks	381	112	(158)	335
Total equity securities	$ 55,919	$ 8,954	$ (158)	$ 64,715

In the normal course of investing activities, the Company actively manages allocations to non-controlling tranches of structured securities which are variable interests issued by Variable Interest Entities ("VIEs"). These structured securities include RMBS, CMBS and ABS.

The Company also invests in limited partnerships which represent 66% of the Company's other investments. The investments in limited partnerships include hedge funds, direct lending funds, private equity funds and real estate funds as well as CLO equity tranched securities, which are all variable interests issued by VIEs (see Note 3(b) *'Other Investments'*). The Company does not have the power to direct the activities that are most significant to the economic performance of the VIEs therefore the Company is not the primary beneficiary of these VIEs.

The maximum exposure to loss on these interests is limited to the amount of investment made by the Company. The Company has not provided financial or other support to these structured securities other than the original investment.

(In thousands of U.S. dollars)

3. Investments (continued)

Contractual Maturities

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. The contractual maturities of fixed maturities are shown below:

	2019		2018	
	Amortized Cost	Fair Value	Amortized Cost	Fair Value
Due in one year or less	$ 119,891	$ 122,275	$ 137,484	$ 135,301
Due after one year through five years	1,900,091	1,925,661	1,867,180	1,836,102
Due after five years through ten years	999,664	1,029,661	948,725	906,765
Due after ten years	265,671	277,298	149,624	146,286
	3,285,317	3,354,895	3,103,013	3,024,454
Agency RMBS	923,899	937,457	1,188,971	1,172,090
CMBS	622,582	629,731	546,400	538,183
Non-Agency RMBS	38,264	38,291	24,846	24,106
ABS	823,562	820,801	945,374	935,630
Total	$ 5,693,624	$ 5,781,175	$ 5,808,604	$ 5,694,463

Gross Unrealized Losses

The following tables summarize fixed maturities and equity securities in an unrealized loss position at December 31, 2019 and 2018, and the aggregate fair value and gross unrealized loss by length of time the security has continuously been in an unrealized loss position:

	2019					
	12 months or greater		Less than 12 months		Total	
	Fair Value	Unrealized Losses	Fair Value	Unrealized Losses	Fair Value	Unrealized Losses
Fixed maturities:						
U.S. government and agency	$ —	$ —	$ 317,590	$ (3,140)	$ 317,590	$ (3,140)
Non-U.S. government	47,706	(1,431)	7,624	(336)	55,330	(1,767)
Corporate debt	93,296	(3,316)	153,997	(1,780)	247,293	(5,096)
Agency RMBS	131,455	(1,257)	178,890	(1,125)	310,345	(2,382)
CMBS	13,316	(41)	188,785	(3,657)	202,101	(3,698)
Non-Agency RMBS	5,821	(792)	10,490	(24)	16,311	(816)
ABS	375,820	(3,674)	195,115	(512)	570,935	(4,186)
Municipals	4,217	(33)	15,559	(50)	19,776	(83)
Total fixed maturities	$ 671,631	$ (10,544)	$ 1,068,050	$ (10,624)	$ 1,739,681	$ (21,168)

(In thousands of U.S. dollars)

3. Investments (continued)

	2018					
	12 months or greater		**Less than 12 months**		**Total**	
	Fair Value	**Unrealized Losses**	**Fair Value**	**Unrealized Losses**	**Fair Value**	**Unrealized Losses**
Fixed maturities:						
U.S. government and agency	$ 69,988	$ (552)	$ 101,335	$ (151)	$ 171,323	$ (703)
Non-U.S. government	15,741	(812)	173,672	(9,243)	189,413	(10,055)
Corporate debt	773,583	(34,930)	1,210,269	(44,892)	1,983,852	(79,822)
Agency RMBS	691,930	(21,317)	47,603	(215)	739,533	(21,532)
CMBS	308,135	(8,314)	132,344	(754)	440,479	(9,068)
Non-Agency RMBS	9,310	(1,167)	5,596	(100)	14,906	(1,267)
ABS	82,310	(1,112)	764,966	(9,474)	847,276	(10,586)
Municipals	31,024	(680)	2,301	(17)	33,325	(697)
Total fixed maturities	$ 1,982,021	$ (68,884)	$ 2,438,086	$ (64,846)	$ 4,420,107	$ (133,730)

<u>Fixed Maturities</u>

At December 31, 2019, 700 fixed maturities (2018: 2,134) were in an unrealized loss position of $21,168 (2018: $(133,730)) of which $5,049 (2018: $40,973) were related to securities below investment grade or not rated.

At December 31, 2019, 399 securities (2018: 923) had been in a continuous unrealized loss position for 12 months or greater and had a fair value of $671,631 (2018: $1,982,021). Following a credit impairment review, the Company concluded that these securities as well as the remaining securities in an unrealized loss position were temporarily impaired at December 31, 2019, and are expected to recover in value as the securities approach maturity. Further, at December 31, 2019, the Company did not intend to sell the securities in an unrealized loss position and it is more likely than not that it will not be required to sell these securities before the anticipated recovery of their amortized costs.

(In thousands of U.S. dollars)

3. Investments (continued)

b) Other Investments

The following tables provide a summary of the Company's other investments, together with additional information relating to the liquidity of each category:

	Fair Value		Redemption Frequency (if currently eligible)	Redemption Notice Period
At December 31, 2019				
Long/short equity funds	$ 31,248	6%	Annually	60 days
Multi-strategy funds	89,774	19%	Quarterly, Semi-annually	60-90 days
Direct lending funds	225,304	47%	N/A	N/A
Private equity funds	60,245	12%	N/A	N/A
Real estate funds	63,252	13%	N/A	N/A
CLO-Equities	14,328	3%	N/A	N/A
Total other investments	$ 484,151	100%		
At December 31, 2018				
Long/short equity funds	$ 26,779	6%	Annually	60 days
Multi-strategy funds	88,099	18%	Quarterly, Semi-annually, Annually	45-95 days
Direct lending funds	224,870	46%	N/A	N/A
Private equity funds	64,417	13%	N/A	N/A
Real estate funds	61,244	13%	N/A	N/A
CLO-Equities	21,271	4%	N/A	N/A
Total other investments	$ 486,680	100%		

N/A - not applicable

The investment strategies for the above funds are as follows:

- *Long/short equity funds*: Seek to achieve attractive returns primarily by executing an equity trading strategy involving both long and short investments in publicly-traded equity securities.

- *Multi-strategy funds*: Seek to achieve above-market returns by pursuing multiple investment strategies to diversify risks and reduce volatility. This category includes funds of hedge funds which invest in a large pool of hedge funds across a diversified range of hedge fund strategies.

- *Direct lending funds*: Seek to achieve attractive risk-adjusted returns, including current income generation, by investing in funds which provide financing directly to borrowers.

- *Private equity funds*: Seek to achieve attractive risk-adjusted returns by investing in private transactions over the course of several years.

- *Real estate funds*: Seek to achieve attractive risk-adjusted returns by making and managing investments in real estate and real estate securities and businesses.

3. Investments (continued)

Two common redemption restrictions which may impact the Company's ability to redeem its hedge funds are gates and lockups. A gate is a suspension of redemptions which may be implemented by the general partner or investment manager of the fund in order to defer, in whole or in part, the redemption request in the event the aggregate amount of redemption requests exceeds a predetermined percentage of the fund's net assets which may otherwise hinder the general partner or investment manager's ability to liquidate holdings in an orderly fashion in order to generate the cash necessary to fund extraordinarily large redemption payouts. A lockup period is the initial amount of time an investor is contractually required to hold the security before having the ability to redeem. During 2019 and 2018, neither of these restrictions impacted the Company's redemption requests. At December 31, 2019, $68,697 (2018: $26,778), representing 57% (2018: 23%) of the Company's total hedge funds, relate to holdings where they are still within the lockup period. The expiration of these lockup periods range from October 2020 to March 2022.

At December 31, 2019, the Company has $170,309 (2018: $209,538) of unfunded commitments as a limited partner in direct lending funds. Once the full amount of committed capital has been called by the General Partner of each of these funds, the assets will not be fully returned until the completion of the fund's investment term. These funds have investment terms ranging from five to ten years and the General Partners of certain funds have the option to extend the term by up to three years.

At December 31, 2019, the Company has $11,474 (2018: $76,532) of unfunded commitments as a limited partner in a multi-strategy hedge fund. Once the full amount of committed capital has been called by the General Partner, the assets will not be fully returned until the completion of the funds' investment term. These funds have investment terms ranging from two years to the dissolution of the underlying fund.

At December 31, 2019, the Company has $60,511 (2018: $81,825) of unfunded commitments as a limited partner in funds which invest in real estate and real estate securities and businesses. These funds include an open-ended fund and funds with investment terms ranging from seven years to the dissolution of the underlying fund.

At December 31, 2019, the Company has $63,886 (2018: $15,900) of unfunded commitments as a limited partner in private equity funds. The life of the funds is subject to the dissolution of the underlying funds. The Company expects the overall holding period to be over five years.

During 2015, the Company made a $50,000 commitment as a limited partner of a bank revolver opportunity fund. The fund has an investment term of seven years and the General Partners have the option to extend the term by up to two years. At December 31, 2019, this commitment remains unfunded. It is not anticipated that the full amount of this fund will be drawn.

(In thousands of U.S. dollars)

3. Investments (continued)

c) Net Investment Income

Net investment income for the years ended December 31, 2019 and 2018 was derived from the following sources:

	2019	2018
Fixed maturities	$ 191,920	$ 203,681
Other investments	26,187	35,547
Equity securities	1,123	1,098
Short-term investments	3,991	6,379
Cash and cash equivalents	2,784	3,326
Loans to affiliates	28,184	21,754
Gross investment income	254,189	271,785
Investment expenses	(14,243)	(14,630)
Net investment income	$ 239,946	$ 257,155

d) Net Investment Gains (Losses)

The following table provides an analysis of net investment gains (losses) for the years ended December 31, 2019 and 2018:

	2019	2018
Gross realized investment gains		
Fixed maturities and short-term investments	$ 48,310	$ 16,564
Equity securities	120	20
Gross realized investment gains	48,430	16,584
Gross realized investment losses		
Fixed maturities and short-term investments	(38,533)	(86,649)
Equity securities	(93)	—
Gross realized investment losses	(38,626)	(86,649)
Net OTTI charge recognized in net income	(5,234)	(7,589)
Changes in fair value of investment derivatives (1)	(1,806)	5,200
Net unrealized gains (losses) on equity securities (2)	18,274	(6,252)
Net investment gains (losses)	$ 21,038	$ (78,706)

(1) Refer to Note 5 - Derivative Instruments
(2) Effective January 1, 2018, the Company adopted ASU No. 2016-01. The change in fair value of equity securities is now recognized in net investment gains (losses).

(In thousands of U.S. dollars)

3. Investments (continued)

The following table summarizes the OTTI charge recognized in net income by asset class for the years ended December 31, 2019 and 2018:

	2019	2018
Fixed maturities:		
Non-U.S. government	$ 90	$ 4,010
Corporate debt	5,144	3,538
Non-Agency CMBS	—	41
Fixed maturities	5,234	7,589
Total OTTI recognized in net income	$ 5,234	$ 7,589

Fixed maturities

The credit loss component of an OTTI charge recognized in net income is calculated based on the difference between the amortized cost of the security and the net present value of its projected future cash flows. A summary of credit loss activities by asset class, the significant inputs and the methodology used to estimate these credit losses are described below.

U.S. Government, U.S. Agency and U.S. Agency RMBS:

Unrealized losses on securities issued or backed, either explicitly or implicitly by the U.S. government are not analyzed for OTTI. The Company has concluded that the possibility of a credit losses on these securities is highly unlikely due to the explicit U.S. government guarantee related to certain securities (e.g. Government National Mortgage Association ("GNMA") issuances) and the implicit guarantee related to other securities that has been validated by past actions (e.g. U.S. government bailout of Federal National Mortgage Association ("FNMA") and Federal Home Loan Mortgage Corporation ("FHLMC") during the 2008 credit crisis). Although these securities are not analyzed for credit losses, they are still evaluated for intention to sell and likely requirement to sell.

Non-U.S. Government:

Non-U.S. government securities are evaluated for credit losses primarily through qualitative assessment of the likelihood of credit losses using information such as duration, severity of unrealized losses, credit ratings and price volatility. At December 31, 2019, the Company's holdings in sovereign debt, including $12,232 (2018: $2,622) relating to the eurozone countries, were substantially all investment-grade securities. The gross unrealized losses of $1,767 at December 31, 2019 were mainly due to foreign exchange losses. At December 31, 2019, the Company does not anticipate any credit losses on its non-U.S. government fixed maturities. In 2019, the OTTI charge on non-U.S. government fixed maturities mainly related to unrealized foreign exchange losses on certain securities where forecasted recovery was uncertain.

Corporate Debt:

To estimate credit losses for corporate debt securities, projected cash flows are primarily driven by assumptions regarding the probability of default and the severity associated with those defaults. The default

3. Investments (continued)

and loss severity rates are based on credit rating, credit analysis, industry analyst reports and forecasts, Moody's historical default data and any other data relevant to the recoverability of the security. In 2019, the OTTI charge on corporate debt securities mainly related to significant loss severity, unrealized foreign exchange losses on certain securities where forecasted recovery was uncertain, and the Company's intent to sell.

CMBS:

The Company's investments in CMBS are diversified and primarily rated AA or better. Based on discounted cash flows at December 31, 2019, the current level of subordination is sufficient to cover the estimated loan losses on the underlying collateral of the CMBS.

Non-Agency RMBS:

To estimate credit losses for non-agency RMBS, projected cash flows incorporated underlying data from widely accepted third-party data sources along with certain internal assumptions and judgments regarding the future performance of the security. These assumptions included default, delinquency, loss severity and prepayment rates. The assumptions used to calculate the credit losses in 2019 have not changed significantly since December 31, 2018.

At December 31, 2019, the fair value of the Company's non-agency RMBS was $38,291 (2018: $24,106), consisting primarily of $25,282 (2018: $20,701) of Prime and $4,807 (2018: $2,387) of Alt-A MBS. At December 31, 2019, the Company does not anticipate any credit losses on its non-agency RMBS, other than those already recorded.

ABS:

The Company's investments in ABS at December 31, 2019 consist mainly of CLO debt tranched securities ("CLO Debt") purchased primarily as new issues during 2017 through 2018. Substantially all of these new issues had credit ratings of AA or better. The Company utilizes a scenario-based approach to review its CLO Debt portfolio based on the current asset market price. The Company also reviews subordination levels of these securities to determine their ability to absorb credit losses of underlying collateral. If losses are forecast to be below the subordination level for a tranche held by the Company, the security is determined not to be impaired. At December 31, 2019, the Company does not anticipate any credit losses on its CLO Debt.

e) Restricted Investments

In order to support the Company's obligations in regulatory jurisdictions where it operates as a non-admitted carrier, the Company provides collateral in the form of assets held in trust and, to a lesser extent, letters of credit. Refer to Note 8 for further information on collateral requirements upon issuance of certain letters of credit.

The capital provided to support underwriting, or Funds at Lloyd's ("FAL"), may be satisfied by cash, certain investments and letters of credit provided by approved banks (refer to Note 9 'Commitments and Contingencies').

(In thousands of U.S. dollars)

3. Investments (continued)

The fair value of the Company's restricted investments primarily relates to the items, as noted in the table below. Restricted investments primarily consist of high-quality fixed maturity and short-term investment securities.

	2019	2018
Collateral in Trust for inter-company agreements	$ 1,511,460	$ 2,043,564
Collateral for secured letter of credit facilities	467,816	338,325
Funds at Lloyd's	806,275	735,123
Collateral in Trust for third party agreements	521,533	274,546
Total restricted investments	$ 3,307,084	$ 3,391,558

f) Reverse Repurchase Agreements

At December 31, 2019, the Company held no (2018: $16,200) reverse repurchase agreements. These loans are fully collateralized, are generally outstanding for a short period of time and are presented on a gross basis as part of cash and cash equivalents in the Company's Consolidated Balance Sheets. The required collateral for these loans is either cash or U.S. Treasuries at a minimum rate of 102% of the loan principal. Upon maturity, the Company receives principal and interest income. The Company monitors the estimated fair value of the securities loaned and borrowed on a daily basis with additional collateral obtained as necessary throughout the duration of the transaction.

4. Fair Value Measurements

Fair Value Hierarchy

Fair value is defined as the price to sell an asset or transfer a liability (i.e. the "exit price") in an orderly transaction between market participants. U.S. GAAP prescribes a fair value hierarchy that prioritizes the inputs to valuation techniques used to measure fair value. The hierarchy gives the highest priority to quoted prices in active markets and the lowest priority to unobservable data. The level in the hierarchy within which a given fair value measurement falls is determined based on the lowest level input that is significant to the measurement. The hierarchy is broken down into three levels as follows:

- Level 1 - Valuations based on unadjusted quoted prices in active markets for identical assets or liabilities that the Company has the ability to access.
- Level 2 - Valuations based on quoted prices in active markets for similar assets or liabilities, quoted prices for identical assets or liabilities in inactive markets, or for which significant inputs are observable (e.g. interest rates, yield curves, prepayment speeds, default rates, loss severities, etc.) or can be corroborated by observable market data.
- Level 3 - Valuations based on inputs that are unobservable and significant to the overall fair value measurement. The unobservable inputs reflect the Company's own judgments about assumptions that market participants might use.

