



XL Insurance
Reinsurance

XL **Bermuda Ltd**

**Consolidated
Financial Statements
for the Years Ended
December 31, 2018
and 2017**



April 30, 2019

Report of Independent Auditors

To the Shareholder of XL Bermuda Ltd

We have audited the accompanying consolidated financial statements of XL Bermuda Ltd and its subsidiaries, which comprise the consolidated balance sheets as of December 31, 2018 and December 31, 2017, and the related consolidated statements of income, comprehensive income, shareholder's equity and cash flows for the years then ended.

Management's responsibility for the consolidated financial statements

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

Auditors' responsibility

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

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



Opinion

In our opinion, the consolidated financial statements referred to above present fairly, in all material respects, the financial position of XL Bermuda Ltd and its subsidiaries as of December 31, 2018 and December 31, 2017, 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 required supplemental information under Accounting Standards Update 2015-09, *Disclosure about Short-Duration Contracts* labelled as Unaudited within Note 10 on pages 50 to 58 be presented to supplement the basic financial statements. Such information, although not a part of the basic financial statements, is required by the Financial Accounting Standards Board, who considers it to be an essential part of financial reporting for placing the basic financial statements in an appropriate operational, economic, or historical context. We have applied certain limited procedures to the required supplementary information in accordance with auditing standards generally accepted in the United States of America, which consisted of inquiries of management about the methods of preparing the information and comparing the information for consistency with management's responses to our inquiries, the basic financial statements, and other knowledge we obtained during our audit of the basic financial statements. We do not express an opinion or provide any assurance on the information because the limited procedures do not provide us with sufficient evidence to express an opinion or provide any assurance.

A handwritten signature in black ink that reads "PricewaterhouseCoopers Ltd." in a cursive script.

Chartered Professional Accountants

XL BERMUDA LTD
CONSOLIDATED BALANCE SHEETS
AS AT DECEMBER 31, 2018 AND 2017

(U.S. dollars in thousands, except share data)

	2018	2017
ASSETS		
Investments:		
Fixed maturities available for sale ("AFS"), at fair value (amortized cost: 2018, \$28,806,216; 2017, \$29,645,663)	\$ 28,839,373	\$ 30,416,290
Short-term investments AFS, at fair value (amortized cost: 2018, \$580,390; 2017, \$801,210)	578,114	800,027
Fixed maturities trading, at fair value (amortized cost: 2018, \$1,995,800; 2017, \$1,946,501)	1,996,429	2,006,385
Short-term investments trading, at fair value (amortized cost: 2018, \$17,043; 2017, \$14,969)	17,032	14,965
Equity securities, at fair value (cost: 2018, \$722,429; 2017, \$638,455)	635,992	713,967
Investments in affiliates	1,313,591	1,911,996
Other investments	1,049,493	1,163,863
Total investments	\$ 34,430,024	\$ 37,027,493
Cash and cash equivalents	2,372,132	3,273,315
Restricted cash	348,863	157,497
Accrued investment income	244,431	269,701
Deferred acquisition costs	1,129,242	1,102,474
Ceded unearned premiums	2,348,869	2,198,217
Premiums receivable	7,424,340	6,934,482
Reinsurance balances receivable	1,325,709	930,114
Unpaid losses and loss expenses recoverable	8,534,033	7,247,723
Receivable from investments sold	885,070	201,515
Amount due from Parent and affiliates	126,028	68,004
Goodwill and other intangible assets	1,858,938	2,089,438
Deferred tax asset	337,540	332,024
Other assets	704,704	738,744
Total assets	\$ 62,069,923	\$ 62,570,741
LIABILITIES AND SHAREHOLDER'S EQUITY		
Liabilities:		
Unpaid losses and loss expenses	\$ 31,597,291	\$ 29,696,779
Deposit liabilities	886,353	1,042,677
Future policy benefit reserves	3,208,280	3,610,926
Funds withheld on GreyCastle life retrocession arrangements (net of future policy benefit reserves recoverable: 2018, \$2,779,698; 2017, \$3,191,584)	703,147	999,219
Unearned premiums	8,902,430	8,307,431
Reinsurance balances payable	3,473,881	3,706,116
Payable for investments purchased	524,216	332,142
Deferred tax liability	62,207	57,574
Amount due to Parent and affiliates	19,906	27,087
Other liabilities	1,056,503	952,773
Total liabilities	\$ 50,434,214	\$ 48,732,724
Shareholder Equity:		
Ordinary shares, 15,000,000 authorized, par value \$0.10; issued and outstanding (2018: \$12,500,000; 2017: 12,500,000)	\$ 1,250	\$ 1,250
Additional paid in capital	12,064,416	12,579,844
Accumulated other comprehensive income	(189,876)	741,922
Retained earnings	(789,606)	(141,078)
Shareholder equity attributable to ordinary shareholder	\$ 11,086,184	\$ 13,181,938
Non-controlling interest in equity of consolidated subsidiaries	549,525	656,079
Total shareholder equity	\$ 11,635,709	\$ 13,838,017
Total liabilities and shareholder equity	\$ 62,069,923	\$ 62,570,741

See accompanying Notes to Consolidated Financial Statements

XL BERMUDA LTD
CONSOLIDATED STATEMENTS OF INCOME
FOR THE YEARS ENDED DECEMBER 31, 2018 AND 2017

(U.S. dollars in thousands)

	2018	2017
Revenues:		
Net premiums earned	\$ 10,617,769	\$ 10,336,612
Net investment income:		
Net investment income - excluding Life Funds Withheld Assets	795,910	688,284
Net investment income - Life Funds Withheld Assets	115,203	127,047
Total net investment income	911,113	815,331
Realized investment gains (losses):		
Net realized gains (losses) on investments sold - excluding Life Funds Withheld Assets	(96,659)	132,788
Net realized and change in net unrealized gains (losses) on equity securities - excluding Life Funds Withheld Assets	(86,847)	—
Net realized and change in net unrealized gains (losses) on other investments - excluding Life Funds Withheld Assets	16,661	—
Other-than-temporary impairments ("OTTI") on investments - excluding Life Funds Withheld Assets	(10,519)	(12,988)
OTTI on investments transferred to (from) other comprehensive income - excluding Life Funds Withheld Assets	(935)	(359)
Net realized gains (losses) on investments and change in net unrealized gains (losses) on investments, trading - Life Funds Withheld Assets	60,486	101,106
OTTI on investments - Life Funds Withheld Assets	(3,553)	(1,434)
Total net realized investment gains (losses)	\$ (121,366)	\$ 219,113
Net realized and unrealized gains (losses) on derivative instruments	10,429	(41,732)
Net realized and unrealized gains (losses) on life retrocession embedded derivative and derivative instruments - Life Funds Withheld Assets	(37,670)	(206,015)
Income (loss) from investment affiliates	64,140	139,046
Fee income and other	42,632	48,647
Total revenues	\$ 11,487,047	\$ 11,311,002
Expenses:		
Net losses and loss expenses incurred	\$ 8,328,863	\$ 8,001,920
Claims and policy benefits	54,857	39,189
Acquisition costs	1,850,488	1,788,140
Operating expenses	1,846,014	1,689,570
Foreign exchange (gains) losses	(11,511)	35,458
(Gain) Loss on sale of subsidiary	215	—
Interest expense	48,468	40,046
Impairment of other intangible assets	189,550	—
Total expenses	\$ 12,306,944	\$ 11,594,323
Income (loss) before income tax and income (loss) from operating affiliates	(819,897)	(283,321)
Income (loss) from operating affiliates	57,409	63,645
Provision (benefit) for income tax	98,954	59,070
Net income (loss)	\$ (861,442)	\$ (278,746)
Non-controlling interests	(5,038)	(30,815)
Net income (loss) attributable to ordinary shareholder	\$ (866,480)	\$ (309,561)

See accompanying Notes to Consolidated Financial Statements

XL BERMUDA LTD
CONSOLIDATED STATEMENTS OF COMPREHENSIVE INCOME
FOR THE YEARS ENDED DECEMBER 31, 2018 AND 2017

(U.S. dollars in thousands)

	2018	2017
Net income (loss) attributable to ordinary shareholder	\$ (866,480)	(309,561)
Change in net unrealized gains (losses) on investments - excluding Life Funds Withheld Assets, net of tax	(536,481)	181,711
Change in adjustments related to future policy benefit reserves, net of tax	74,784	27,184
Change in net unrealized gains (losses) on investments - Life Funds Withheld Assets, net of tax	(210,193)	(51,983)
Change in net unrealized gains (losses) on affiliate and other investments, net of tax	4,580	(1,460)
Change in net unrealized gains (losses) on other investments, net of tax	—	(3,555)
Change in OTTI losses recognized in other comprehensive income, net of tax	2,192	2,415
Change in underfunded pension liability, net of tax	3,851	2,531
Foreign currency translation adjustments, net of tax	(52,577)	43,177
Comprehensive income (loss)	\$ (1,580,324)	(109,541)

See accompanying Notes to Consolidated Financial Statements

XL BERMUDA LTD
CONSOLIDATED STATEMENTS OF SHAREHOLDER'S EQUITY
FOR THE YEARS ENDED DECEMBER 31, 2018 AND 2017

(U.S. dollars in thousands)

	2018	2017
Ordinary Shares:		
Balance – beginning of year	\$ 1,250	\$ 1,250
Issuance of ordinary shares	—	—
Balance – end of year	\$ 1,250	\$ 1,250
Additional Paid in Capital:		
Balance – beginning of year	\$ 12,579,844	\$ 12,579,844
Acquisition of subsidiary non-controlling interests	(15,428)	—
Return of Capital	(500,000)	—
Balance – end of year	\$ 12,064,416	\$ 12,579,844
Accumulated Other Comprehensive Income (Loss):		
Balance – beginning of year	\$ 741,920	\$ 541,900
Reclassification due to the adoption of Accounting Standards Update ("ASU") 2016-01	(221,856)	—
Reclassification due to the adoption of ASU 2018-02	3,904	—
Change in net unrealized gains (losses) on investments - excluding Life Funds Withheld	(536,481)	181,711
Change in adjustments related to future policy benefit reserves, net of tax	74,784	27,184
Change in net unrealized gains (losses) on investments - Life Funds Withheld Assets, net of tax	(210,193)	(51,983)
Change in net unrealized gains (losses) on affiliate, net of tax	4,580	(1,460)
Change in net unrealized gains (losses) on other investments, net of tax	—	(3,555)
Change in OTTI losses recognized in other comprehensive income, net of tax	2,192	2,415
Change in underfunded pension liability, net of tax	3,851	2,531
Foreign currency translation adjustments, net of tax	(52,577)	43,177
Balance – end of year	\$ (189,876)	\$ 741,920
Retained Earnings (Deficit):		
Balance – beginning of year	\$ (141,078)	\$ 918,483
Reclassification due to the adoption of ASU 2016-01	221,856	—
Reclassification due to the adoption of ASU 2018-02	(3,904)	—
Net income (loss) attributable to ordinary shareholders	(866,480)	(309,561)
Dividends on ordinary shares	—	(750,000)
Balance – end of year	\$ (789,606)	\$ (141,078)
Non-controlling Interest in Equity of Consolidated Subsidiaries:		
Balance – beginning of year	\$ 656,079	\$ 677,665
Non-controlling interests – contributions	5,475	59,583
Non-controlling interests – distributions	(90,217)	(26,092)
Non-controlling interests – redeemed	—	(43,704)
Non-controlling interests	(22,586)	(10,557)
Non-controlling interest share in change in accumulated other comprehensive income (loss)	774	(816)
Balance – end of year	\$ 549,525	\$ 656,079
Total Shareholder's Equity	\$ 11,635,709	\$ 13,838,015