4. Fair Value Measurements (continued)

The availability of observable inputs can vary from financial instrument to financial instrument and is affected by a wide variety of factors including, for example, the type of financial instrument, whether the financial instrument is new and not yet established in the marketplace, and other characteristics particular to the transaction. To the extent that valuation is based on models or inputs that are less observable or unobservable in the market, the determination of fair value requires significantly more judgment.

Accordingly, the degree of judgment exercised by management in determining fair value is greatest for financial instruments categorized as Level 3. In periods of market dislocation, the observability of prices and inputs may be reduced for many financial instruments. This may lead the Company to change the selection of its valuation technique (from market to cash flow approach) or may cause it to use multiple valuation techniques to estimate the fair value of a financial instrument. This circumstance could cause an instrument to be reclassified between levels within the fair value hierarchy.

Valuation Techniques

The valuation techniques, including significant inputs and assumptions generally used to determine the fair values of the Company's financial instruments as well as the classification of the fair values of its financial instruments in the fair value hierarchy are described in detail below.

Fixed Maturities

At each valuation date, the Company uses the market approach valuation technique to estimate the fair value of its fixed maturities portfolio, where possible. This market approach includes, but is not limited to, prices obtained from third party pricing services for identical or comparable securities and the use of "pricing matrix models" using observable market inputs such as yield curves, credit risks and spreads, measures of volatility, and prepayment speeds. Pricing from third party pricing services is sourced from multiple vendors, where available, and the Company maintains a vendor hierarchy by asset type based on historical pricing experience and vendor expertise. Where prices are unavailable from pricing services, the Company obtains non-binding quotes from broker-dealers who are active in the corresponding markets. The valuation techniques including significant inputs and assumptions generally used to determine the fair values of the Company's fixed maturities by asset class as well as the classifications of the fair values of these securities in the fair value hierarchy are described in detail below.

U.S. Government and Agency

U.S. government and agency securities consist primarily of bonds issued by the U.S. Treasury and mortgage pass-through agencies such as the Federal National Mortgage Association, the Federal Home Loan Mortgage Corporation and the Government National Mortgage Association. As the fair values of U.S. Treasury securities are based on unadjusted quoted market prices in active markets, these securities are classified as Level 1. The fair values of U.S. government agency securities are determined using the spread above the risk-free yield curve. As the yields for the risk-free yield curve and the spreads are observable market inputs, the fair values of U.S. government agency securities are classified as Level 2.

4. Fair Value Measurements (continued)

Non-U.S. Government

Non-U.S. government securities include bonds issued by non-U.S. governments and their agencies along with supranational organizations (collectively also known as sovereign debt securities). The fair values of these securities are based on prices obtained from international indices or valuation models that include inputs such as interest rate yield curves, cross-currency basis index spreads and country credit spreads for structures similar to the sovereign bond in terms of issuer, maturity and seniority. As the significant inputs used to price these securities are observable market inputs, the fair values of non-U.S. government securities are classified as Level 2.

Corporate Debt

Corporate debt securities consist primarily of investment-grade debt of a wide variety of corporate issuers and industries. The fair values of these securities are generally determined using the spread above the risk-free yield curve. These spreads are generally obtained from the new issue market, secondary trading and broker-dealer quotes. As the yields for the risk-free yield curve and the spreads are observable market inputs, the fair values of corporate debt securities are generally classified as Level 2. Where pricing is unavailable from pricing services, the Company obtains non-binding quotes from broker-dealers to estimate fair value. This is generally the case when there is a low volume of trading activity and current transactions are not orderly. In this event, the fair values of these securities are classified as Level 3.

Agency RMBS

Agency RMBS consist of bonds issued by the Federal National Mortgage Association, the Federal Home Loan Mortgage Corporation and the Government National Mortgage Association. The fair values of these securities are priced using a mortgage pool specific model which uses daily inputs from the active to be announced market and the spread associated with each mortgage pool based on vintage. As the significant inputs used to price these securities are observable market inputs, the fair values of Agency RMBS are classified as Level 2.

CMBS

CMBS include mostly investment-grade bonds originated by non-agencies. The fair values of these securities are determined using a pricing model which uses dealer quotes and other available trade information along with security level characteristics to determine deal specific spreads. As the significant inputs used to price these securities are observable market inputs, the fair values of CMBS are generally classified as Level 2. Where pricing is unavailable from pricing services, the Company obtains non-binding quotes from broker-dealers to estimate fair value. This is generally the case when there is a low volume of trading activity and current transactions are not orderly. In this event, the fair values of these securities are classified as Level 3.

4. Fair Value Measurements (continued)

Non-Agency RMBS

Non-Agency RMBS mainly include investment-grade bonds originated by non-agencies. The fair values of these securities are determined using an option adjusted spread model or other relevant models, which use inputs including available trade information or broker quotes, prepayment and default projections based on historical statistics of the underlying collateral and current market data. As the significant inputs used to price these securities are observable market inputs, the fair values of non-agency RMBS are generally classified as Level 2. Where pricing is unavailable from pricing services, the Company obtains non-binding quotes from broker-dealers to estimate fair value. This is generally the case when there is a low volume of trading activity and current transactions are not orderly. In this event, the fair values of these securities are classified as Level 3.

ABS

ABS mainly include investment-grade bonds backed by pools of loans with a variety of underlying collateral, including auto loans, student loans, credit card receivables, and collateralized loan obligations ("CLOs") originated by a variety of financial institutions. The fair values of these securities are determined using a model which uses prepayment speeds and spreads sourced primarily from the new issue market. As the significant inputs used to price these securities are observable market inputs, the fair values of ABS are generally classified as Level 2. Where pricing is unavailable from pricing services, the Company obtains non-binding quotes from broker-dealers to estimate fair value. This is generally the case when there is a low volume of trading activity and current transactions are not orderly. In this event, the fair values of these securities are classified as Level 3.

Municipals

Municipals comprise revenue and general obligation bonds issued by U.S. domiciled state and municipal entities. The fair values of these securities are determined using spreads obtained from the new issue market, trade prices and broker-dealers quotes. As the significant inputs used to price these securities are observable market inputs, the fair values of municipals are classified as Level 2.

Equity Securities

Equity securities include common stocks and exchange-traded funds. As the fair values of common stocks and exchange-traded funds are based on unadjusted quoted market prices in active markets, the fair values of these securities are classified as Level 1.

Other Investments

The fair value of an indirect investment in CLO-Equities is estimated using an income approach valuation technique, specifically an externally developed discounted cash flow model due to the lack of observable and relevant trades in secondary markets. As the significant inputs used to price this security are unobservable, the fair value of the indirect investment in CLO-Equities is classified as Level 3.

4. Fair Value Measurements (continued)

Short-Term Investments

Short-term investments primarily comprise highly liquid securities with maturities greater than three months but less than one year from the date of purchase. These securities are typically not actively traded due to their approaching maturity therefore, their amortized cost approximates fair value. The fair values of short-term investments are classified as Level 2.

Derivative Instruments

Derivative instruments include foreign exchange forward contracts and exchange-traded interest rate swaps that are customized to the Company's economic hedging strategies and trade in the over-the-counter derivative market. The fair values of these derivatives are determined using a market approach valuation technique based on significant observable market inputs from third party pricing vendors, non-binding broker-dealer quotes and/or recent trading activity. As the significant inputs used to price these securities are observable market inputs, the fair values of these derivatives are classified as Level 2.

Other underwriting-related derivatives include insurance and reinsurance contracts that are accounted for as derivatives. These derivative contracts are initially valued at cost which approximates fair value. In subsequent measurement periods, the fair values of these derivatives are determined using internally developed discounted cash flow models. As the significant inputs used to price these derivatives are unobservable, the fair values of these contracts are classified as Level 3.

Insurance-Linked Securities

Insurance-linked securities comprise an investment in a catastrophe bond. As pricing is unavailable from pricing services, the Company obtains non-binding quotes from broker-dealers to estimate the fair value of this security. Pricing is generally unavailable when there is a low volume of trading activity and current transactions are not orderly therefore, the fair value of this security is classified as Level 3.

Cash Settled Awards

Cash settled awards comprise restricted stock units that form part of the Company's compensation program. Although the fair values of these awards are determined using observable quoted market prices in active markets, the restricted stock units are not actively traded. As the significant inputs used to price these securities are observable market inputs, the fair values of these liabilities are classified as Level 2.

(In thousands of U.S. dollars)

4. Fair Value Measurements (continued)

The tables below present the financial instruments measured at fair value on a recurring basis at December 31, 2019 and 2018:

December 31, 2019	Quoted Prices in Active Market for Identical Assets (Level 1)	Significant Other Observable Inputs (Level 2)	Significant Unobservable Inputs (Level 3)	Fair value based on NAV practical expedient	Total Fair Value
Asset					
Fixed maturities					
U.S government and agency	$ 849,301	$ —	$ —	$ —	$ 849,301
Non U.S. government	—	259,186	—	—	259,186
Corporate debt	—	2,188,892	—	—	2,188,892
Agency RMBS	—	937,457	—	—	937,457
CMBS	—	629,731	—	—	629,731
Non-Agency RMBS	—	38,291	—	—	38,291
ABS	—	820,312	489	—	820,801
Municipals	—	57,516	—	—	57,516
	849,301	4,931,385	489	—	5,781,175
Equity securities					
Exchange-traded funds	82,708	—	—	—	82,708
Common stocks	188	—	—	—	188
	82,896	—	—	—	82,896
Other investments					
Hedge funds (1)	—	—	—	121,022	121,022
Direct lending funds	—	—	—	225,304	225,304
Private equity funds	—	—	—	60,245	60,245
Real estate funds	—	—	—	63,252	63,252
CLO-Equities	—	—	14,328	—	14,328
	—	—	14,328	469,823	484,151
Short-term investments	—	10,324	—	—	10,324
Derivative instruments (see Note 5)	—	880	—	—	880
Total Assets	$ 932,197	$ 4,942,589	$ 14,817	$ 469,823	$ 6,359,426
Liabilities					
Derivative instruments (see Note 5)	$ —	$ 3,965	$ 9,672	$ —	$ 13,637
Cash settled awards (see Note 12)	—	1,559	—	—	1,559
Total Liabilities	$ —	$ 5,524	$ 9,672	$ —	$ 15,196

(1) Includes Long/short equity and Multi-strategy funds.

(In thousands of U.S. dollars)

4. Fair Value Measurements (continued)

December 31, 2018	Quoted Prices in Active Market for Identical Assets (Level 1)	Significant Other Observable Inputs (Level 2)	Significant Unobservable Inputs (Level 3)	Fair value based on NAV practical expedient	Total Fair Value
Asset					
Fixed maturities					
U.S government and agency	$ 380,344	$ 17,953	$ —	$ —	$ 398,297
Non U.S. government	—	256,999	—	—	256,999
Corporate debt	—	2,262,983	41,010	—	2,303,993
Agency RMBS	—	1,172,090	—	—	1,172,090
CMBS	—	537,704	479	—	538,183
Non-Agency RMBS	—	24,106	—	—	24,106
ABS	—	933,424	2,206	—	935,630
Municipals	—	65,165	—	—	65,165
	380,344	5,270,424	43,695	—	5,694,463
Equity securities					
Exchange-traded funds	64,380	—	—	—	64,380
Common stocks	335	—	—	—	335
	64,715	—	—	—	64,715
Other investments					
Hedge funds [(1)]	—	—	—	114,878	114,878
Direct lending funds	—	—	—	224,870	224,870
Private equity funds	—	—	—	64,417	64,417
Real estate funds	—	—	—	61,244	61,244
CLO-Equities	—	—	21,271	—	21,271
	—	—	21,271	465,409	486,680
Short-term investments	—	115,735	—	—	115,735
Derivative instruments (see Note 5)	—	7,557	—	—	7,557
Insurance-linked securities	—	—	—	—	—
Total Assets	$ 445,059	$ 5,393,716	$ 64,966	$ 465,409	$ 6,369,150
Liabilities					
Derivative instruments (see Note 5)	$ —	$ 4,166	$ 10,299	$ —	$ 14,465
Cash settled awards (see Note 12)	—	1,906	—	—	1,906
Total Liabilities	$ —	$ 6,072	$ 10,299	$ —	$ 16,371

(1) Includes Long/short equity and Multi-strategy funds.

(In thousands of U.S. dollars)

4. Fair Value Measurements (continued)

The following table quantifies the significant unobservable inputs used in estimating fair values at December 31, 2019 of investments classified as Level 3 in the fair value hierarchy.

		Fair Value	Valuation Technique	Unobservable Input	Range	Weighted Average
Other investments - CLO-Equities	$	14,328	Discounted cash flow	Default rates	3.5%	3.5%
				Loss severity rate	35.0%	35.0%
				Collateral spreads	3.0%	3.0%
				Estimated maturity	7 years	7 years
Derivatives - Other underwriting-related derivatives	$	(9,672)	Discounted cash flow	Discount rate	1.8%	1.8%

Note: Fixed maturities and insurance-linked securities that are classified as Level 3 are excluded from the above table as these securities are priced using broker-dealer quotes.

Other investments - CLO-Equities

The CLO-Equities market continues to be relatively inactive with only a small number of transactions being observed, particularly as it relates to transactions involving CLO-Equities held by the Company. Accordingly, the fair value of the Company's indirect investment in CLO-Equities is determined using a discounted cash flow model prepared by an external investment manager.

The default and loss severity rates are the most judgmental unobservable market inputs to the discounted cash flow model to which the valuation of the Company's indirect investment in CLO-Equities is most sensitive. A significant increase (decrease) in either of these significant inputs in isolation would result in a lower (higher) fair value estimate for the investment in CLO-Equities and, in general, a change in default rate assumptions will be accompanied by a directionally similar change in loss severity rate assumptions. Collateral spreads and estimated maturity dates are less judgmental inputs as they are based on the historical average of actual spreads and the weighted average life of the current underlying portfolios, respectively. A significant increase (decrease) in either of these significant inputs in isolation would result in a higher (lower) fair value estimate for the investment in CLO-Equities. In general, these inputs have no significant interrelationship with each other or with default and loss severity rates.

On a quarterly basis, the Company's valuation process for its indirect investment in CLO-Equities includes a review of the underlying cash flows and key assumptions used in the discounted cash flow model. The above significant unobservable inputs are reviewed and updated based on information obtained from secondary markets, including information received from the managers of the Company's CLO-Equities investment. In order to assess the reasonableness of the inputs used by the Company in the discounted cash flow model, a current understanding of the market conditions, historical results, and emerging trends that may impact future cash flows is maintained. In addition, the assumptions used by the Company in its models are updated through regular communication with industry participants and ongoing monitoring of the deals in which it participates.

4. Fair Value Measurements (continued)

Derivatives - Other underwriting-related derivatives

Other underwriting-related derivatives are initially valued at cost which approximates fair value. In subsequent measurement periods, the fair values of these derivatives are determined using internally developed discounted cash flow models which uses appropriate discount rates. The selection of an appropriate discount rate is judgmental and is the most significant unobservable input used in the valuation of these derivatives. A significant increase (decrease) in this input in isolation could result in a significantly lower (higher) fair value measurement for the derivative contracts. In order to assess the reasonableness of the inputs the Company uses in the discounted cash flow model, the Company maintains an understanding of current market conditions, historical results, as well as contract specific information that may impact future cash flows.