See accompanying Notes to Consolidated Financial Statements

XL BERMUDA LTD
CONSOLIDATED STATEMENTS OF CASH FLOWS
FOR THE YEARS ENDED DECEMBER 31, 2018 AND 2017

(U.S. dollars in thousands)

	2018	2017
Cash flows provided by (used in) operating activities:		
Net income (loss)	\$ (861,443)	\$ (278,746)
Adjustments to reconcile net income (loss) to net cash provided by (used in) operating activities:		
Net realized investment gains (losses)	121,366	(219,750)
Net realized and unrealized (gains) losses on derivative instruments	(10,429)	41,732
Impairment of other intangible assets	189,550	—
Net realized and unrealized gains (losses) on life retrocession embedded derivatives	37,670	206,015
Amortization of premiums (discounts) on fixed maturities	102,149	156,855
(Income) loss from investment fund and operating affiliates	(59,413)	(122,487)
Depreciation and amortization	107,653	90,952
Accretion of deposit liabilities	37,707	29,243
Changes in:		
Unpaid losses and loss expenses	2,416,196	2,881,359
Future policy benefit reserves	(255,823)	(235,328)
Funds withheld liability on life retrocession agreements, net	(205,765)	(281,136)
Unearned premiums	791,145	733,182
Premiums receivable	(664,027)	(1,200,673)
Unpaid losses and loss expenses recoverable	(1,422,747)	(1,575,046)
Amounts due from parent and affiliates	(65,204)	(5,669)
Ceded unearned premiums	(208,852)	(430,213)
Reinsurance balances receivable	(428,547)	(327,462)
Deferred acquisition costs	(48,591)	(118,566)
Reinsurance balances payable	(145,672)	1,120,507
Deferred tax asset – net	25,424	(59,498)
Derivatives	72,673	(18,856)
Other assets	(22,836)	(68,370)
Other liabilities	130,888	(235,142)
Other	(58,178)	68,574
Total adjustments	\$ 436,337	\$ 430,223
Net cash provided by (used in) operating activities	\$ (425,106)	\$ 151,477
Cash flows provided by (used in) investing activities:		
Proceeds from sale of fixed maturities and short-term investments	\$ 15,842,012	\$ 15,527,115
Proceeds from redemption of fixed maturities and short-term investments	2,527,078	3,332,898
Proceeds from sale of equity securities	355,232	756,872
Purchases of fixed maturities and short-term investments	(18,118,865)	(19,073,441)
Purchases of equity securities	(456,218)	(326,610)
Proceeds from sale of affiliates	584,233	593,539
Purchases of affiliates	(153,125)	(176,034)
Other, net	(28,420)	(70,645)
Net cash provided by (used in) investing activities	\$ 551,927	\$ 563,694

See accompanying Notes to Consolidated Financial Statements

XL BERMUDA LTD
CONSOLIDATED STATEMENTS OF CASH FLOWS
FOR THE YEARS ENDED DECEMBER 31, 2018 AND 2017

(U.S. dollars in thousands)

	2018	2017
Cash flows provided by (used in) financing activities:		
(Distribution)/Contribution to/from Parent Company	(500,000)	—
Acquisition of subsidiary non-controlling interests	(14,095)	—
Dividends paid on ordinary shares	—	(750,000)
Distributions to non-controlling interests	(131,547)	(65,678)
Contributions from non-controlling interests	5,475	59,583
Repurchase of preference shares	—	(45,581)
Deposit liabilities	(192,896)	(34,565)
Net cash provided by (used in) financing activities	\$ (833,063)	\$ (836,241)
Effects of exchange rate changes on foreign currency cash	(3,575)	56,699
Increase (decrease) in cash and cash equivalents	\$ (709,817)	\$ (64,371)
Cash, cash equivalents and restricted cash – beginning of period	3,430,812	3,495,183
Cash, cash equivalents and restricted cash– end of period	\$ 2,720,995	\$ 3,430,812
Net taxes paid	\$ 29,861	\$ 30,955

See accompanying Notes to Consolidated Financial Statements

XL BERMUDA LTD
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS
FOR THE YEARS ENDED DECEMBER 31, 2018 AND 2017

1. General

XL Bermuda Ltd (the “Company” or “XLB”) was formed June 2016 under the laws of Bermuda as the result of the amalgamation of two Bermuda operating entities, XL Insurance (Bermuda) Ltd and XL Re Ltd and is registered as a Class 4E insurer. The Company’s shares are wholly owned by EXEL Holdings Limited and the ultimate parent is AXA SA, a French domiciled holding company (“AXA”).