(In thousands of U.S. dollars)

4. Fair Value Measurements (continued)

The following table presents changes in Level 3 for financial instruments measured at fair value on a recurring basis for the years ended December 31, 2019 and 2018:

	Opening Balance	Transfer into Level 3	Transfer out of Level 3	Included in earnings (1)	Included in OCI (2)	Purchases	Sales	Settlement/ Distributions	Closing Balance	Change in unrealized gain/loss (3)
Year ended December 31, 2019										
Fixed maturities										
Corporate debt	$ 41,010	$ —	$ —	$ 6,097	$ (4,805)	$ —	$ (4,802)	$ (37,500)	$ —	$ —
CMBS	479	—	—	—	—	—	—	(479)	—	—
ABS	2,206	—	(1,828)	—	111	—	—	—	489	—
	43,695	—	(1,828)	6,097	(4,694)	—	(4,802)	(37,979)	489	—
Other investments										
CLO-Equities	21,271	—	—	(199)	—	—	—	(6,744)	14,328	(199)
Other assets										
Insurance-linked securities	—	—	—	—	—	—	—	—	—	—
Total assets	$ 64,966	$ —	$ (1,828)	$ 5,898	$ (4,694)	$ —	$ (4,802)	$ (44,723)	$ 14,817	$ (199)
Other liabilities										
Derivative instruments	10,299	—	—	(627)	—	—	—	—	9,672	(627)
Total liabilities	$ 10,299	$ —	$ —	$ (627)	$ —	$ —	$ —	$ —	$ 9,672	$ (627)
Year ended December 31, 2018										
Fixed maturities										
Corporate debt	$ 25,000	$ 853	$ —	$ —	$ 4,890	$ 10,267	$ —	$ —	$ 41,010	$ —
CMBS	—	2,219	—	—	(1)	—	—	(1,739)	479	—
ABS	—	1,979	—	—	(273)	500	—	—	2,206	—
	25,000	5,051	—	—	4,616	10,767	—	(1,739)	43,695	—
Other investments										
CLO-Equities	31,413	—	—	6,627	—	—	—	(16,769)	21,271	6,627
Other assets										
Insurance-linked securities	25,090	—	—	(90)	—	—	—	(25,000)	—	—
Total assets	$ 81,503	$ 5,051	$ —	$ 6,537	$ 4,616	$ 10,767	$ —	$ (43,508)	$ 64,966	$ 6,627
Other liabilities										
Derivative instruments	11,510	—	—	(1,211)	—	—	—	—	10,299	(1,211)
Total liabilities	$ 11,510	$ —	$ —	$ (1,211)	$ —	$ —	$ —	$ —	$ 10,299	$ (1,211)

(1) Realized gains (losses) on fixed maturities, and realized and unrealized gains (losses) on other assets and other liabilities included in net income are included in net investment gains (losses). Realized and unrealized gains (losses) on other investments included in net income are included in net investment income.
(2) Unrealized gains (losses) on fixed maturities are included in other comprehensive income ("OCI").
(3) Change in unrealized gains (losses) relating to assets held at the reporting date.

4. Fair Value Measurements (continued)

Transfers into Level 3 from Level 2

There were no transfers into Level 3 from Level 2 made during 2019.

The transfers into Level 3 from Level 2 made during 2018 were primarily due to the lack of observable market inputs and multiple quotes from pricing vendors and broker-dealers for certain fixed maturities.

Transfers out of Level 3 into Level 2

The transfers into Level 2 from Level 3 made during 2019 and 2018 were primarily due to the availability of observable market inputs and quotes from pricing vendors on certain fixed maturities.

Measuring the Fair Value of Other Investments Using Net Asset Valuations

The fair values of hedge funds, direct lending funds, private equity funds and real estate funds are estimated using net asset valuations ("NAVs") as advised by external fund managers or third party administrators. For these funds, NAVs are based on the manager's or administrator's valuation of the underlying holdings in accordance with the fund's governing documents and in accordance with U.S. GAAP.

If there is a reporting lag between the current period end and reporting date of the latest available fund valuation for any hedge fund, the Company estimates fair values by starting with the most recent fund valuation and adjusting for return estimates as well as any subscriptions, redemptions and distributions that took place during the current period. Return estimates are obtained from the relevant fund managers therefore, the Company does not typically have a reporting lag in fair value measurements of these funds. Historically, the Company's valuation estimates incorporating these return estimates have not significantly diverged from the subsequently received NAVs.

For direct lending funds, private equity funds, real estate funds and one of the Company's hedge funds, valuation statements are typically released on a reporting lag therefore, the Company estimates the fair value of these funds by starting with the most recent fund valuations and adjusting for capital calls, redemptions, drawdowns and distributions. Return estimates are not available from the relevant fund managers for these funds therefore the Company typically has a reporting lag in its fair value measurements of these funds. In 2019, funds reported on a lag represented 78% (2018: 80%) of the total other investments balance.

(In thousands of U.S. dollars)

4. Fair Value Measurements (continued)

The Company often does not have access to financial information relating to the underlying securities held within the funds, therefore management is unable to corroborate the fair values placed on the securities underlying the asset valuations provided by fund managers or fund administrators. In order to assess the reasonableness of the NAVs, the Company performs a number of monitoring procedures on a quarterly basis, to assess the quality of the information provided by fund managers and fund administrators. These procedures include, but are not limited to, regular review and discussion of each fund's performance with its manager, regular evaluation of fund performance against applicable benchmarks and the backtesting of the Company's fair value estimates against subsequently received NAVs. Backtesting involves comparing the Company's previously reported fair values for each fund against NAVs per audited financial statements (for year-end values) and final NAVs from fund managers and fund administrators (for interim values).

The fair values of hedge funds, direct lending funds, private equity funds and real estate funds are measured using the NAV practical expedient, therefore the fair values of these funds have not been categorized within the fair value hierarchy.

Financial Instruments Disclosed, But Not Carried, at Fair Value

The fair value of financial instruments accounting guidance also applies to financial instruments disclosed, but not carried, at fair value, except for certain financial instruments, including insurance contracts.

At December 31, 2019, the carrying values of cash equivalents including restricted amounts, accrued investment income, receivable for investments sold, certain other assets, payable for investments purchased and certain other liabilities approximated their fair values due to their respective short maturities. As these financial instruments are not actively traded, their fair values are classified as Level 2.

5. Derivative Instruments

The balance sheet classifications of derivatives recorded at fair value are shown in the following table.

	December 31, 2019			December 31, 2018		
	Derivative Notional Amount	Asset Derivative Fair Value (1)	Liability Derivative Fair Value (1)	Derivative Notional Amount	Asset Derivative Fair Value (1)	Liability Derivative Fair Value (1)
Relating to investment portfolio:						
Foreign exchange forward contracts	$ 68,998	$ —	$ 1,405	$ 79,336	$ 262	$ 531
Interest rate swaps	—	—	—	150,000	—	1,116
Relating to underwriting portfolio:						
Foreign exchange forward contracts	$ 911,978	$ 880	$ 2,560	$ 480,060	$ 7,295	$ 2,519
Other underwriting-related contracts	85,000	—	9,672	85,000	—	10,299
Total derivatives		$ 880	$ 13,637		$ 7,557	$ 14,465

(1) Asset and liability derivatives are classified within other assets and other liabilities in the Consolidated Balance Sheets.

The notional amounts of derivative contracts represent the basis upon which amounts paid or received amounts are calculated and are presented in the above table to quantify the volume of the Company's derivative activities. Notional amounts are not reflective of credit risk.

(In thousands of U.S. dollars)

5. Derivative Instruments (continued)

None of the Company's derivative instruments are designated as hedges under current accounting guidance.

Offsetting Assets and Liabilities

The Company's derivative instruments are generally traded under International Swaps and Derivatives Association master netting agreements, which establish terms that apply to all transactions. In the event of a bankruptcy or other stipulated event, master netting agreements provide that individual positions be replaced with a new amount, usually referred to as the termination amount, determined by taking into account market prices and converting into a single currency. Effectively, this contractual close-out netting reduces credit exposure from gross to net exposure.

A reconciliation of the gross derivative assets and liabilities to the net amounts presented in the Company's Consolidated Balance Sheets, with the difference being attributable to the impact of master netting agreements, is shown in the following table:

	December 31, 2019			December 31, 2018		
	Gross Amounts	Gross Amounts Offset	Net Amounts (1)	Gross Amounts	Gross Amounts Offset	Net Amounts (1)
Derivative assets	$ 5,379	$ (4,499)	$ 880	$ 10,844	$ (3,287)	$ 7,557
Derivative liabilities	$ 18,136	$ (4,499)	$ 13,637	$ 17,752	$ (3,287)	$ 14,465

(1) Net asset and liability derivatives are classified within other assets and other liabilities on the Consolidated Balance Sheets.

For information on reverse repurchase agreements see Note 3 *'Investments'*.

a) Relating to Investment Portfolio

Foreign Currency Risk

The Company's investment portfolio is exposed to foreign currency risk therefore the fair values of its investments are partially influenced by the change in foreign exchange rates. The Company may enter into foreign exchange forward contracts to manage the effect of this foreign currency risk. These foreign currency hedging activities are not designated as specific hedges for financial reporting purposes.

Interest Rate Risk

The Company's investment portfolio includes a large percentage of fixed maturities which expose it to significant interest rate risk. As part of the overall management of this risk, the Company may use interest rate swaps.

(In thousands of U.S. dollars)

5. Derivative Instruments (continued)

b) Relating to Underwriting Portfolio

Foreign Currency Risk

The Company's underwriting portfolio is exposed to significant foreign currency risk. The Company manages foreign currency risk by seeking to match foreign-denominated net liabilities under (re)insurance contracts with cash and investments that are denominated in the same currencies. The Company uses derivative instruments, specifically forward contracts to economically hedge foreign currency exposures.

Other Underwriting-Related Risks

The Company enters into insurance and reinsurance contracts that are accounted for as derivatives. These insurance or reinsurance contracts provide indemnification to an insured or cedant as a result of a change in a variable as opposed to an identifiable insurable event. The Company considers these contracts to be part of its underwriting operations.

The total unrealized and realized gains (losses) recognized in net income for derivatives not designated as hedges for the years ended December 31, 2019 and 2018 are shown in the following table:

	Location of Gain (Loss) Recognized In Income on Derivative	Amount of Gain (Loss) Recognized in Income on Derivative	
		2019	2018
Derivatives not designated as hedging instruments			
Relating to investment portfolio:			
Foreign exchange forward contracts	Net realized investment gains (losses)	$ 1,871	$ 3,446
Interest rate swaps	Net realized investment gains (losses)	(3,677)	1,752
Relating to underwriting portfolio:			
Foreign exchange forward contracts	Foreign exchange (losses) gains	(4,405)	10,194
Other underwriting-related contracts	Other insurance related income (losses)	1,789	2,384
Total		$ (4,422)	$ 17,776

6. Reserve for Losses and Loss Expenses

Reserving Methodology

The Company's loss reserving process begins with the collection and analysis of paid and incurred claim data for each of the Company's insurance and reinsurance operations. The data is then disaggregated by reserving class and further disaggregated by underwriting year and accident year. Underwriting year or accident year information is used to analyze the Company's business and to estimate reserves for losses and loss expenses. Reserve classes are selected to ensure that the underlying contracts have homogeneous loss development characteristics, while remaining large enough to make the estimation of trends credible. The Company's reserve classes are reviewed on a regular basis and adjusted over time as the Company's business evolves. The paid and incurred claim data, in addition to industry benchmarks, serves as a key input to many of the methods employed by the Company's actuaries.The relative weights assigned to the Company's historical loss data versus industry data vary based on a number of factors including the Company's historical track record and the development profile for the reserve class being evaluated (refer to 'Claim Tail Analysis' and 'Net Incurred and Paid Claims Development Tables By Accident Year' below for further details).

The tables below map the Company's lines of business to reserve classes and the expected claim tails:

Insurance Operations	**Reserve class and tail**					
	Property and Other	Marine	Aviation	Credit and Political Risk	Professional Lines	Liability
	Short	Short	Short/ Medium	Medium	Medium	Long
Reported line of business						
Property and other	X					
Marine		X				
Terrorism	X					
Aviation			X			
Credit and Political Risk				X		
Professional Lines					X	
Liability						X
Accident and Health	X					

6. Reserve for Losses and Loss Expenses (continued)

Reinsurance Operations	**Reserve class and tail**				
	Property and Other	Credit and Surety	Professional Lines	Motor	Liability
	Short	Medium	Medium	Long	Long
Reported lines of business					
Catastrophe	X				
Property	X				
Credit and Surety		X			
Professional Lines			X		
Motor				X	
Liability					X
Engineering	X				
Agriculture	X				
Marine and Other	X				
Accident and Health	X				

Actuarial Analysis

Multiple actuarial methods are available to estimate ultimate losses. Each method has its own assumptions and its own advantages and disadvantages, with no single estimation method being better than the others in all situations and no one set of assumption variables being meaningful for all reserve classes. The relative strengths and weaknesses of the particular estimation methods when applied to a particular group of claims can also change over time.

The following is a brief description of the reserve estimation methods commonly employed by the Company's actuaries including a discussion of their particular strengths and weaknesses:

- Expected Loss Ratio Method ("ELR Method"): This method estimates ultimate losses for an accident year or underwriting year by applying an expected loss ratio to the earned or written premium for that year. Generally, expected loss ratios are based on one or more of (a) an analysis of historical loss experience to date, (b) pricing information and (c) industry data, adjusted as appropriate, to reflect changes in rates, loss and exposure trends, and terms and conditions. This method is insensitive to actual incurred losses for the accident year or underwriting year in question and is, therefore, often useful in the early stages of development when very few losses have been incurred. Conversely, the lack of sensitivity to incurred/paid losses for the accident year or underwriting year in question means that this method is usually inappropriate in later stages of an accident year or underwriting year’s development.

- Loss Development Method (also referred to as the "Chain Ladder Method" or "Link Ratio Method"): This method assumes that the losses incurred/paid for each accident year or underwriting year at a particular development stage follow a relatively similar pattern. It assumes that on average, every accident year or underwriting year will display the same percentage of ultimate losses incurred/paid at the same point in time after the inception of that year. The percentages incurred/paid are established

6. Reserve for Losses and Loss Expenses (continued)

for each development stage (e.g. 12 months, 24 months, etc.) after examining historical averages from historical loss development data and/or external industry benchmark information. Ultimate losses are then estimated by multiplying the actual incurred/paid losses by the reciprocal of the established incurred/paid percentage. The strengths of this method are that it reacts to loss emergence/payments and that it makes full use of historical claim emergence/payment experience. However, this method has weaknesses when the underlying assumption of stable loss development/payment patterns is not valid. This could be the consequence of changes in business mix, claim inflation trends or claim reporting practices and/or the presence of large claims, amongst other things. Furthermore, this method tends to produce volatile estimates of ultimate losses where there is volatility in the underlying incurred/paid patterns. In particular, where the expected percentage of incurred/paid losses is low, small deviations between actual and expected claims can lead to very volatile estimates of ultimate losses. As a result, this method is often unsuitable at early development stages for an accident year or underwriting year.

- Bornhuetter-Ferguson Method ("BF Method"): This method can be seen as a combination of the ELR and Loss Development Methods, under which the Loss Development Method is given progressively more weight as an accident year or underwriting year matures. The main advantage of the BF Method is that it provides a more stable estimate of ultimate losses than the Loss Development Method at earlier stages of development, while remaining more sensitive to emerging loss development than the ELR Method. In addition, the BF Method allows for the incorporation of external market information through the use of expected loss ratios, whereas the Loss Development Method does not incorporate such information.

As part of the loss reserve review process, the Company's actuaries employ the estimation method(s) that they believe will produce the most reliable estimate of ultimate losses, at that particular evaluation date, for each reserve class and accident year or underwriting year combination. Often, this is a blend (i.e. weighted average) of the results of two or more appropriate actuarial methods. These ultimate loss estimates are generally utilized to evaluate the adequacy of ultimate loss estimates for previous accident or underwriting years, as established in the prior reporting period. For the initial estimate of the current accident or underwriting year, the available claim data is typically insufficient to produce a reliable estimate of ultimate losses. As a result, initial estimates for an accident or underwriting year are generally based on the ELR Method for longer tailed lines and a BF Method for shorter tailed lines. The initial ELR for each reserve class is established collaboratively by actuaries, underwriters and management at the start of the year as part of the planning process, taking into consideration prior accident years' or underwriting years' experience and industry benchmarks, adjusted after considering factors such as loss and exposure trends, rate differences, changes in contract terms and conditions, business mix changes and other known differences between the current year and prior accident or underwriting years. The initial expected loss ratios for a given accident or underwriting year may be modified over time if the underlying assumptions, such as loss development or premium rate changes, differ from the original assumptions.

Key Actuarial Assumptions

The use of the above actuarial methods requires the Company to make certain explicit assumptions, the most significant of which are: (1) expected loss ratios and (2) loss development patterns.

In earlier years, significant reliance was placed on industry benchmarks in establishing expected loss ratios and loss development patterns. Over time, more reliance has been placed on historical loss experience in establishing these ratios and selecting these patterns where the Company believes the weight of its own

6. Reserve for Losses and Loss Expenses (continued)

actual experience has become sufficiently credible for consideration. The weight given to the Company's experience differs for each of the three claim tail classes (refer to 'Claim Tail Analysis' below for further details). In establishing expected loss ratios for the insurance operations, consideration is given to a number of other factors, including exposure trends, rate adequacy on new and renewal business, ceded reinsurance costs, changes in claims emergence and underwriters' view of terms and conditions in the market environment. For the reinsurance operations, expected loss ratios are based on a contract-by-contract review, which considers information provided by clients together with estimates provided by underwriters and actuaries about the impact of changes in pricing, terms and conditions and coverage. Market experience of some classes of business as compiled and analyzed by an independent actuarial firm has also been considered, as appropriate.

Claims Tail Analysis

Short-Tail Business

Short-tail business generally includes exposures for which losses are usually known and paid within a relatively short period of time after the underlying loss event has occurred. The key actuarial assumptions for short-tail business in early accident years were primarily developed with reference to industry benchmarks for expected loss ratios and loss development patterns. As the Company's own historical loss experience amassed, it gained credibility and became relevant for consideration in establishing these key actuarial assumptions. As a result, the Company gradually increased the weighting assigned to its own historical loss experience in selecting the expected loss ratios and loss development patterns utilized to establish estimates of ultimate losses for an accident year. Due to the relatively short reporting and settlement patterns for short-tail business, more weight is generally placed upon experience-based methods and other qualitative considerations in establishing reserves for recent and more mature accident years. The majority of development for an accident year or underwriting year is expected to be recognized in the subsequent one to three years

Medium-Tail Analysis

Medium-tail business generally has claim reporting and settlement periods longer than those of short-tail reserve classes. For the Company's earliest accident and underwriting years, initial key actuarial expected loss ratio and loss development assumptions were established utilizing industry benchmarks. Due to the longer claim tail, the length of time required to develop its own credible loss history for use in the reserve process is greater for medium-tail business than for short-tail business.

Long-Tail Analysis

In contrast to short and medium-tail business, the claim tails for long-tail business,is expected to be notably longer, as claims are often reported and ultimately paid or settled years, or even decades, after the related loss events occur. As a general rule, estimates of accident year or underwriting year ultimate losses for long-tail business are notably more uncertain than those for short and medium-tail business. To date, key actuarial assumptions for long-tail business have been derived from a combination of industry benchmarks supplemented with Company historical loss experience. While industry benchmarks that the Company believes reflect the nature and coverage of its business are considered, actual loss experience may differ from the benchmarks based on industry averages. Due to the length of the development tail for this business,

6. Reserve for Losses and Loss Expenses (continued)

reserve estimates for most accident years and underwriting years are predominantly based on the BF Method or ELR Method and the consideration of qualitative factors.

Reserving for Significant Catastrophic Events

The Company cannot estimate losses from widespread catastrophic events, such as hurricanes and earthquakes, using the traditional actuarial methods described above. Loss reserves for such events are estimated by management after a catastrophe occurs by completing an in-depth analysis of individual contracts which may potentially have been impacted by the catastrophic event. This in-depth analysis may rely on several sources of information including:

- estimates of the size of insured industry losses from the catastrophic event and the Company's corresponding market share;
- a review of portfolio of contracts performed to identify those contracts which may be exposed to the catastrophic event;
- a review of modeled loss estimates based on information previously reported by customers and brokers, including exposure data obtained during the underwriting process;
- discussions of the impact of the event with customers and brokers; and
- catastrophe bulletins published by various independent statistical reporting agencies.

A blend of these information sources is generally used to arrive at aggregate estimates of the ultimate losses arising from the catastrophic event. In subsequent reporting periods, changes in paid and incurred losses in relation to each significant catastrophe are reviewed and adjustments are made to estimates of ultimate losses for each event if there are developments that are different from previous expectations. Adjustments are recorded in the period in which they are identified.

Selection of Reported Reserves - Management's Best Estimate

The Company's reserving process involves the collaboration of underwriting, claims, actuarial, legal, ceded reinsurance and finance departments, includes various segmental committee meetings and culminates with the approval of a single point best estimate by the Company's Group Reserving Committee, which comprises senior management. In selecting this best estimate, management considers actuarial estimates and applies informed judgment regarding qualitative factors that may not be fully captured in these actuarial estimates. Such factors include, but are not limited to: the timing of the emergence of claims, volume and complexity of claims, social and judicial trends, potential severity of individual claims and the extent of internal historical loss data versus industry information. While these qualitative factors are considered in arriving at the point estimate, no specific provisions for qualitative factors are established.

(In thousands of U.S. dollars)

6. Reserve for Losses and Loss Expenses (continued)

Reserve Roll-Forward

The following table presents a reconciliation of the beginning and ending gross reserve for losses and loss expenses and net reserve for unpaid losses and loss expenses for the years ended December 31, 2019 and 2018:

	2019	2018
Gross reserve for losses and loss expenses, beginning of year	$ 5,201,676	$ 5,771,966
Less: reinsurance recoverable on unpaid losses, beginning of year	(570,885)	(394,716)
Net reserve for unpaid losses and loss expenses, beginning of year	4,630,791	5,377,250
Net incurred losses and loss expenses related to:		
Current year	1,165,858	1,213,549
Prior years	(54,864)	(94,211)
	1,110,994	1,119,338
Net paid losses and loss expenses related to:		
Current year	(196,024)	(258,075)
Prior years	(1,215,539)	(1,399,686)
	(1,411,563)	(1,657,761)
Foreign exchange and other	28,156	(208,036)
Net reserve for unpaid losses and loss expenses, end of year	4,358,378	4,630,791
Reinsurance recoverable on unpaid losses, end of year	693,104	570,885
Gross reserve for losses and loss expenses, end of year	$ 5,051,482	$ 5,201,676

The Company writes business with loss experience generally characterized as low frequency and high severity in nature, which can result in volatility in its financial results. During 2019 and 2018, respectively, the Company recognized aggregate net losses and loss expenses of $247,674 and $219,821 in relation to catastrophe and weather-related events.

On December 15, 2019, the Company entered into a quota share retrocessional agreement with Harrington Re, a related party, which was deemed to have met the established criteria for retroactive reinsurance accounting. The Company recognized reinsurance recoverable on unpaid losses of $59,444 related to this reinsurance agreement. This transaction was conducted at market rates consistent with negotiated arms-length contracts.

On April 16, 2018, the Company entered into a quota share retrocessional agreement with Harrington Re, a related party, which was deemed to have met the established criteria for retroactive reinsurance accounting. The Company recognized reinsurance recoverable on unpaid losses of $80,635 related to this reinsurance agreement. This transaction was conducted at market rates consistent with negotiated arms-length contracts.

6. Reserve for Losses and Loss Expenses (continued)

Estimates for Significant Catastrophe Events

At December 31, 2019, net reserve for losses and loss expenses included estimated amounts for numerous catastrophe events. The magnitude and/or complexity of losses arising from these events, in particular Japanese Typhoons Hagibis, Faxai and Tapah, Hurricane Dorian and the Australia Wildfires which occurred in 2019 together with Hurricanes Michael and Florence, California Wildfires and Typhoon Jebi which occurred in 2018 as well as Hurricanes Harvey, Irma and Maria, and the California Wildfires which occurred in 2017 inherently increase the level of uncertainty and, therefore, the level of management judgment involved in arriving at estimated net reserves for losses and loss expenses. As a result, actual losses for these events may ultimately differ materially from current estimates.

Prior Year Reserve Development

Net losses and loss expenses incurred include net favorable prior period reserve development of $54,864 and $94,211 for the years ended December 31, 2019 and 2018, respectively. Prior year reserve development arises from changes to losses and loss expense estimates related to loss events that occurred in previous calendar years.

The net favorable prior period reserve development for both years originates from insurance and reinsurance operations on business both written directly by the Company and assumed from affiliates.

Short-tail business

Short-tail business includes the underlying exposures in the property and other, marine and aviation reserve classes within the insurance operations, and the underlying exposures in the property and other reserve class within the reinsurance operations. Development from these classes contributed $61,456 of net adverse prior year reserve development in 2019, including net adverse prior year reserve development of $95,324 recognized by the reinsurance property and other reserve class, partially offset by net favorable prior year reserve development of $24,320 contributed by the insurance marine reserve class and net favorable prior year reserve development of $6,050 contributed by the insurance property and other reserve class.

The net adverse prior year reserve development recognized by the reinsurance property and other reserve class was due to an increase in loss estimates attributable to Hurricanes Irma and Michael consistent with industry trends, an increase in loss estimates attributable Typhoon Jebi consistent with updated industry insured loss estimates, and reserve strengthening within the U.S. regional and commercial proportional property books of business and the European proportional property book of business.

Development from these classes contributed $28,855 of net favourable prior year reserve development in 2018 which primarily reflected the recognition of better than expected loss emergence.

Medium-tail business

Medium-tail business consists primarily of insurance and reinsurance professional line reserve classes, insurance credit and political risk reserve class, and reinsurance credit and surety reserve class. The reinsurance professional ines reserve class experienced minimal net adverse prior year development of $1,168 in 2019 compared to net favourable prior year development of $10,973 in 2018 that reflected generally favorable experience on earlier accident years as the Company continued to transition to more experience

6. Reserve for Losses and Loss Expenses (continued)

based actuarial methods. The insurance professional lines reserve class recorded net favorable prior year development of $13,795 in 2019 and $10,317 in 2018 reflecting generally favorable experience on older accident years as the Company continued to transition to more experience based actuarial methods . The reinsurance credit and surety reserve class recorded net favorable prior year reserve development of $34,707 in 2019 and $25,043 in 2018, reflecting better than expected loss emergence.

Long-tail business

Long-tail business consists primarily of the insurance and reinsurance liability reserve classes and the reinsurance motor reserve class.

For the year ended December 31, 2019, the reinsurance liability reserve classes recognized net favorable prior year development of $19,443 (2018: $13,978). The net favorable prior year development in 2019 and 2018 was due to progressively increased weight given by management to experience based indications on older accident years.

For the year ended December 31, 2019, the insurance liability reserve class recognized net adverse prior year development of $10,213 (2018: $9,450). The net adverse prior year reserve development in 2019 was primarily related to reserve strengthening within the Company's assumed U.S. excess casualty and U.S. primary casualty books of business. The net adverse prior year reserve development in 2018 was primarily related to reserve strengthening within the Company's assumed U.S. excess casualty book of business.

For the year ended December 31, 2019, the reinsurance motor reserve class recognized net favorable prior year reserve development of $52,875 (2018: $17,437). The net favorable prior year reserve development in 2019 was impacted by the increase in the Ogden discount rate and changes in related actuarial assumptions. The Ogden Rate which is used to calculate lump sum awards in U.K. bodily injury cases, changed from minus 0.75% to minus 0.25%, effective August 5, 2019. The net favorable prior year reserve development in 2018 was primarily attributable to U.K. non proportional treaty business on older accident years.

Net Incurred and Paid Claims Development Tables By Accident Year

The following tables present net incurred and paid claims development by accident year, total incurred-but-not-reported liabilities plus expected development on reported claims, cumulative reported claims frequency and claims duration for each reserve class. The loss development triangles are presented on an accident year basis for both the insurance and reinsurance operations. The Company does not discount unpaid losses and loss expense reserves.

Non-U.S. dollar denominated loss data is converted to U.S. dollar at the rates of exchange in effect at the balance sheet date for material underlying currencies. Fluctuations in foreign currency exchange rates may cause material shifts in loss development. Reserves for losses and loss expenses, disclosed in the Consolidated Balance Sheets, are also remeasured using the rates of exchange in effect at the balance sheet date.

There are many considerations in establishing loss reserves and an attempt to evaluate loss reserves using solely the data presented in these tables could be misleading. The Company cautions against mechanical application of standard actuarial methodologies to project ultimate losses using data presented in this disclosure.

(In thousands of U.S. dollars)

6. Reserve for Losses and Loss Expenses (continued)

Insurance Operations

The reporting of cumulative claims frequency for the reserve classes within the insurance operations has been measured by counting the number of unique claim references including claim references assigned to nil and nominal case reserves. Claim references are grouped by claimant by loss event for each reserve class. For certain insurance facilities and business produced by managing general agents where underlying data is reported to the Company in an aggregated format, the information necessary to provide cumulative claims frequency is not available therefore reporting of claims frequency is deemed to be impracticable.

Insurance Property and Other

This reserve class includes property, terrorism and accident and health lines of business.

The property line of business provides physical loss or damage, business interruption and machinery breakdown cover for virtually all types of property, including commercial buildings, residential premises, construction projects and onshore energy installations. This line of business includes both primary and excess risks, some of which are catastrophe-exposed.

The terrorism line of business provides cover for physical damage and business interruption of an insured following an act of terrorism and includes kidnap and ransom, and crisis management insurance.

The accident and health line of business includes accidental death, travel insurance and specialty health products for employer and affinity groups.

In general, reporting and payment patterns are relatively short-tailed although they can be volatile due to the incidence of catastrophe events.

Insurance Property and Other

	Incurred Claims and Allocated Claim Adjustment Expenses, Net of Reinsurance										At December 31, 2019	
	For the Years Ended December 31,											
Accident Year	2010 Unaudited	2011 Unaudited	2012 Unaudited	2013 Unaudited	2014 Unaudited	2015 Unaudited	2016 Unaudited	2017 Unaudited	2018 Unaudited	2019	Total of Incurred-But-Not-Reported Liabilities Plus Expected Development on Reported Claims	Cumulative Number of Reported Claims
2010	$ 100,372	$ 89,358	$ 85,281	$ 70,318	$ 67,477	$ 66,974	$ 66,743	$ 66,470	$ 65,916	$ 65,767	$ 494	4,423
2011		209,629	195,434	177,863	167,272	164,894	163,299	163,524	162,996	162,317	33	6,350
2012			223,611	232,460	223,117	210,446	207,543	203,628	203,040	197,980	(25)	29,931
2013				186,744	179,512	162,686	160,478	160,371	165,554	163,418	482	53,191
2014					213,985	209,306	203,091	190,184	189,121	187,890	1,755	62,356
2015						165,637	158,878	152,955	150,261	148,158	2,065	48,424
2016							209,250	226,483	222,100	213,292	3,204	93,717
2017								437,625	410,767	399,179	10,923	697,983
2018									145,439	165,625	7,246	4,498
2019										101,174	23,315	2,860
									Total	$ 1,804,800		

(In thousands of U.S. dollars)

6. Reserve for Losses and Loss Expenses (continued)

Insurance Property and Other

Cumulative Paid Claims and Allocated Claim Adjustment Expenses, Net of Reinsurance

For the Years Ended December 31,

Accident Year	2010 Unaudited	2011 Unaudited	2012 Unaudited	2013 Unaudited	2014 Unaudited	2015 Unaudited	2016 Unaudited	2017 Unaudited	2018 Unaudited	2019
2010	$ 26,111	$ 47,635	$ 52,405	$ 60,283	$ 63,250	$ 63,352	$ 63,193	$ 63,225	$ 63,388	$ 63,386
2011		44,767	104,178	139,602	157,149	156,220	156,128	156,353	156,448	156,440
2012			40,423	115,798	156,073	168,637	173,716	177,495	177,527	178,643
2013				39,782	116,449	142,201	148,402	155,862	157,380	157,805
2014					71,797	147,683	178,565	182,026	183,573	184,217
2015						57,821	119,682	134,452	142,397	142,401
2016							72,160	172,791	196,663	202,264
2017								131,534	295,603	355,967
2018									46,611	121,773
2019										32,129
									Total	1,595,025
									All outstanding liabilities before 2010, net of reinsurance	6,051
									Liabilities for claims and claim adjustment expenses, net of reinsurance	$ 215,826

Insurance Property and Other

Average annual percentage payout of incurred claims by age, net of reinsurance

Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10
31.6%	41.1%	14.7%	6.1%	2.0%	0.6%	0.1%	0.2%	0.1%	—%

Insurance Marine

This reserve class includes the marine line of business which provides cover for traditional marine classes, including offshore energy, cargo, liability, recreational marine, fine art, specie as well as hull and war. Offshore energy includes physical damage, business interruption, operators extra expense and liability coverage for all aspects of offshore upstream energy, from exploration and construction through the operation and distribution phases. The complex nature of claims arising under marine policies tends to result in reporting and payment patterns that are longer than those of the property and other class. Exposure to natural perils such as windstorm and earthquake can result in volatility.