The Company and its operating subsidiaries are a leading provider of insurance and reinsurance coverages to industrial, commercial and professional firms, insurance companies and other enterprises on a worldwide basis. The Company and its various subsidiaries operate globally through the Company's two business operations: Insurance and Reinsurance.

Insurance Operations

The Company’s insurance operations are organized to pair our global industry and product expertise with a strong regional presence and local infrastructure that includes decision makers familiar with local needs and market dynamics. It includes three business groups: North America, International and Global Lines.

North America provides primary and excess casualty, environmental liability, professional liability, property, excess and surplus lines, U.S. program/facilities and construction business.

International provides property, primary and excess casualty, environmental liability, professional liability, construction, mergers & acquisitions and structured risk solutions.

Global Lines includes the following lines of business: aviation & satellite, marine (including North America inland marine), fine art & specie, private clients, equine, livestock & aquaculture, energy, crisis management, political risk, credit & bond, London wholesale property & casualty and life, accident & health

Reinsurance Operations

The Company’s Reinsurance operations are structured into five business groups mainly based on region: Bermuda; North America; London; Europe, Middle East, and Africa (“EMEA”); and Latin America, Asia Pacific & Credit (“LAC”).

The Reinsurance operations provide casualty, property risk, property catastrophe, specialty, and other reinsurance lines on a global basis with business being written on both a proportional and non-proportional treaty basis, and also on a facultative basis.

Run-Off Life Operations

The Company ceased writing new life reinsurance in 2009 and since that time has been managing the run-off of the life reinsurance operations (“Run-Off Life Operations”). On May 30, 2014, XLB completed a transaction with GreyCastle Holdings Ltd (“GreyCastle”) that resulted in sale of the Company's wholly-owned subsidiary, XL Life Reinsurance (SAC) Ltd (“XLLR”), to GreyCastle (subsequent to the transaction, XLLR changed its name to GreyCastle Life Reinsurance (SAC) Ltd (“GCLR”). As a result of the transaction, the Company has ceded the majority of the life reinsurance business to GCLR via 100% quota share reinsurance (the “GreyCastle Life Retro Arrangements”). This transaction covers a substantial portion of XLB's life reinsurance reserves. During 2015, the Company entered into another reinsurance agreement (the “U.S. Term Life Retro Arrangements”) ceding the majority of the remaining life reinsurance business.

2. Significant Accounting Policies

(a) Basis of Preparation and Consolidation

These consolidated financial statements include the accounts of the Company and all of its subsidiaries. These consolidated financial statements have been prepared in conformity with accounting principles generally accepted in the United States of America (“GAAP”). In order to facilitate period-to-period comparisons, certain reclassifications have been made to prior year consolidated financial statement amounts to conform to the current year presentation. There was no effect on net income from this change in presentation.

XL BERMUDA LTD
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS
FOR THE YEARS ENDED DECEMBER 31, 2018 AND 2017

The preparation of financial statements in conformity with GAAP 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 financial statements and the reported amounts of revenues and expenses during the reporting period. The Company's most significant areas of estimation include:

- unpaid losses and loss expenses and unpaid losses and loss expenses recoverable;
- future policy benefit reserves;
- valuation and other-than-temporary impairments of investments;
- income taxes;
- reinsurance premium estimates; and
- carrying value of goodwill and intangible assets.

While management believes that the amounts included in the consolidated financial statements reflect the Company's best estimates and assumptions, actual results could differ materially from these estimates.

(b) Fair Value Measurements

Financial Instruments Subject to Fair Value Measurements

Accounting guidance over fair value measurements requires that a fair value measurement reflect the assumptions market participants would use in pricing an asset or liability based on the best information available. Assumptions include the risks inherent in a particular valuation technique (such as a pricing model) and/or the risks inherent in the inputs to the model. The fair value of a financial instrument is the amount that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date (the "exit price"). Instruments that the Company owns ("long positions") are marked to bid prices and instruments that the Company has sold but not yet purchased ("short positions") are marked to offer prices. Fair value measurements are not adjusted for transaction costs.

Basis of Fair Value Measurement

Fair value measurements accounting guidance also establishes a fair value hierarchy that prioritizes the inputs to the respective valuation techniques used to measure fair value. The hierarchy gives the highest priority to unadjusted quoted prices in active markets for identical assets or liabilities (Level 1 measurements) and the lowest priority to unobservable inputs (Level 3 measurements). An asset or liability's classification within the fair value hierarchy is based on the lowest level of significant input to its valuation. The three levels of the fair value hierarchy are described further below:

- **Level 1** - Quoted prices in active markets for identical assets or liabilities (unadjusted); no blockage factors.
- **Level 2** - Other observable inputs (quoted prices in markets that are not active or inputs that are observable either directly or indirectly)-include quoted prices for similar assets/liabilities (adjusted) other than quoted prices in Level 1; quoted prices in markets that are not active; or other inputs that are observable or can be derived principally from or corroborated by observable market data for substantially the full term of the assets or liabilities.
- **Level 3** - Unobservable inputs that are supported by little or no market activity and are significant to the fair value of the assets or liabilities. Unobservable inputs reflect the reporting entity's own assumptions about the assumptions that market participants would use in pricing the asset or liability. Level 3 assets and liabilities include financial instruments whose values are determined using pricing models, discounted cash flow methodologies, or similar techniques, as well as instruments for which the determination of fair value requires significant management judgment or estimation.