(In thousands of U.S. dollars)

6. Reserve for Losses and Loss Expenses (continued)

Insurance Marine

	Incurred Claims and Allocated Claim Adjustment Expenses, Net of Reinsurance										At December 31, 2019	
	For the Years Ended December 31,											
Accident Year	2010 Unaudited	2011 Unaudited	2012 Unaudited	2013 Unaudited	2014 Unaudited	2015 Unaudited	2016 Unaudited	2017 Unaudited	2018 Unaudited	2019	Total of Incurred-But-Not-Reported Liabilities Plus Expected Development on Reported Claims	Cumulative Number of Reported Claims
2010	$ 45,845	$ 46,713	$ 44,473	$ 35,979	$ 34,387	$ 32,205	$ 31,309	$ 29,991	$ 29,730	$ 29,431	$ 214	3,197
2011		66,565	58,510	54,297	49,775	49,447	49,565	51,181	51,636	50,978	727	3,830
2012			66,664	60,294	50,520	52,616	53,359	55,326	53,823	44,798	1,821	4,134
2013				59,640	75,250	72,185	72,837	61,013	60,319	59,480	972	2,353
2014					44,884	33,613	36,379	33,158	34,131	34,550	3,391	2,163
2015						116,999	103,721	101,446	95,481	85,650	2,623	2,228
2016							63,949	57,998	56,404	51,153	3,315	2,841
2017								54,778	51,265	47,706	12,251	3,976
2018									48,887	57,806	15,876	2,933
2019										44,966	32,043	1,412
									Total	$ 506,518		

(In thousands of U.S. dollars)

6. Reserve for Losses and Loss Expenses (continued)

Insurance Marine

Cumulative Paid Claims and Allocated Claim Adjustment Expenses, Net of Reinsurance

For the Years Ended December 31,

Accident Year	2010 Unaudited	2011 Unaudited	2012 Unaudited	2013 Unaudited	2014 Unaudited	2015 Unaudited	2016 Unaudited	2017 Unaudited	2018 Unaudited	2019
2010	$ 11,811	$ 18,372	$ 21,124	$ 27,936	$ 29,822	$ 30,361	$ 31,084	$ 28,366	$ 28,430	$ 28,434
2011		19,496	32,266	40,985	43,572	45,062	45,619	48,631	50,121	50,487
2012			6,750	27,656	32,091	35,330	35,933	37,718	39,210	40,015
2013				13,150	31,725	39,806	45,976	47,881	56,154	56,264
2014					4,220	10,687	19,351	19,300	25,790	29,357
2015						15,208	39,150	78,491	80,637	81,655
2016							8,343	22,102	40,700	45,126
2017								6,464	16,711	25,462
2018									5,401	22,659
2019										4,194
									Total	383,653
All outstanding liabilities before 2010, net of reinsurance										4,863
Liabilities for claims and claim adjustment expenses, net of reinsurance										$ 127,728

Insurance Marine

Average annual percentage payout of incurred claims by age, net of reinsurance

Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10
19.4%	27.8%	22.0%	8.1%	5.6%	6.2%	3.0%	(1.5)%	0.5%	—%

Insurance Aviation

This reserve class includes the aviation line of business which provides cover for hull and liability, and specific war covers primarily for passenger airlines but also for cargo operations, general aviation operations, airports, aviation authorities, security firms and product manufacturers. The claims reporting pattern varies by insurance coverage provided. Losses arising from war or terrorism and damage to hulls of aircraft are generally reported quickly compared with liability claims which involve passengers and third parties which generally exhibit longer reporting and payment patterns. To date, the claims reported to the Company have predominantly related to damage to hulls, therefore reporting and payment patterns have typically exhibited a relatively short tail.

(In thousands of U.S. dollars)

6. Reserve for Losses and Loss Expenses (continued)

Insurance Aviation

	Incurred Claims and Allocated Claim Adjustment Expenses, Net of Reinsurance										At December 31, 2019	
	For the Years Ended December 31,											
Accident Year	2010 Unaudited	2011 Unaudited	2012 Unaudited	2013 Unaudited	2014 Unaudited	2015 Unaudited	2016 Unaudited	2017 Unaudited	2018 Unaudited	2019	Total of Incurred-But-Not-Reported Liabilities Plus Expected Development on Reported Claims	Cumulative Number of Reported Claims
2010	$ 11,882	$ 10,984	$ 10,706	$ 9,270	$ 8,362	$ 8,315	$ 8,362	$ 8,170	$ 8,504	$ 8,820	$ 43	663
2011		16,584	14,279	11,896	8,916	8,011	6,890	6,854	6,829	6,810	104	4,202
2012			12,062	10,105	10,294	8,279	7,330	7,276	7,161	6,255	84	2,857
2013				14,887	15,506	14,382	14,448	14,747	14,624	16,868	250	3,017
2014					19,208	21,591	22,361	19,667	19,640	16,169	286	3,529
2015						22,323	21,552	22,408	22,027	17,777	(59)	4,140
2016							21,224	24,141	24,305	26,141	(736)	4,062
2017								37,949	27,134	36,077	2,724	4,272
2018									52,845	41,964	6,558	4,258
2019										31,233	9,283	2,305
									Total	$ 208,114		

Insurance Aviation

	Cumulative Paid Claims and Allocated Claim Adjustment Expenses, Net of Reinsurance									
	For the Years Ended December 31,									
Accident Year	2010 Unaudited	2011 Unaudited	2012 Unaudited	2013 Unaudited	2014 Unaudited	2015 Unaudited	2016 Unaudited	2017 Unaudited	2018 Unaudited	2019
2010	$ 987	$ 3,948	$ 6,031	$ 6,586	$ 7,235	$ 7,346	$ 7,787	$ 7,876	$ 8,046	$ 8,280
2011		605	2,599	4,235	4,733	5,251	5,492	5,708	5,850	5,851
2012			874	2,658	3,847	5,584	6,436	6,648	6,758	6,868
2013				4,269	6,862	9,096	10,713	12,764	13,348	13,766
2014					3,785	7,319	10,455	12,238	12,784	13,453
2015						6,087	11,947	15,437	17,088	18,719
2016							7,393	13,702	18,844	21,402
2017								11,631	16,445	17,237
2018									21,027	17,475
2019										13,533
									Total	136,584
						All outstanding liabilities before 2010, net of reinsurance				2,738
						Liabilities for claims and claim adjustment expenses, net of reinsurance				$ 74,268

(In thousands of U.S. dollars)

6. Reserve for Losses and Loss Expenses (continued)

Insurance Aviation

Average annual percentage payout of incurred claims by age, net of reinsurance

Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10
27.1%	21.2%	17.6%	11.6%	8.9%	3.2%	3.1%	1.6%	1.0%	2.7%

Insurance Credit and Political Risk

This reserve class includes the credit and political risk line of business which provides credit and political risk insurance products for banks, commodity traders, corporations and multilateral and export credit agencies. Cover is provided for a range of risks including sovereign default, credit default, political violence, currency inconvertibility and non-transfer, expropriation, aircraft non-repossession and contract frustration due to political events.

The credit insurance coverage is primarily for lenders seeking to mitigate the risk of non-payment from their borrowers. In order to claim compensation under a credit insurance contract, the insured (most often a bank) cannot assign, without the Company's prior agreement, the insured contract (most often a loan) to any third party and is normally obliged to hold a material portion of insured asset on their own books, unhedged and uninsured. Claims for this business tend to be characterized by their severity risk, as opposed to their frequency risk. Claim reporting and payment patterns are anticipated to be volatile. Under the notification provisions of credit insurance policies issued by the Company, it anticipates being advised of an insured event within a relatively short time period. Consequently, the Company generally estimates ultimate losses based on a contract-by-contract analysis which considers the contracts' terms, the facts and circumstances of underlying loss events and qualitative input from claims managers.

Insurance Credit and Political Risk

	Incurred Claims and Allocated Claim Adjustment Expenses, Net of Reinsurance										At December 31, 2019	
	For the Years Ended December 31,											
Accident Year	2010 Unaudited	2011 Unaudited	2012 Unaudited	2013 Unaudited	2014 Unaudited	2015 Unaudited	2016 Unaudited	2017 Unaudited	2018 Unaudited	2019	Total of Incurred-But-Not-Reported Liabilities Plus Expected Development on Reported Claims	Cumulative Number of Reported Claims
2010	$ 54,865	$ 54,056	$ 54,339	$ 55,561	$ 55,868	$ 55,136	$ 61,878	$ 80,456	$ 88,998	$ 89,309	$ 370	6
2011		54,207	47,523	47,560	48,152	48,310	45,003	33,541	27,841	27,841	205	4
2012			30,124	14,052	12,105	12,257	10,290	34	149	149	116	4
2013				23,894	24,320	9,766	9,795	14,856	13,977	12,334	4,027	1
2014					36,191	66,697	64,004	64,867	67,754	69,329	2,719	6
2015						27,020	29,727	26,880	25,827	25,688	2,379	2
2016							44,979	44,474	42,309	42,835	18,138	1
2017								17,975	17,632	15,734	14,168	3
2018									11,294	6,781	4,952	1
2019										14,154	7,239	1
									Total	$ 304,154		

(In thousands of U.S. dollars)

6. Reserve for Losses and Loss Expenses (continued)

Insurance Credit and Political Risk

Cumulative Paid Claims and Allocated Claim Adjustment Expenses, Net of Reinsurance

For the Years Ended December 31,

Accident Year	2010 Unaudited	2011 Unaudited	2012 Unaudited	2013 Unaudited	2014 Unaudited	2015 Unaudited	2016 Unaudited	2017 Unaudited	2018 Unaudited	2019
2010	$ 50,000	$ 77,238	$ 82,548	$ 96,050	$ 91,071	$ 91,231	$ 91,437	$ 91,483	$ 91,802	$ 90,907
2011		32,788	37,205	27,636	27,636	27,636	27,636	27,636	27,636	27,636
2012			—	—	—	—	29	31	32	32
2013				745	2,235	3,726	5,216	11,769	13,828	13,828
2014					1,924	38,644	58,456	56,016	56,016	62,208
2015						—	23,309	23,309	23,309	23,309
2016							—	24,697	24,697	24,697
2017								—	1,452	2,727
2018									2,857	1,830
2019										6,851
									Total	254,025
						All outstanding liabilities before 2010, net of reinsurance				(2,588)
						Liabilities for claims and claim adjustment expenses, net of reinsurance				$ 47,541

Insurance Credit and Political Risk

Average annual percentage payout of incurred claims by age, net of reinsurance

Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10
27.3%	28.2%	2.5%	3.4%	11.2%	5.4%	0.2%	—%	0.2%	(1.0)%

Insurance Professional Lines

This reserve class includes the professional line of business which provides directors' and officers' liability, errors and omissions liability, employment practices liability, fiduciary liability, crime, professional indemnity, cyber and privacy insurance, medical malpractice and other financial insurance related covers for public and private commercial enterprises, financial institutions, not-for-profit organizations and other professional service providers. This business is predominantly written on a claims-made basis. Typically this reserve class is anticipated to exhibit medium to long tail claim reporting and payment patterns.

With respect to key actuarial assumptions, the Company relies on its loss experience when establishing expected loss ratios and selected loss development patterns. Loss reporting patterns for professional lines business tend to be volatile, causing instability in actuarial indications based on incurred loss data until an accident year or underwriting year matures. Consequently, initial loss reserves for an accident year or underwriting year are generally based upon an ELR method and the consideration of relevant qualitative factors. As accident years and underwriting years mature, the Company increasingly gives more weight to methods that reflect its experience until its selections are based almost exclusively on experience-based methods. The Company evaluates the appropriateness of the transition to experience-based methods at the reserve class level, commencing this transition when it believes that its incurred loss development is sufficient

(In thousands of U.S. dollars)

6. Reserve for Losses and Loss Expenses (continued)

to produce meaningful actuarial indications. The rate at which the Company transitions fully to sole reliance on experience-based methods can vary by reserve class and by year, depending on its assessment of the stability and relevance of such indications. For some professional lines in the insurance segment, the Company also relies upon the evaluation of the open claim inventory in addition to the commonly employed actuarial methods when establishing reserves.

Insurance Professional Lines

	Incurred Claims and Allocated Claim Adjustment Expenses, Net of Reinsurance										At December 31, 2019	
	For the Years Ended December 31,											
Accident Year	2010 Unaudited	2011 Unaudited	2012 Unaudited	2013 Unaudited	2014 Unaudited	2015 Unaudited	2016 Unaudited	2017 Unaudited	2018 Unaudited	2019	Total of Incurred-But-Not-Reported Liabilities Plus Expected Development on Reported Claims	Cumulative Number of Reported Claims
2010	$ 133,126	$ 136,065	$ 134,874	$ 119,715	$ 105,827	$ 92,633	$ 113,938	$ 105,139	$ 118,356	$ 116,530	$ 11,112	5,698
2011		180,115	181,292	189,475	185,875	189,478	197,177	198,999	198,756	196,966	14,359	7,229
2012			188,595	211,749	211,619	208,390	201,147	204,363	199,689	197,550	22,084	8,326
2013				219,763	225,660	227,596	207,018	202,021	203,114	188,389	28,193	9,439
2014					232,468	230,944	235,952	219,160	209,207	195,638	45,013	9,802
2015						214,130	212,719	217,403	204,657	198,234	50,977	10,453
2016							198,864	201,150	205,467	209,579	63,838	11,763
2017								198,392	211,189	235,140	108,975	13,418
2018									74,930	79,771	54,844	5,694
2019										85,323	73,762	4,193
									Total	$1,703,120		

(In thousands of U.S. dollars)

6. Reserve for Losses and Loss Expenses (continued)

Insurance Professional Lines

Cumulative Paid Claims and Allocated Claim Adjustment Expenses, Net of Reinsurance

For the Years Ended December 31,

Accident Year	2010 Unaudited	2011 Unaudited	2012 Unaudited	2013 Unaudited	2014 Unaudited	2015 Unaudited	2016 Unaudited	2017 Unaudited	2018 Unaudited	2019
2010	$ 3,974	$ 14,159	$ 29,255	$ 43,008	$ 51,787	$ 57,107	$ 63,398	$ 65,961	$ 82,759	$ 86,235
2011		3,865	17,461	40,142	58,132	88,032	137,805	160,967	167,391	172,043
2012			4,073	22,804	54,010	98,453	124,611	136,417	147,423	151,688
2013				9,226	38,673	70,812	96,162	116,656	134,670	147,203
2014					12,467	39,581	70,668	103,453	120,741	131,373
2015						11,720	35,778	73,383	94,562	113,985
2016							8,874	39,831	83,324	110,008
2017								10,277	36,399	74,194
2018									3,121	13,174
2019										8,844
									Total	1,008,747
						All outstanding liabilities before 2010, net of reinsurance				43,077
					Liabilities for claims and claim adjustment expenses, net of reinsurance					$ 737,450

Insurance Professional Lines

Average annual percentage payout of incurred claims by age, net of reinsurance

Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10
4.8%	11.7%	16.2%	13.9%	10.9%	10.2%	7.4%	2.6%	8.4%	3.0%

Insurance Liability

This reserve class includes the liability line of business which primarily targets primary and low to mid-level excess and umbrella commercial liability risks in the U.S. wholesale markets in addition to primary and excess of loss employers, public, and products liability predominately in the U.K. Target industry sectors include construction, manufacturing, transportation and trucking and other services. The delay between the writing of a contract, notification and subsequent settlement of a claim in respect of that contract results in claim reporting and payment patterns that are typically long tail in nature. A consequence of the claim development tail is that this line of business is particularly exposed, amongst a number of uncertainties, to the potential for unanticipated levels of claim inflation relative to that assumed when the contracts were written. Factors influencing claim inflation on this class can include, but are not limited to, underlying economic and medical inflation, judicial inflation, mass tort and changing social trends.

(In thousands of U.S. dollars)

6. Reserve for Losses and Loss Expenses (continued)

Insurance Liability

	Incurred Claims and Allocated Claim Adjustment Expenses, Net of Reinsurance										At December 31, 2019	
	For the Years Ended December 31,											
Accident Year	2010 Unaudited	2011 Unaudited	2012 Unaudited	2013 Unaudited	2014 Unaudited	2015 Unaudited	2016 Unaudited	2017 Unaudited	2018 Unaudited	2019	Total of Incurred-But-Not-Reported Liabilities Plus Expected Development on Reported Claims	Cumulative Number of Reported Claims
2010	$ 47,535	$ 53,372	$ 57,083	$ 56,828	$ 56,908	$ 55,478	$ 62,994	$ 63,080	$ 62,513	$ 64,685	$ 6,904	4,029
2011		39,881	41,189	48,700	49,703	47,590	46,799	46,010	46,094	47,493	7,919	3,571
2012			41,231	41,018	41,145	37,651	34,617	42,365	40,554	36,003	9,606	3,188
2013				56,633	57,662	56,900	50,490	56,648	58,250	55,219	9,297	3,568
2014					57,370	65,763	68,526	66,593	67,330	66,385	11,937	4,865
2015						68,557	66,060	74,412	88,129	96,533	25,263	6,225
2016							63,157	66,363	65,855	64,616	26,787	7,068
2017								72,537	73,366	82,663	34,281	6,710
2018									8,594	8,084	4,295	649
2019										13,183	10,300	359
									Total	$ 534,864		

Insurance Liability

	Cumulative Paid Claims and Allocated Claim Adjustment Expenses, Net of Reinsurance									
	For the Years Ended December 31,									
Accident Year	2010 Unaudited	2011 Unaudited	2012 Unaudited	2013 Unaudited	2014 Unaudited	2015 Unaudited	2016 Unaudited	2017 Unaudited	2018 Unaudited	2019
2010	$ 519	$ 8,014	$ 15,546	$ 31,511	$ 35,252	$ 37,787	$ 40,632	$ 53,582	$ 54,359	$ 54,593
2011		1,382	5,322	10,183	23,249	27,108	31,570	34,203	35,152	37,634
2012			842	2,803	7,775	15,160	18,669	23,073	24,980	25,731
2013				1,209	16,408	21,452	25,827	37,492	41,172	43,899
2014					720	9,402	25,007	35,859	42,254	46,858
2015						2,723	10,959	20,480	46,767	60,786
2016							3,212	11,839	18,398	28,583
2017								2,288	13,689	28,101
2018									145	658
2019										383
									Total	327,226
									All outstanding liabilities before 2010, net of reinsurance	26,054
									Liabilities for claims and claim adjustment expenses, net of reinsurance	$ 233,692

(In thousands of U.S. dollars)

6. Reserve for Losses and Loss Expenses (continued)

Insurance Liability

Average annual percentage payout of incurred claims by age, net of reinsurance									
Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10
2.5%	12.0%	13.2%	20.0%	11.5%	7.8%	5.0%	8.0%	3.2%	0.4%

Reinsurance Operations

The presentation of net incurred and paid claims development tables by accident year for the reinsurance operations is challenging due to the need to allocate loss information related to proportional treaties to the appropriate accident years. Information related to proportional treaty reinsurance contracts is generally submitted to the Company using quarterly bordereau reporting by underwriting year, with a supplemental listing of large losses. Large losses can be allocated to the corresponding accident years accurately. The remaining losses can generally only be allocated to accident years based on estimated premiums earned and loss reporting patterns. To the extent management’s assumptions and allocation procedures differ from the actual loss development patterns, the actual loss development may differ materially from the net incurred and paid claims development presented in the tables below.

The reporting of cumulative claims frequency for this reserve classes within the reinsurance operations is deemed to be impracticable. The information necessary to provide cumulative claims frequency for these reserve classes is not available to the Company.

Reinsurance Property and Other

This reserve class includes property, catastrophe, engineering, agriculture, as well as marine and other and accident and health lines of business.

The catastrophe line of business provides protection for most catastrophic losses that are covered in the underlying insurance policies written by the Company's cedants. The underlying policies principally cover property-related exposure but other exposures including workers compensation, personal accident are also covered. The principal perils covered by policies in this portfolio include hurricane and windstorm, earthquake, flood, tornado, hail and fire. In some instances, terrorism may be a covered peril or the only peril. The Company underwrites this business on a proportional and on an excess of loss basis.

The property line of business provides protection for property damage and related losses resulting from natural and man-made perils contained in underlying personal and commercial lines insurance policies written by the Company's cedants. The predominant exposure is to property damage, but other risks, including business interruption and other non-property losses, may also be covered when arising from a covered peril. The most significant perils covered by policies in this portfolio include windstorm, tornado and earthquake, but other perils such as freezes, riots, floods, industrial explosions, fires, hail and a number of other loss events are also included. The Company underwrites this business on a proportional and excess of loss basis.

(In thousands of U.S. dollars)

6. Reserve for Losses and Loss Expenses (continued)

The agriculture line of business provides protection for risks associated with the production of food and fiber on a global basis for primary insurance companies writing multi-peril crop insurance, crop hail, and named peril covers, as well as custom risk transfer mechanisms for agricultural dependent industries with exposures to crop yield and/or price deviations. The Company underwrites this business on a proportional and aggregate stop loss reinsurance basis.

The engineering line of business provides protection for all types of construction risks and risks associated with erection, testing and commissioning of machinery and plants during the construction stage. This line of business also includes coverage for losses arising from operational failures of machinery, plant and equipment and electronic equipment as well as business interruption.

The marine and other line of business includes marine and aviation reinsurance.

The accident and health line of business includes specialty health, accidental death, travel, life and disability reinsurance products which are offered on a proportional and catastrophic or per life excess of events loss basis.

In general, reporting and payment patterns are relatively short-tailed and can be volatile due to the incidence of catastrophe.

Reinsurance Property and Other

	Incurred Claims and Allocated Claim Adjustment Expenses, Net of Reinsurance										At December 31, 2019
	For the Years Ended December 31,										
Accident Year	2010 Unaudited	2011 Unaudited	2012 Unaudited	2013 Unaudited	2014 Unaudited	2015 Unaudited	2016 Unaudited	2017 Unaudited	2018 Unaudited	2019	Total of Incurred-But-Not-Reported Liabilities Plus Expected Development on Reported Claims
2010	$ 559,712	$ 548,570	$ 517,556	$ 531,602	$ 534,558	$ 529,386	$ 521,642	$ 519,879	$ 519,057	$ 517,867	$ 2,868
2011		1,041,434	1,050,206	1,057,245	1,021,152	1,006,779	982,445	980,684	982,108	983,018	7,400
2012			470,249	443,861	428,640	401,943	388,431	383,539	384,626	381,897	2,277
2013				428,483	410,022	385,397	368,926	364,042	363,253	360,023	1,465
2014					367,752	377,214	358,329	348,737	346,409	345,641	38,828
2015						335,148	320,754	317,616	313,831	311,131	4,475
2016							424,443	431,896	423,223	418,238	8,433
2017								773,735	766,640	798,335	68,622
2018									512,915	597,349	141,121
2019										523,096	467,017
									Total	$ 5,236,595	

(In thousands of U.S. dollars)

6. Reserve for Losses and Loss Expenses (continued)

Reinsurance Property and Other

Cumulative Paid Claims and Allocated Claim Adjustment Expenses, Net of Reinsurance

For the Years Ended December 31,

Accident Year	2010 Unaudited	2011 Unaudited	2012 Unaudited	2013 Unaudited	2014 Unaudited	2015 Unaudited	2016 Unaudited	2017 Unaudited	2018 Unaudited	2019
2010	$ 102,636	$ 281,133	$ 365,984	$ 392,832	$ 435,393	$ 463,068	$ 488,084	$ 493,188	$ 495,974	$ 499,839
2011		240,241	548,713	744,043	838,741	868,814	940,868	954,295	957,183	962,827
2012			99,876	242,097	306,667	326,289	338,138	346,093	348,061	359,509
2013				77,417	228,866	316,477	339,562	346,735	347,818	347,739
2014					74,525	222,037	273,185	286,716	291,164	295,087
2015						53,635	178,994	249,218	274,634	283,959
2016							91,840	254,821	347,157	377,503
2017								181,393	493,883	607,255
2018									83,126	331,134
2019										45,640
									Total	4,110,492
						All outstanding liabilities before 2010, net of reinsurance				10,138
						Liabilities for claims and claim adjustment expenses, net of reinsurance				$ 1,136,241

Reinsurance Property and Other

Average annual percentage payout of incurred claims by age, net of reinsurance

Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10
19.8%	38.6%	18.9%	6.5%	3.5%	3.2%	1.7%	1.4%	0.6%	0.7%

Reinsurance Credit and Surety

This reserve class includes the credit and surety line of business which provides reinsurance of trade credit insurance products and includes both proportional and excess of loss structures. The underlying insurance indemnifies sellers of goods and services in the event of a payment default by the buyer of those goods and services. Surety reinsurance provides protection for losses arising from a broad array of surety bonds issued by insurers to satisfy regulatory demands or contract obligations in a variety of jurisdictions around the world. The Company also provides mortgage reinsurance to mortgage guaranty insurers and U.S. government sponsored entities for losses related to credit risk transfer into the private sector.

Initial and most recent underwriting year loss projections are generally based on the ELR method, with consideration given to qualitative factors. Given that there is a quicker and more stable reporting pattern for trade credit and mortgage business, the Company generally commences the transition to experience-based methods sooner for trade credit business than for the surety business.

(In thousands of U.S. dollars)

6. Reserve for Losses and Loss Expenses (continued)

Reinsurance Credit and Surety

	Incurred Claims and Allocated Claim Adjustment Expenses, Net of Reinsurance										At December 31, 2019
	For the Years Ended December 31,										Total of Incurred-But-Not-Reported Liabilities Plus Expected Development on Reported Claims
Accident Year	2010 Unaudited	2011 Unaudited	2012 Unaudited	2013 Unaudited	2014 Unaudited	2015 Unaudited	2016 Unaudited	2017 Unaudited	2018 Unaudited	2019	
2010	$ 85,262	$ 72,428	$ 68,143	$ 66,231	$ 63,162	$ 57,664	$ 56,654	$ 55,217	$ 54,306	$ 52,993	$ 1,312
2011		85,661	75,156	74,575	80,016	78,348	72,017	70,576	70,005	67,912	1,831
2012			113,015	106,081	108,092	105,930	99,649	93,568	90,917	88,544	2,660
2013				118,771	110,075	104,319	101,768	98,048	89,786	89,827	2,687
2014					96,572	97,965	103,834	101,326	93,220	92,119	4,698
2015						115,355	119,826	115,853	112,809	99,948	6,007
2016							102,004	101,270	105,871	87,632	6,678
2017								90,759	89,238	85,157	16,114
2018									66,991	73,892	20,405
2019										42,520	19,372
									Total	$ 780,544	

Reinsurance Credit and Surety

	Cumulative Paid Claims and Allocated Claim Adjustment Expenses, Net of Reinsurance									
	For the Years Ended December 31,									
Accident Year	2010 Unaudited	2011 Unaudited	2012 Unaudited	2013 Unaudited	2014 Unaudited	2015 Unaudited	2016 Unaudited	2017 Unaudited	2018 Unaudited	2019
2010	$ 21,061	$ 35,729	$ 43,462	$ 43,905	$ 45,142	$ 46,011	$ 47,082	$ 47,828	$ 48,095	$ 48,417
2011		16,228	37,609	49,375	54,877	57,862	59,446	61,083	61,962	62,593
2012			35,644	60,810	70,243	74,317	76,779	78,043	78,987	80,511
2013				23,924	55,191	65,682	70,556	75,722	77,159	80,823
2014					26,515	44,672	62,518	69,196	74,972	78,076
2015						24,609	59,551	72,408	84,718	86,091
2016							31,393	53,346	65,816	72,607
2017								24,357	49,063	60,416
2018									26,183	44,796
2019										13,462
									Total	627,792
						All outstanding liabilities before 2010, net of reinsurance				8,201
						Liabilities for claims and claim adjustment expenses, net of reinsurance				$ 160,953

(In thousands of U.S. dollars)

6. Reserve for Losses and Loss Expenses (continued)

Reinsurance Credit and Surety

Average annual percentage payout of incurred claims by age, net of reinsurance

Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10
31.5%	29.3%	14.3%	6.6%	3.8%	2.1%	2.4%	1.5%	0.7%	0.6%

Reinsurance Professional Lines

This reserve class includes the professional line of business which provides cover for directors' and officers' liability, employment practices liability, medical malpractice, professional indemnity, environmental liability and miscellaneous errors and omissions insurance risks. The underlying business is predominantly written on a claims-made basis. Business is written on both a proportional and excess of loss basis. Typically, this reserve class is anticipated to exhibit medium to long-tail claim reporting and payment patterns.

With respect to key actuarial assumptions, the Company relies on its experience when establishing expected loss ratios and selected loss development patterns. Loss reporting patterns for professional lines business tend to be volatile, causing instability in actuarial indications based on incurred loss data until an underwriting year matures. Consequently, initial loss reserves for an underwriting year are generally based on an ELR method and the consideration of relevant qualitative factors. As underwriting years mature, the Company increasingly gives more weight to methods that reflect its experience until its selections are based almost exclusively on experience-based methods. The Company evaluates the appropriateness of the transition to experience-based methods at the reserve class level, commencing this transition when it believes that its incurred loss development is sufficient to produce meaningful actuarial indications. The rate at which the Company transitions fully to sole reliance on experience-based methods can vary by reserve class and by year, depending on its assessment of the stability and relevance of such indications.

(In thousands of U.S. dollars)

6. Reserve for Losses and Loss Expenses (continued)

Reinsurance Professional Lines

Incurred Claims and Allocated Claim Adjustment Expenses, Net of Reinsurance

Accident Year	2010 Unaudited	2011 Unaudited	2012 Unaudited	2013 Unaudited	2014 Unaudited	2015 Unaudited	2016 Unaudited	2017 Unaudited	2018 Unaudited	2019	At December 31, 2019 Total of Incurred-But-Not-Reported Liabilities Plus Expected Development on Reported Claims
2010	$ 109,482	$ 109,555	$ 110,295	$ 111,898	$ 112,260	$ 102,866	$ 97,854	$ 92,675	$ 85,393	$ 86,585	$ 2,881
2011		106,210	106,354	106,915	111,284	109,848	109,172	103,522	91,411	85,878	3,054
2012			110,443	113,657	116,677	117,654	116,799	111,927	111,970	107,878	9,286
2013				110,512	112,863	113,263	112,182	111,822	108,008	94,526	18,767
2014					115,101	114,887	114,663	114,485	121,412	119,760	14,706
2015						111,499	111,529	113,057	119,375	124,124	32,540
2016							98,328	99,092	101,010	117,169	32,963
2017								67,847	68,516	71,822	30,742
2018									20,271	21,022	15,732
2019										27,798	22,965
									Total	$ 856,562	

Reinsurance Professional Lines

Cumulative Paid Claims and Allocated Claim Adjustment Expenses, Net of Reinsurance

For the Years Ended December 31,

Accident Year	2010 Unaudited	2011 Unaudited	2012 Unaudited	2013 Unaudited	2014 Unaudited	2015 Unaudited	2016 Unaudited	2017 Unaudited	2018 Unaudited	2019
2010	$ 883	$ 6,058	$ 15,795	$ 26,338	$ 39,155	$ 54,739	$ 63,043	$ 66,705	$ 70,465	$ 73,211
2011		756	5,950	15,331	29,176	43,059	52,533	61,144	66,334	70,145
2012			396	5,536	15,586	27,816	44,354	55,845	68,594	75,988
2013				539	6,379	15,896	33,424	41,855	54,012	63,557
2014					1,184	6,915	25,390	38,497	56,517	75,911
2015						1,640	7,054	21,832	41,216	59,041
2016							1,060	10,439	26,716	48,603
2017								1,444	6,572	17,537
2018									396	1,042
2019										256
									Total	485,291
All outstanding liabilities before 2010, net of reinsurance										25,374
Liabilities for claims and claim adjustment expenses, net of reinsurance										$ 396,645

(In thousands of U.S. dollars)

6. Reserve for Losses and Loss Expenses (continued)

Reinsurance Professional Lines

Average annual percentage payout of incurred claims by age, net of reinsurance									
Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10
1.1%	5.6%	12.3%	14.8%	14.1%	13.8%	10.4%	5.7%	4.4%	3.2%

Reinsurance Motor

This reserve class includes the motor line of business which provides cover to insurers for motor liability and motor property damage losses arising from any one occurrence. A loss occurrence can involve one or many claimants where the ceding insurer aggregates the claims from the occurrence. The Company offers traditional proportional and non-proportional reinsurance as well as structured solutions predominantly relating to European exposures.

The business written on a proportional basis has expanded significantly since 2010 and now represents the majority of the premium written within this line of business. Most of the premium relates to a relatively small number of large United Kingdom ("U.K.") quota share reinsurance treaties. The motor proportional class generally has a significantly shorter reported and payment pattern relative to the motor non-proportional class.

The motor non-proportional business consists of standard excess of loss contracts written for cedants in several European countries with most of the premium related to two major markets, U.K. and France. Since 2009/2010, an increasing number of large bodily injury settlements in the U.K. market were settled using indexed annuities (Periodical Payment Orders "PPOs"). This led to a materially longer development tail on the older accident years for the U.K. non-proportional motor book. This also resulted in the inclusion of capitalization clauses on a number of U.K. motor treaties to help mitigate the lengthening of the development tail on more recent accident years.

In 2017, the U.K. Ministry of Justice announced a decrease in the discount rate to be used to calculate lump sum awards in U.K. bodily injury cases, known as the Ogden Rate. Effective March 20, 2017, the Ogden rate changed from plus 2.5% to minus 0.75%. This resulted in an increase in projected ultimate losses, particularly related to recent accident years.

Effective August 5, 2019, the Ogden rate changed from minus 0.75% to minus 0.25%. This resulted in a decrease in projected ultimate losses, particularly related to recent accident years.