Details on assets and liabilities that have been included under the requirements of authoritative guidance on fair value measurements to illustrate the bases for determining the fair values of these items held by the Company are included in each respective section of this note.

Fair values of investments and derivatives are based on published market values if available, estimates of fair values of similar issues, or estimates of fair values provided by independent pricing services and brokers. Fair values of financial instruments for which quoted market prices are not available or for which the Company believes current trading conditions represent distressed markets are based on estimates using present value or other valuation techniques. The fair values estimated using such techniques are significantly affected by the assumptions used, including the discount rates and the estimated

XL BERMUDA LTD
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS
FOR THE YEARS ENDED DECEMBER 31, 2018 AND 2017

amounts and timing of future cash flows. In such instances, the derived fair value estimates cannot be substantiated by comparison to independent markets and are not necessarily indicative of the amounts that would be realized in a current market exchange.

(c) Investments

Investments - Available For Sale

Investments that are considered available for sale ("AFS") (comprised of fixed maturities and short-term investments) are carried at fair value. The fair values for AFS investments are generally sourced from third parties. The fair values of fixed income securities are based upon quoted market values where available, "evaluated bid" prices provided by third party pricing services ("pricing services") where quoted market values are not available, or by reference to broker or underwriter bid indications where pricing services do not provide coverage for a particular security. The Company may elect to utilize internally generated models to the extent it believes current trading conditions represent distressed transactions.

It is common industry practice to utilize pricing services as a source for determining the fair values of investments where the pricing services are able to obtain sufficient market-corroborating information to allow them to produce a valuation at a reporting date. In addition, in the majority of cases, although a value may be obtained from a particular pricing service for a security or class of similar securities, these values are corroborated against values provided by other pricing services. The pricing services use market approaches to valuations using primarily Level 2 inputs in the vast majority of valuations, or some form of discounted cash flow analysis, to obtain investment values for a small percentage of fixed income securities for which they provide a price. Standard inputs to the valuations provided by the pricing services listed in approximate order of priority for use when available include: reported trades, benchmark yields, broker/dealer quotes, issuer spreads, two-sided markets, benchmark securities, bids, offers, and reference data. The pricing services may prioritize inputs differently on any given day for any security, and not all inputs listed are available for use in the evaluation process on any given day for each security evaluation; however, the pricing services also monitor market indicators, customer feedback through a price challenge process and industry and economic events. Information of this nature is a trigger to acquire further corroborating market data. When these inputs are not available, they identify "buckets" of similar securities (allocated by asset class types, sectors, sub-sectors, contractual cash flows/structure, and credit rating characteristics) and apply some form of matrix or other modeled pricing to determine an appropriate security value that represents their best estimate as to what a buyer in the marketplace would pay for a security in a current sale. Prices provided by independent pricing services and independent broker quotes can vary widely even for the same security. The use of different methodologies and assumptions may have a material effect on the estimated fair value amounts. While the Company receives values for the majority of the investment securities it holds from pricing services, it is ultimately management's responsibility to determine whether the values received and recorded in the financial statements are representative of appropriate fair value measurements.

Broker/dealer quotations are used to value fixed maturities where prices are unavailable from pricing services due to factors specific to the security such as limited liquidity, lack of current transactions, or trades only taking place in privately negotiated transactions. These are considered Level 3 valuations, as significant inputs utilized by brokers may be difficult to corroborate with observable market data, or sufficient information regarding the specific inputs utilized by the broker was not available to support a Level 2 classification.

Short-term investments include investments due to mature within one year from the date of purchase and are valued using the same external factors and in the same manner as fixed income securities.

Changes in the value of available for sale fixed maturities and short-term investments are reflected as unrealized gains or losses on investments, and are included in "accumulated other comprehensive income (loss)", on a net of tax basis. Changes in the value of equity securities are recognized in net income.

All investment transactions are recorded on a trade date basis. Realized gains and losses on sales of equities and fixed income investments are determined on a first-in, first-out basis.

Investment income is recognized when earned, and includes interest and dividend income together with the amortization of premium and discount on fixed maturities and short-term investments, and is recorded net of related investment expenses. Amortization of discounts on fixed maturities includes amortization to expected recovery values for investments that have previously been recorded as other-than-temporarily impaired. For mortgage-backed securities, and any other holdings for which there is a prepayment risk, prepayment assumptions are evaluated and revised as necessary. Prepayment fees or call premiums that are payable to the Company only when a security is called prior to its maturity are earned when received and reflected in net investment income.

XL BERMUDA LTD
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS
FOR THE YEARS ENDED DECEMBER 31, 2018 AND 2017

Investments -Trading

Investments for which the Company has elected the fair value option are classified as "trading". Trading securities are carried at fair value. All trading securities are held in support of the GreyCastle Life Retro Arrangements, as defined in Note 1. Thus, changes in the fair value of trading securities are included in "Net realized gains (losses) on investments and change in net unrealized gains (losses) on investments, trading - Life Funds Withheld Assets," and interest and dividend income from trading securities are included as a component of "Net investment income - Life Funds Withheld Assets".