(In thousands of U.S. dollars)

6. Reserve for Losses and Loss Expenses (continued)

Reinsurance Motor

Incurred Claims and Allocated Claim Adjustment Expenses, Net of Reinsurance

Accident Year	2010 Unaudited	2011 Unaudited	2012 Unaudited	2013 Unaudited	2014 Unaudited	2015 Unaudited	2016 Unaudited	2017 Unaudited	2018 Unaudited	2019	At December 31, 2019: Total of Incurred-But-Not-Reported Liabilities Plus Expected Development on Reported Claims
	For the Years Ended December 31,										
2010	$ 75,522	$ 81,023	$ 81,491	$ 80,788	$ 76,186	$ 72,344	$ 65,103	$ 62,334	$ 60,676	$ 60,021	$ 16,245
2011		119,238	121,904	124,899	129,237	126,375	119,720	111,402	107,885	102,058	13,522
2012			135,390	128,372	119,741	114,062	110,281	103,188	101,014	94,880	11,650
2013				123,604	121,758	113,005	105,928	103,343	101,252	94,537	10,371
2014					139,101	140,284	136,678	134,632	131,039	128,552	4,727
2015						169,652	166,710	169,795	170,884	162,458	9,219
2016							187,247	201,429	202,701	194,971	16,392
2017								254,657	258,385	246,130	32,404
2018									265,021	264,505	58,737
2019										254,403	123,153
									Total	$ 1,602,515	

Reinsurance Motor

Cumulative Paid Claims and Allocated Claim Adjustment Expenses, Net of Reinsurance

Accident Year	2010 Unaudited	2011 Unaudited	2012 Unaudited	2013 Unaudited	2014 Unaudited	2015 Unaudited	2016 Unaudited	2017 Unaudited	2018 Unaudited	2019
	For the Years Ended December 31,									
2010	$ 5,401	$ 9,451	$ 13,612	$ 16,284	$ 18,865	$ 22,072	$ 24,537	$ 25,326	$ 26,129	$ 27,781
2011		17,957	35,993	47,146	55,172	60,262	64,850	68,373	69,151	70,616
2012			22,036	40,469	51,728	59,160	64,116	67,234	68,986	69,895
2013				25,600	40,705	51,376	59,058	63,384	67,624	69,925
2014					32,721	56,658	71,672	77,932	85,725	93,118
2015						43,673	71,379	86,928	100,146	112,360
2016							45,990	80,200	98,704	112,503
2017								52,799	101,225	124,798
2018									63,439	109,531
2019										68,543
									Total	859,070
							All outstanding liabilities before 2010, net of reinsurance			133,614
							Liabilities for claims and claim adjustment expenses, net of reinsurance			$ 877,059

(In thousands of U.S. dollars)

6. Reserve for Losses and Loss Expenses (continued)

Reinsurance Motor

Average annual percentage payout of incurred claims by age, net of reinsurance

Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10
22.5%	16.7%	10.2%	6.9%	5.5%	4.7%	3.0%	1.0%	1.4%	2.8%

Reinsurance Liability

This reserve class includes the liability line of business which provides protection to insurers of admitted casualty business, excess and surplus lines casualty business and specialty casualty programs. The primary focus of the underlying business is general liability, workers' compensation, auto liability and excess casualty.

Claim reporting and payment patterns are typically long-tail in nature and, therefore, subject to increased uncertainty surrounding future loss development. In particular, claims can be subject to inflation from a number of sources including, but not limited to, economic and medical inflation, judicial inflation and changing social trends.

Reinsurance Liability

	Incurred Claims and Allocated Claim Adjustment Expenses, Net of Reinsurance										At December 31, 2019
	For the Years Ended December 31,										
Accident Year	2010 Unaudited	2011 Unaudited	2012 Unaudited	2013 Unaudited	2014 Unaudited	2015 Unaudited	2016 Unaudited	2017 Unaudited	2018 Unaudited	2019	Total of Incurred-But-Not-Reported Liabilities Plus Expected Development on Reported Claims
2010	$ 104,596	$ 102,032	$ 111,815	$ 113,402	$ 125,903	$ 119,562	$ 113,380	$ 103,613	$ 98,708	$ 96,717	$ 7,893
2011		100,738	101,301	103,740	115,171	119,210	116,275	115,812	114,733	113,662	9,854
2012			89,657	87,864	90,141	92,321	92,934	91,137	86,076	82,142	8,953
2013				93,666	95,180	98,400	99,373	99,394	94,449	82,057	13,410
2014					107,523	108,796	109,541	107,507	106,853	105,456	29,995
2015						114,619	114,721	115,175	115,158	114,184	37,844
2016							120,516	123,016	125,965	127,749	51,809
2017								117,349	114,823	117,952	58,574
2018									27,690	31,165	21,082
2019										27,991	25,364
									Total	$ 899,075	

(In thousands of U.S. dollars)

6. Reserve for Losses and Loss Expenses (continued)

Reinsurance Liability

Cumulative Paid Claims and Allocated Claim Adjustment Expenses, Net of Reinsurance

For the Years Ended December 31,

Accident Year	2010 Unaudited	2011 Unaudited	2012 Unaudited	2013 Unaudited	2014 Unaudited	2015 Unaudited	2016 Unaudited	2017 Unaudited	2018 Unaudited	2019
2010	$ 1,301	$ 9,344	$ 28,432	$ 39,231	$ 52,620	$ 60,963	$ 68,509	$ 75,108	$ 79,992	$ 81,628
2011		2,615	13,146	24,412	42,809	55,312	66,150	72,710	79,717	83,522
2012			1,837	6,473	14,336	29,922	39,866	51,613	58,947	64,708
2013				3,100	11,487	26,688	35,090	44,840	52,091	57,408
2014					3,647	14,425	24,360	35,761	45,520	56,227
2015						3,694	13,866	27,840	41,154	56,276
2016							5,665	17,302	33,122	53,869
2017								5,565	17,258	32,120
2018									549	1,936
2019										552
									Total	488,246
						All outstanding liabilities before 2010, net of reinsurance				41,244
						Liabilities for claims and claim adjustment expenses, net of reinsurance				$ 452,073

Reinsurance Liability

Average annual percentage payout of incurred claims by age, net of reinsurance

Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10
2.9%	8.4%	13.0%	13.6%	11.9%	10.3%	7.3%	6.7%	4.2%	1.7%

(In thousands of U.S. dollars)

6. Reserve for Losses and Loss Expenses (continued)

Reconciliation of Development Tables to Consolidated Balance Sheet

The following table reconciles the reserve for losses and loss expenses at December 31, 2019 included in the loss development tables to the reserve for losses and loss expenses reported in the consolidated balance sheet:

Reconciliation of the Disclosure of Incurred and Paid Claims Development to the Liability for Unpaid Claims and Claim Adjustment Expenses

	December 31, 2019		
	Net outstanding liabilities	Reinsurance recoverable on unpaid claims	Gross outstanding liabilities
Insurance Operations			
Property and Other	$ 215,826	$ 895	$ 216,721
Marine	127,728	26,490	154,218
Aviation	74,268	8,609	82,877
Credit and Political Risk	47,541	953	48,494
Professional Lines	737,450	20,542	757,992
Liability	233,692	60,064	293,756
Total Insurance Operations	1,436,505	117,553	1,554,058
Reinsurance Operations			
Property and Other	1,136,241	275,375	1,411,616
Credit and Surety	160,953	11,639	172,592
Professional Lines	396,645	45,025	441,670
Motor	877,059	173,571	1,050,630
Liability	452,073	69,942	522,015
Total Reinsurance Operations	3,022,971	575,552	3,598,523
Total	$ 4,459,476	$ 693,105	5,152,581
Unallocated claims adjustment expenses			55,877
Foreign exchange and other(1)			(25,518)
(Ceded)/ assumed reserves related to retroactive transactions			(131,458)
Total liability for unpaid claims and claims adjustment expense			$ 5,051,482

(1) Non-U.S. dollar denominated loss data is converted to U.S dollar at the rates of exchange in effect at the balance sheet date for material underlying currencies. Fluctuations in currency exchange rates cause material shifts in loss development. Reserves for losses and loss expenses, disclosed on our Consolidated Balance Sheets, are also revalued using the exchange rate at the balance sheet date.

(In thousands of U.S. dollars)

7. Reinsurance

In the ordinary course of business, the Company purchases treaty and facultative reinsurance to reduce exposure to significant losses. Facultative reinsurance provides coverage for all or a portion of the losses incurred for a single policy and each facultative contract is negotiated separately.

Treaty reinsurance provides coverage for a specified type or category of risks. Treaty reinsurance agreements provide this cover on either an excess of loss or a proportional basis. Excess of loss covers provide a contractually set amount of coverage after a specified loss amount has been reached. These treaties can provide cover for a number of lines of business within one contract. Under proportional reinsurance, the Company cedes an agreed proportion of the premiums and the losses and loss expenses on the policies it underwrites. These treaties provide a specified percentage of coverage from the first dollar of loss.

All of these reinsurance covers provide the Company the right to recover a portion of specified losses and loss expenses from reinsurers. To the extent that the reinsurers do not meet their obligations under these agreements due to solvency issues, contractual disputes or other reasons, the Company remains liable. The Company predominantly cedes business to reinsurers rated A- or better by A.M. Best Company, Inc. ("A.M. Best") or on a fully collateralized basis.

Gross and net premiums written and earned for the years ended December 31, 2019 and 2018 are as follows:

	2019		2018	
	Premiums Written	**Premiums Earned**	**Premiums Written**	**Premiums Earned**
Gross	$ 2,008,445	$ 2,033,095	$ 1,418,396	$ 2,006,030
Ceded	(463,838)	(436,120)	(236,530)	(337,203)
Net	$ 1,544,607	$ 1,596,975	$ 1,181,866	$ 1,668,827

During the year ended December 31, 2019, the Company recognized ceded losses and loss expenses of $253,713 (2018: $240,275).

The Company's provision for unrecoverable reinsurance was $1,790 at December 31, 2019 (2018: $1,877). At December 31, 2019, 70% of the Company's reinsurance balances recoverable were collectible from reinsurers rated A- or better by A.M. Best (2018: 72%) and 30% were fully collateralized (2018: 28%).

8. Financing Arrangements

Letter of Credit Facility

On November 20, 2013, the Company and certain of AXIS Capital's operating subsidiaries ("Participating Subsidiaries") entered into an amendment to extend the term of a secured $750 million letter of credit facility (the "LOC Facility") with Citibank Europe plc ("Citibank") pursuant to a Master Reimbursement Agreement and other ancillary documents (together, the "LOC Facility Documents"). Under the terms of the LOC Facility, letters of credit to a maximum aggregate amount of $750 million are available for issuance on behalf of the Participating Subsidiaries. These letters of credit are principally used to support the reinsurance obligations of the Participating Subsidiaries. The LOC Facility is subject to certain covenants, including the requirement to maintain sufficient collateral, as defined in the LOC Facility Documents, to cover all of the obligations under the LOC Facility. Such obligations include contingent reimbursement obligations for outstanding letters of credit and fees payable to Citibank. In the event of default, Citibank may exercise certain remedies, including the exercise of control over pledged collateral and the termination of the availability of the LOC Facility to any or all of the Participating Subsidiaries.

On March 31, 2015, AXIS Capital entered into an amendment to reduce the maximum aggregate utilization capacity of the LOC Facility from $750 million to $500 million (the "$500 million Facility"). All other material terms and conditions remained unchanged.

On March 27, 2017, the Participating Subsidiaries amended the existing $500 million Facility with Citibank to include an additional $250 million of secured letter of credit capacity (the "$250 million Facility") pursuant to a Committed Facility Letter and an amendment to the Master Reimbursement Agreement. Under the terms of the $250 million Facility, letters of credit to a maximum aggregate amount of $250 million are available for issuance on behalf of the Participating Subsidiaries once the $500 million Facility is fully utilized.

On March 28, 2019, the expiration date of the $250 million Facility was extended to March 31, 2020.

On December 24, 2019, the expiration date of the $500 million Facility was extended to December 31, 2023.

At December 31, 2019, the Company had $222,864 and nil letters of credit outstanding under the $500 million Facility and $250 million Facility, respectively. In addition, letters of credit of $141,961 issued on behalf of other Participating Subsidiaries under the $500 million Facility for which the Company provides collateral were outstanding as at December 31, 2019. AXIS Capital and the Participating Subsidiaries were in compliance with all LOC Facility covenants at December 31, 2019.

9. Commitments and Contingencies

a) Concentrations of Credit Risk

Credit Risk Aggregation

The aggregation of credit risk is monitored and managed on an AXIS Capital group-wide basis by considering exposure management strategies for individual companies, countries, regions, sectors and any other relevant inter-dependencies. These credit exposures are aggregated based on the origin of risk. As part of the credit aggregation framework, aggregate credit limits are assigned by single counterparty (a group of companies or country). Limits are based on and adjusted for a variety of factors, including the prevailing economic environment and the nature of the underlying credit exposures. The credit aggregation measurement and reporting process is facilitated by a credit risk exposure database, which contains relevant information on counterparty details and credit risk exposures, and is supplemented by licensed third party tools which provide credit risk assessments.

Credit risk aggregation is also managed through minimizing overlaps in underwriting, financing and investing activities. These AXIS Capital group-wide processes include some entity level monitoring and limits.

The assets that potentially subject the Company to concentrations of credit risk consist principally of cash and investments, reinsurance recoverable and (re)insurance premiums receivable balances, as described below.

Cash and Investments

In order to mitigate concentration and operational risks related to cash and cash equivalents, the Company limits the maximum amount of cash that can be deposited with a single counterparty and limits acceptable counterparties based on current rating, outlook and other relevant factors.

The Company's investment portfolio is managed by external investment managers in accordance with its investment guidelines. The Company limits such credit risk through diversification, issuer exposure limitation graded by ratings and, with respect to custodians, through contractual and other legal remedies. Excluding U.S. government and agency securities, the Company limits its concentration of credit risk to any single corporate issuer to 2% or less of its investment grade fixed maturities portfolio for securities rated A- or above and 1% or less of its investment grade fixed maturities portfolio for securities rated below A-.

At December 31, 2019, the Company was in compliance with these limits.

9. Commitments and Contingencies (continued)

Reinsurance Recoverable Balances

The Company is exposed to the credit risk associated with reinsurance recoverable on unpaid and paid losses to the extent that any of its reinsurers fail to meet their obligations under reinsurance contracts. To help mitigate this risk, the Company's purchase of reinsurance is subject to financial security requirements specified by the AXIS Group Reinsurance Security Committee. This Committee maintains a list of approved reinsurers, performs credit risk assessments for potential new reinsurers, regularly monitors approved reinsurers with consideration for events which may have a material impact on their creditworthiness, recommends counterparty tolerance levels for different types of ceded business and monitors concentrations of credit risk. This assessment considers a wide range of individual attributes, including a review of the counterparty's financial strength, industry position and other qualitative factors. Generally, the Committee requires that reinsurers who do not meet specified requirements provide collateral.

At December 31, 2019, the top ten reinsurers with the largest balances recoverable accounted for 90% (2018: 89%) of reinsurance recoverable on unpaid and paid losses.

Premiums Receivable Balances

The diversity of the Company's client base limits the credit risk associated with its insurance and reinsurance premium balances receivable. In addition, for insurance contracts, the Company has contractual rights to cancel coverage for non-payment of premiums and for reinsurance contracts, it has contractual rights to offset premiums receivable balances against corresponding payments for losses and loss expenses.

Brokers and other intermediaries collect premiums from customers on behalf of the Company. The Company has procedures in place to manage and monitor credit risk from intermediaries with a focus on day-to-day monitoring of the largest positions.

These contractual rights contribute to the mitigation of credit risk, together with the monitoring of aged receivable balances. In light of these mitigating factors, and considering that a significant portion of premium balances receivable are not currently due based on the terms of the underlying contracts, the Company does not utilize specific credit quality indicators to monitor its premium balances receivable balance.

At December 31, 2019, the Company recorded an allowance for estimated uncollectible premium balances receivable of $272 (2018: $133). The corresponding bad debt expense was negligible in 2019 and 2018.

b) Brokers

The Company produces its business through brokers and direct relationships with insurance companies. Excluding business assumed from affiliates, during 2019, three brokers accounted for 32% (2018: 37%) of the total gross premiums written by the Company. Aon plc accounted for 15% (2018: 17%), Marsh & McLennan Companies Inc. 12% (2018: 13%), and Willis Tower Watson PLC for 6% (2018: 7%). With the exception of reinsurance provided to other subsidiaries of AXIS Capital through quota share and stop loss agreements, no other broker and no one insured or reinsured accounted for more than 10% of gross premiums written in the years ended December 31, 2019 and 2018.

(In thousands of U.S. dollars)

9. Commitments and Contingencies (continued)

c) Lease Commitments

In the ordinary course of business, the Company renews and enters into new leases for office space which expire at various dates.The total rent expense with respect to these operating leases for the year ended December 31, 2019 was $3,398 (2018: $3,435).

Future minimum lease payments under the leases are expected to be as follows:

Year	Amount
2020	$ 3,416
2021	2,850
2022	2,850
2023	2,850
2024	2,850
Later years	2,138
Total	$ 16,954

d) Guarantees

During 2014, the Company entered into a Deed of Guarantee (the “Guarantee”) with a policyholder of AXIS Specialty Europe SE (“ASE”), one of AXIS Capital’s operating subsidiary following which the Company guarantees the obligations of ASE in the event of non-payment of balances owing to the policyholder following ASE’s insolvency. The maximum limit of the guarantee is $250,000 and the amount outstanding which is based on in-force policies was $nil at December 31, 2019 (2018: $nil).

On February 14, 2017, the Company entered into a Guaranty agreement (the "Guaranty") with AXIS Reinsurance Company (“ARC”), one of AXIS Capital’s operating subsidiary following which the Company guarantees the book value of ARC's investment in a credit fund up to an amount of $75,000, in the event of ARC's insolvency or ARC's inability to pay a portion or all of its policyholder claims. The Guaranty was terminated on December 31, 2019.

e) Credit Facility

On December 29, 2017, the Company provided an unsecured credit facility to the Novae Group Limited ("Novae") following which Novae may borrow up to $75,000 from the Company. The facility expires three hundred and sixty four days from the first draw down and provides for interest at a rate of 1.65% over LIBOR. Novae has not drawn down on this facility.

In February of 2018, the Company provided an unsecured credit facility to Novae's Lloyd's Syndicate 2007 ("Novae Syndicate 2007") following which Novae Syndicate 2007 may borrow up to $230,000 from the Company. The facility expires three hundred and sixty four days from the first draw down and provides for

9. Commitments and Contingencies (continued)

interest at a rate of 1.5% over LIBOR. Novae Syndicate 2007 drew down on this facility in 2018 and $85,873 was outstanding as at December 31, 2018.

In February of 2018, the Company provided an unsecured credit facility to AXIS Capital's Lloyd's Syndicate 1686 ("AXIS Syndicate 1686") following which AXIS Syndicate 1686 may borrow up to $85,000 from the Company. The facility expires three hundred and sixty four days from the first draw down and provides for interest at a rate of 1.5% over LIBOR. AXIS Syndicate 1686 drew down on this facility in 2018 and $24,479 was outstanding as at December 31, 2018.

On February 26, 2019, the $85,000 unsecured credit facility with AXIS Syndicate 1686 matured and the Company provided an unsecured credit facility to AXIS Syndicate 1686 for an amount of up to $85,000 ("Bridge Credit Facility") for a period of 91 days.

The $75,000 unsecured credit facility with Novae, the $230,000 unsecured credit facility with Novae Syndicate 2007 and the $85,000 Bridge Credit Facility with AXIS Syndicate 1686 were terminated on April 18, 2019.

10. Shareholder's Equity

Share capital consists of 12,000,000 authorized common shares of a par value of $0.10 per share. As at December 31, 2019, 12,000,000 common shares were issued and fully paid (2018: 12,000,000 common shares).

11. Retirement Plans

The Company maintains defined contribution plans to provide retirement benefits to eligible employees. Contributions to the plans, which are managed externally, are based on eligible compensation.

During 2019, the Company's total pension expenses were $1,871 (2018: $2,018) for the above retirement benefits.

12. Share-Based Compensation

AXIS Capital adopted long‑term equity compensation plans that provide for, among other things, the issuance of restricted shares, restricted stock units (share-settled awards and cash-settled awards), performance units (share-settled awards and cash-settled awards), stock options, stock appreciation rights and other equity-based awards to our employees and directors.

Restricted Stock Units - Share-Settled

Restricted stock units granted either cliff vest at the end of a three year period, vest in accordance with a three year graded vesting schedule, or vest in accordance with a four year graded vesting schedule in four annual installments beginning on the grant date.

Restricted Stock Units - Cash-settled

Cash settled restricted stock units granted are liability awards and generally cliff vest at the end of a three year period, or vest in accordance with a four year graded vesting schedule in four annual installments beginning on the grant date.

12. Share-Based Compensation (continued)

Performance Restricted Stock Units - Share-Settled and Cash-Settled

Performance restricted stock units granted represent the right to receive a specified number of common shares in the future, based upon the achievement of established performance criteria and continued service during the applicable performance period. Awards granted pursuant to these plans generally cliff vest at the end of a three year period. Compensation expense is recognized on a straight-line basis over the applicable requisite service period and is subject to periodic adjustment based upon the achievement of established performance criteria during the applicable performance period. Performance restricted stock units granted are either share settled awards or cash settled liability awards.

Acceleration provisions

Grants generally allow for accelerated vesting provisions upon the employee’s death, permanent disability, or certain terminations following a change in control of the Company occurring within two years of the change in control event. Notwithstanding these vesting provisions, the Compensation Committee of the AXIS Capital Board has broad authority to accelerate vesting at its own discretion.

Retirement Plan

In 2016, the Company established the AXIS Executive Restricted Stock Unit Retirement Plan (the "Plan") to reward certain eligible long-term employees of the Company for their dedicated service. The Plan was implemented in 2017. Subject to certain conditions being met, eligible employees will not forfeit all of their outstanding share-settled restricted stock units or cash-settled restricted stock units on or following their retirement. Absent the Plan, outstanding restricted stock units are generally forfeited upon termination of employment.

At December 31, 2019, the liability for cash-settled restricted stock units, included in other liabilities in the Consolidated Balance Sheets, is $1,559 (2018: $1,906).

At December 31, 2019, there were $4,902 (2018: $6,890) of unrecognized compensation costs which are expected to be recognized over the weighted average period of 2.3 years (2018: 2.4 years).

During 2019, the Company incurred share-based compensation costs of $4,901 (2018: $4,155) related to share-settled restricted stock units, and cash-settled restricted stock units.

(In thousands of U.S. dollars)

13. Related Party Transactions

During the years ended December 31, 2019 and 2018, the Company entered into various transactions with AXIS Capital and its subsidiaries.

The following amounts relating to the quota share and stop loss agreements (see Note 1) are included in the Consolidated Statements of Operations for the years ended December 31, 2019 and 2018:

	2019	2018
Gross premiums written	$ 1,270,187	$ 811,944
Net premiums earned	1,343,490	1,409,084
Acquisition costs expensed	426,558	461,925
Losses and loss expenses	832,905	886,289

On January 1, 2018 the Company terminated all of its assumed affiliated reinsurance agreements with AXIS Capital's subsidiaries domiciled in the United States of America. The termination was done on a cut-off basis and was effective January 1, 2018. The Company returned unearned premiums of $589,116 as a result of this termination in 2018.

At December 31, 2019, amounts due from AXIS Capital and its subsidiaries were $2,054,018 (2018: $1,967,351). This balance includes $1,135,704 (2018: $1,017,738) of balances receivable under reinsurance arrangements that typically include quarterly settlement provisions. The balance also includes $494,929 (2018: $494,929) of loans and accrued interest receivable from AXIS Specialty Holdings, $308,809 (2018: $294,214) of unsecured, non-interest bearing advances to AXIS Capital and its subsidiaries that are payable on demand, $ nil (2018: $50,118) of loans and accrued interest receivable from AXIS Specialty U.S. Holdings, Inc. ("Specialty U.S. Holdings"), $nil (2018: $85,873) receivable from Novae Syndicate 2007 under an unsecured credit facility (see Note 9e), $nil (2018: $24,479) receivable from AXIS Syndicate 1686 under an unsecured credit facility (see Note 9e) and $114,576 (2018: $nil) of notes receivable from AXIS Specialty Finance plc.

The loans and accrued interest balance due from AXIS Specialty Holdings are comprised of three loans:

- The first loan of $103,500 is unsecured, matures on June 23, 2026 and bears interest at an annual rate of 3.68%, which is payable semi-annually.
- The second loan of $4,365 is unsecured, matures on December 12, 2026 and bears interest at an annual rate of 4.17%, which is payable semi-annually.
- The third loan of $387,064 is unsecured, matures on December 6, 2027 and bears interest at an annual rate of 4.25%, which is payable semi-annually.

AXIS Specialty Holdings may prepay any or all amounts due under these loans at any time without penalty.

On April 18, 2019, AXIS Specialty Finance PLC ("AXIS Finance PLC"), a company affiliated through common ownership, executed a deed following which it can issue up to $390,000 of fixed rate unsecured loan notes maturing on or before April 22, 2022 ("2022 Notes"). The 2022 Notes bear interest at LIBOR plus 1.50% with interest payable semi-annually on June 30 and December 31.The Company holds $114,576 of 2022 Notes with an interest rate ranging between 2.29% and 3.64%.

13. Related Party Transactions (continued)

On November 15, 2018, the Company entered into a loan with Specialty U.S. Holdings for an amount up to $200,000 in two tranches. The loan is unsecured, matures on December 31, 2021 with interest payable semi-annually. Specialty U.S. Holdings borrowed the first tranche of $50,000 on November 15, 2018 at an annual interest rate of 2.70%. Specialty U.S. Holdings borrowed the second tranche of $96,000 on February 1, 2019 at an annual interest rate of 2.57%. Specialty U.S. Holdings repaid both tranches to the Company on June 19, 2019 and no amounts are outstanding as at December 31, 2019.

On February 15, 2019, the Company entered into a loan with AXIS Specialty Holdings Ireland Limited ("ASHIL") for an amount of $60,000. The loan is unsecured, matures on or before February 14, 2020 with interest payable at maturity at an annual interest rate of 3.50%. ASHIL may prepay any or all amounts due at any time without penalty. ASHIL repaid the loan on December 24, 2019.

On June 26, 2019, the Company entered into a loan with ASHIL for an amount of $62,861. The loan is unsecured, matures on or before December 31, 2019 with interest payable at maturity at an annual interest rate of 3.59%. ASHIL may prepay any or all amounts due at any time without penalty. ASHIL repaid the loan on December 12, 2019.

For the year ended December 31, 2019, the Company recognized $28,654 (2018: $21,754) of interest income in relation to the these loans and credit facilities.

At December 31, 2019, insurance and reinsurance balances payable included $88,769 (2018: $183,982) payable to affiliates under quota share agreements. Due to affiliates included $217,524 of loans and accrued interest payable to Specialty U.S. Holdings (2018: $21,000), $nil of loans and accrued interest payable to AXIS Specialty U.S. Services, Inc (2018: $50,000) and $20,912 (2018: $13,148) of unsecured, non-interest bearing amounts due to certain of AXIS Capital's subsidiaries that are payable on demand.

On January 18, 2019, the Company repaid the $50,000 loan payable to AXIS Specialty U.S. Services and the $21,000 loan payable to Specialty U.S. Holdings.

On June 19, 2019, the Company entered into a loan with Specialty U.S. Holdings following which it borrowed $136,603 at an annual interest rate of 2.37%. The loan matures on or before May 28, 2020. On July 29, 2019, the Company entered into a loan with Specialty U.S. Holdings following which it borrowed $80,000 at an annual interest rate of 2.13%. The loan matures on or before May 28, 2020.

For the year ended December 31, 2019, the Company recognized $2,609 (2018: $nil) of interest expense in relation to the these loans.

In 2016, Harrington Reinsurance Holdings Limited, the parent company of Harrington Re Ltd. ("Harrington Re"), an independent reinsurance company jointly sponsored by AXIS Capital and The Blackstone Group L.P., and Harrington Re commenced operations. In the normal course of business, the Company entered into certain reinsurance transactions with Harrington Re. For the year ended December 31, 2019, the Company ceded reinsurance premiums of $84,102 (2018: returned reinsurance premiums of $42,665) and ceded losses of $63,455 (2018: $42,373) to Harrington Re. In addition, Harrington Re paid certain acquisition costs and administrative fees to the Company. At December 31, 2019, the amount of reinsurance recoverable from Harrington Re on unpaid and paid losses was $330,942 (2018: $249,461) and the amount of ceded reinsurance

13. Related Party Transactions (continued)

payable to Harrington Re included in insurance and reinsurance balances payable was $49,634 (2018: $23,658) in the Consolidated Balance Sheets.

In November 2013, AXIS Capital formed AXIS Ventures Limited and its direct subsidiary AXIS Ventures Reinsurance Limited ("Ventures Re"), a Bermuda domiciled insurer, to develop AXIS Capital's third party capital capabilities. In the normal course of business, the Company enters into certain reinsurance contracts with Ventures Re. In 2019, the Company ceded premiums of $191,944 (2018: $181,026) to Ventures Re and ceded losses of $137,684 (2018: $151,536). In addition, Ventures Re also paid certain acquisition costs and administrative fees to the Company. At December 31, 2019, the amount of reinsurance recoverable from Ventures Re on unpaid and paid losses was $199,481 (2018: $186,088) and the amount of ceded reinsurance payable to Ventures Re included in insurance and reinsurance balances payable was $43,857 (2018: $65,202) in the Consolidated Balance Sheets.

A member of AXIS Capital's Board of Directors, Mr. Charles Davis, is the Chief Executive Officer of Stone Point Capital, LLC ("Stone Point"). In the ordinary course of business, the Company engages SKY Harbor Capital Management, LLC, an affiliate of Stone Point, to provide asset management services for certain short duration high yield debt portfolios. For the year ended December 31, 2019, total fees paid to SKY Harbor Capital Management, LLC, were $2,589 (2018: $2,400).

The Company has invested $10,699 in NXT Capital Senior Loan Fund II and $18,554 in NXT Capital Senior Loan Fund III. The manager of these funds is an indirect subsidiary of NXT Capital Inc. ("NXT Capital"). Investment funds managed by Stone Point indirectly owned approximately 43% of NXT Capital until this ownership interest was sold in August 2018. For the year ended December 31, 2018, fees paid to NXT Capital were $578.

The Company's investment portfolio includes certain investments where the Company is considered to have the ability to exercise significant influence over the operating and financial policies of the investee. Significant influence is generally deemed to exist where the Company has an investment of 20% or more in the common stock of a corporation or an investment greater than 3% to 5% in closed end funds, limited partnerships, LLCs or similar investment vehicles. At December 31, 2019, the Company had $186,369 (2018: $282,093) of investments where it is deemed to have the ability to exercise such significant influence. The Company generally pays management and performance fees to the investment managers of these investments. The Company considers all fees paid to the investment managers to be at market rates consistent with negotiated arms-length contracts.

(In thousands of U.S. dollars)

14. Taxation

Under current Bermuda law, the Company is not required to pay any taxes in Bermuda on income or capital gains. The Company has received an assurance from the Minister of Finance in Bermuda that, in the event of any taxes being imposed, the Company will be exempt from taxation in Bermuda until March 2035. The Branch is subject to taxes in Singapore. The Branch is not under examination in this tax jurisdiction, but remains subject to examination for the tax years 2016 through 2019.

At December 31, 2019, the total operating loss carry forwards for the Branch were $103,899 (2018: $79,445). Such operating losses are currently available to offset future taxable income of the Branch and may be carried forward indefinitely. At December 31, 2019 and 2018, the Company established a full valuation allowance on these operating loss carry forwards due to the cumulative losses historically.

15. Other Comprehensive Income (Loss)

Reclassifications out of AOCI into net income were as follows:

Details About AOCI Components	**Consolidated Statements of Operations Line Item That Includes Reclassification**	**Amount Reclassified from AOCI[1] Year ended December 31, 2019**	**2018**
Unrealized gains (losses) on available for sale investments			
	Other realized investment gains (losses)	$ 9,768	$ (70,010)
	OTTI losses	(5,234)	(7,589)
	Total before tax	**4,534**	**(77,599)**
	Income tax expenses	—	—
	Net of tax	**$ 4,534**	**$ (77,599)**

(1) Amounts in parentheses are charges to net income

(In thousands of U.S. dollars)

16. Statutory Financial Information

The Company is licensed under the Bermuda Insurance Act 1978, amendments thereto and Related Regulations (the "Act") and is required to comply with various provisions of the Act regarding solvency and liquidity. Under the Act, the Company is required to maintain minimum statutory capital and surplus equal to the greater of a minimum solvency margin ("MSM") and an Enhanced Capital Requirement ("ECR"). The MSM is the greater of $100 million, 50% of net written premiums, 15% of the net reserve for losses and loss adjustment expenses or 25% of the ECR. The ECR is calculated based on either an internally developed risk-based capital model or a standard risk-based capital model developed by the Bermuda Monetary Authority ("BMA"). In 2016, the BMA implemented an Economic Balance Sheet ("EBS") framework, which is used as the basis to determine the ECR. Actual and required minimum statutory capital and surplus at December 31, 2019 and 2018 were as follows:

	2019	2018
Required minimum statutory capital and surplus	$ 1,502,153	$ 1,470,392
Actual statutory capital and surplus	$ 3,288,752	$ 3,513,342

Under the Act, the Company is restricted as to the payment of dividends for amounts greater than 25% of the prior year's statutory capital and surplus, whereby a signed affidavit by at least two members of the Board of Directors attesting that a dividend in excess of this amount would not cause the company to fail to meet its relevant margins is required. The maximum dividend the Company could pay, without a signed affidavit, having met minimum levels of statutory capital and surplus requirements, was approximately $843,574 (2018: $864,158).

In accordance with the Company's license under the Act, loss reserves are certified annually by an independent loss reserve specialist.

The Branch is licensed under the Insurance Act of Singapore and is required to comply with various provisions of the Act regarding solvency.

17. Subsequent Events

On January 14, 2020, the Company entered into a loan with Specialty U.S. Holdings following which it borrowed $260,000 at an annual interest rate of 5.15%. The loan matures on May 28, 2020.

The recent global outbreak of the coronavirus ("COVID-19") has caused significant volatility within the economic markets, for which the duration and spread of the outbreak and the resultant economic impact is uncertain and cannot be predicted. The Company is exposed to the impact of COVID-19 on the financial markets and the overall economy from an asset and liability perspective. The effect of the impact of COVID-19 has not been reflected in these financial statements; such impact may affect future financial results of the Company and its' financial position.