Investments Related to Life Retrocession Arrangements written on a Funds Withheld Basis

Designated investments that support the GreyCastle Life Retro Arrangements, which were written on a funds withheld basis ("Life Funds Withheld Assets") and entered into in connection with the sale of XLB's life reinsurance subsidiary are classified as either available for sale or trading. Investment results for these assets - including interest income, unrealized gains and losses, and gains and losses from sales - are passed directly to the reinsurer pursuant to a contractual arrangement that is accounted for as a derivative.

Changes in the fair value of the embedded derivative associated with the GreyCastle Life Retro Arrangements are recorded in "Net realized and unrealized gains (losses) on life retrocession embedded derivative and derivative instruments - Life Funds Withheld Assets" in the Consolidated Statements of Income. The fair value of the embedded derivative is included within "Funds withheld on life retrocession arrangements, net of future policy benefit reserves recoverable" on the Consolidated Balance Sheets.

Equity Securities

Equity securities include investments in open-end mutual funds, exchange-traded funds and shares of publicly traded companies. The fair value of equity securities is based upon quoted market values (Level 1), or monthly net asset value statements provided by the investment managers upon which subscriptions and redemptions can be executed (Level 2).

Investments In Affiliates

Investments in which the Company has significant influence over the operating and financial policies of the investee are classified as investments in affiliates on the Company's Consolidated Balance Sheets and are accounted for under the equity method of accounting. Under this method, the Company records its proportionate share of income or loss from such investments in its results for the period as well as its portion of movements in certain of the investee shareholders' equity balances. When financial statements of the affiliate are not available on a timely basis to record the Company's share of income or loss for the same reporting periods as the Company, the most recently available financial statements are used. This lag in reporting is applied consistently. Distributions received from affiliates representing returns on invested capital are recorded as operating cash flows, while distributions representing returns of invested capital or proceeds upon sale of all or a portion of an affiliate are recorded as investing cash flows.

The Company generally records its hedge fund and private investment affiliates on a one-month and three-month lag, respectively, and its operating affiliates on a three-month lag. Significant influence is considered on a case-by-case basis. Investments in affiliates are not subject to fair value measurement guidance as they are not considered to be fair value measured investments under GAAP. However, impairments associated with investments in affiliates that are deemed to be other-than-temporary are calculated in accordance with fair value measurement guidance and appropriate disclosures included within the financial statements during the period the losses are recorded.

Other Investments

Contained within this asset class are equity interests in investment funds, limited partnerships and unrated tranches of collateralized debt obligations for which the Company does not have sufficient rights or ownership interests to follow the equity method of accounting. Also included within other investments are structured transactions, which are carried at amortized cost.

Fair values for other investments, principally other direct equity investments, investment funds and limited partnerships, are primarily based on the net asset value provided by the investment manager, the general partner or the respective entity, recent financial information, available market data and, in certain cases, management judgment. These entities generally carry their trading positions and investments, the majority of which have underlying securities valued using Level 1 or Level 2 inputs, at fair value as determined by their respective investment managers; accordingly, these investments are generally classified as Level 2. Investments for which fair value is estimated using net asset value per share as a practical expedient are excluded from the fair value hierarchy. Private equity investments are classified as Level 3. The net unrealized gain or loss on investments, net of tax, is included in "Accumulated other comprehensive income (loss)." Any unrealized loss in value considered by management to be other-than-temporary is charged to income in the period in which such determination is made.

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Overseas deposits include investments in private funds related to Lloyd's syndicates in which the underlying instruments are primarily fixed maturities. The funds themselves do not trade on an exchange and therefore are not included within available for sale securities. Also included in overseas deposits are restricted balances held by Lloyd's syndicates for solvency purposes which are primarily invested in cash and cash equivalents. Given the restricted nature of these balances, they are included in other investments on the Consolidated Balance Sheets. Each of these investment types is considered a Level 2 valuation.

The Company has historically participated in structured transactions. These have included providing cash loans supporting project finance transactions and providing liquidity facility financing to structured project deals. The Company also invested in a payment obligation with an insurance company. The Company's policy is to value such transactions at amortized cost. For further details see Note 8, "Fair Value Measurements" and Note 6, "Other Investments."

(d) Premiums and Acquisition Costs

Insurance premiums written are recorded in accordance with the terms of the underlying policies. Reinsurance premiums written are recorded at the inception of the policy and are estimated based upon information received from ceding companies and any subsequent differences arising on such estimates are recorded in the period they are determined. For multi-year reinsurance treaties which are payable in annual installments, generally, only the initial annual installment is included as premiums written at policy inception due to the ability of the reinsured to commute or cancel coverage during the term of the policy. The remaining annual installments are included as premiums written at each successive anniversary date within the multi-year term.

Premiums are generally earned on a pro-rata basis over the period the coverage is provided. Unearned premiums represent the portion of premiums written applicable to the unexpired terms of policies in force. Net premiums earned are presented after deductions for reinsurance ceded, as applicable. Premiums receivable are reported net of commissions payable and allowance for estimated uncollectible amounts.

Reinstatement premiums are recognized at the time a loss event occurs where coverage limits for the remaining life of the contract are reinstated under pre-defined contract terms and are fully earned when recognized.

Life and annuity premiums from long duration contracts that transfer significant mortality or morbidity risks are recognized as revenue and earned when due from policyholders. Life and annuity premiums from long duration contracts that do not subject the Company to risks arising from policyholder mortality or morbidity are accounted for as investment contracts and presented within deposit liabilities.

The Company has periodically written retroactive loss portfolio transfer contracts. These contracts are evaluated to determine whether they meet the established criteria for reinsurance accounting, and, if so, at inception, written premiums are fully earned and corresponding losses and loss expense recognized. The contracts can cause significant variances in gross premiums written, net premiums written, net premiums earned, and net incurred losses in the years in which they are written. Reinsurance contracts sold not meeting the established criteria for reinsurance accounting are recorded using the deposit method.

Acquisition costs, which vary with and are directly related to the acquisition of policies, consist primarily of: a) commissions paid to brokers and cedants, and b) premium-related taxes are deferred and amortized over the period during which the premiums are earned. Acquisition costs are shown net of contractual commissions earned on reinsurance ceded. Future earned premiums, the anticipated losses and other costs (and in the case of a premium deficiency, investment income) related to those premiums, are also considered in determining the level of acquisition costs to be deferred.

(e) Reinsurance

In the normal course of business, the Company seeks to reduce the potential amount of loss arising from claims events by reinsuring certain levels of risk assumed in various areas of exposure with other insurers or reinsurers. Reinsurance premiums ceded are expensed (and any commissions recorded thereon are earned) on a monthly pro-rata basis over the period the reinsurance coverage is provided. Ceded unearned reinsurance premiums represent the portion of premiums ceded applicable to the unexpired term of policies in force. Reinstatement premiums ceded are recognized at the time a loss event occurs where coverage limits for the remaining life of the contract are reinstated under pre-defined contract terms and are fully earned when recognized. Amounts recoverable from reinsurers are estimated in a manner consistent with the claim liability associated with the reinsured policy. Provisions are made for estimated unrecoverable reinsurance.

The Company enters into ceded reinsurance agreements with other companies in the normal course of business. All premium and loss-related balances related to reinsurance agreements are reported on a gross basis within XLB's Consolidated Balance Sheets, with the exception of the GreyCastle Life Retro Arrangements, which were written on a funds withheld basis.

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The future policy benefit reserves recoverable related to these retrocession arrangements are netted against the funds withheld liability owing to the counterparty on the Consolidated Balance Sheets due to the contractual right of offset.

(f) Fee Income and Other

Fee income and other includes fees received for insurance, loss prevention consulting services and product structuring services provided and is earned over the service period of the contract. Any adjustments to fees earned or the service period are reflected in income in the period when determined.

(g) Other-Than-Temporary Impairments ("OTTI") of Available for Sale Securities

The Company's process for identifying declines in the fair value of investments that are other-than-temporary involves consideration of several factors. The primary factors include (i) an analysis of the liquidity, business prospects and financial condition of the issuer, including consideration of credit ratings, (ii) the significance of the decline, (iii) an analysis of the collateral structure and other credit support, as applicable, of the securities in question, and (iv) for debt securities, whether the Company intends to sell such securities. In addition, the authoritative guidance requires that OTTI for certain asset-backed and mortgage-backed securities be recognized if the fair value of the security is less than its discounted cash flow value and there has been a decrease in the present value of the expected cash flows since the last reporting period. Where the Company's analysis of the above factors results in the Company's conclusion that declines in fair values are other-than-temporary, the cost of the security is written down to discounted cash flow, and a portion of the previously unrealized loss is therefore realized in the period such determination is made.

With respect to equity securities and other investments carried at fair value, we generally impair a security if its fair value is 50% or lower than its amortized cost or if the security is in a loss position for 11 or more consecutive months.

If the Company intends to sell an impaired security, or it is more likely than not that it will be required to sell the security before recovery of its amortized cost basis, the impairment is other-than-temporary and is recognized currently in earnings in an amount equal to the entire difference between fair value and amortized cost.

In instances in which the Company determines that a credit loss exists but the Company does not intend to sell the security, and it is not more likely than not that the Company will be required to sell the security before the anticipated recovery of its remaining amortized cost basis, the OTTI is separated into (1) the amount of the total impairment related to the credit loss and (2) the amount of the total impairment related to all other factors (i.e. the noncredit portion). The amount of the total OTTI related to the credit loss is recognized in earnings and the amount of the total OTTI related to all other factors is recognized in accumulated other comprehensive loss. The total OTTI is presented in the Consolidated Statements of Income with an offset for the amount of the total OTTI that is recognized in accumulated other comprehensive income (loss). Absent the intent or requirement to sell a security, if a credit loss does not exist, any impairment is considered to be temporary.

The noncredit portion of any OTTI losses on securities classified as available for sale is recorded as a component of other comprehensive income (loss) with an offsetting adjustment to the carrying value of the security. The fair value adjustment could increase or decrease the carrying value of the security.

In periods subsequent to the recognition of an OTTI loss, the other-than-temporarily impaired debt security is accounted for as if it had been purchased on the measurement date of the OTTI at an amount equal to the previous amortized cost basis less the credit-related OTTI recognized in earnings. For debt securities for which credit-related OTTI is recognized in earnings, the difference between the new cost basis and the cash flows expected to be collected is accreted into interest income over the remaining life of the security in a prospective manner based on the estimated amount and timing of future estimated cash flows.

With respect to securities where the decline in value is determined to be temporary and the security's amortized cost is not written down, a subsequent decision may be made to sell that security and realize a loss. Subsequent decisions on security sales are made within the context of overall risk monitoring, changing information, market conditions generally and assessing value relative to other comparable securities. We have outsourced a significant portion of the day-to-day management of the Company's investment portfolio to third party investment manager service providers. While these investment manager service providers may, at a given point in time, believe that the preferred course of action is to hold securities with unrealized losses that are considered temporary until such losses are recovered, the dynamic nature of the portfolio management may result in a subsequent decision to sell the security and realize the loss, based upon a change in market and other factors described above. The Company believes that subsequent decisions to sell such securities are consistent with the classification of the Company's portfolio as available for sale.

There are risks and uncertainties associated with determining whether declines in the fair value of investments are other-than-temporary. These include subsequent significant changes in general economic conditions as well as specific business

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conditions affecting particular issuers, subjective assessment of issue-specific factors (seniority of claims, collateral value, etc.), future financial market effects, stability of foreign governments and economies, future rating agency actions and significant disclosure of accounting, fraud or corporate governance issues that may adversely affect certain investments. In addition, significant assumptions and management judgment are involved in determining if the decline is other-than-temporary. If management determines that a decline in fair value is temporary, then a security's value is not written down at that time. However, there are potential effects upon the Company's future earnings and financial position should management later conclude that some of the current declines in the fair value of the investments are other-than-temporary declines.

(h) Derivative Instruments

The Company recognizes all derivatives as either assets or liabilities on the Consolidated Balance Sheets and measures those instruments at fair value. Except for the embedded derivative associated with the GreyCastle Life Retro Arrangements discussed above within (c) "Investments Related to Life Retrocession Arrangements written on a Funds Withheld Basis," the changes in fair value of derivatives are shown in the Consolidated Statements of Income as "net realized and unrealized gains (losses) on derivative instruments," unless the derivatives are designated as hedging instruments. The accounting for derivatives that are designated as hedging instruments is discussed below. Changes in the fair value of derivatives may create volatility in the Company's results of operations from period to period. Amounts recognized for the right to reclaim cash collateral (a receivable) or the obligation to return cash collateral (a payable) are offset against net fair value amounts recognized in the Consolidated Balance Sheets for derivative instruments executed with the same counterparty under the same netting arrangement to the extent that the Company intends to settle the amounts on a net basis.

Derivative contracts can be exchange-traded or over-the-counter ("OTC"). Exchange-traded derivatives (futures and options) typically fall within Level 1 of the fair value hierarchy, depending on whether they are deemed to be actively traded or not. OTC derivatives are valued using market transactions and other market evidence whenever possible, including market-based inputs to models, model calibration to market clearing transactions, broker or dealer quotations or alternative pricing sources where an understanding of the inputs utilized in arriving at the valuations is obtained. Where models are used, the selection of a particular model to value an OTC derivative depends upon the contractual terms and specific risks inherent in the instrument as well as the availability of pricing information in the market. The Company generally uses similar models to value similar instruments. Valuation models require a variety of inputs, including contractual terms, market prices, yield curves, credit curves, measures of volatility, prepayment rates and correlations of such inputs. For OTC derivatives that trade in liquid markets, such as generic forwards, interest rate swaps and options, model inputs can generally be verified and model selection does not involve significant management judgment. Such instruments comprise the majority of derivatives held by the Company and are typically classified within Level 2 of the fair value hierarchy.

Certain OTC derivatives trade in less liquid markets with limited pricing information, or required model inputs that are not directly market corroborated, which causes the determination of fair value for these derivatives to be inherently more subjective. Accordingly, such derivatives are classified within Level 3 of the fair value hierarchy. The valuations of less standard or less liquid OTC derivatives are typically based on Level 1 and/or Level 2 inputs that can be observed in the market, as well as unobservable Level 3 inputs. Level 1 and Level 2 inputs are regularly updated to reflect observable market changes. Level 3 inputs are changed only when corroborated by evidence such as similar market transactions, pricing services and/or broker or dealer quotations. The Company conducts its non-hedging derivatives activities in three main areas: investment related derivatives, credit derivatives and other non-investment-related derivatives.

The Company uses derivative instruments, primarily interest rate swaps, to manage the interest rate exposure associated with certain assets and liabilities. These derivatives are recorded at fair value. On the date the derivative contract is entered into, the Company may designate the derivative as: a hedge of the fair value of a recognized asset or liability ("fair value" hedge); a hedge of the variability in cash flows of a forecasted transaction or of amounts to be received or paid related to a recognized asset or liability ("cash flow" hedge); or a hedge of a net investment in a foreign operation. Alternatively, the Company may not designate any hedging relationship for a derivative contract.

Fair Value Hedges

Changes in the fair value of a derivative that is designated and qualifies as a fair value hedge, along with the changes in the fair value of the hedged asset or liability that is attributable to the hedged risk, are recorded in current period earnings (through "net realized and unrealized gains and losses on derivative instruments"), with any differences between the net change in fair value of the derivative and the hedged item representing the hedge ineffectiveness. Periodic derivative net coupon settlements are recorded in net investment income, with the exception of hedges of Company-issued debt, which are recorded in interest expense. The Company may designate fair value hedging relationships where interest rate swaps are used to hedge the changes in the fair value of certain fixed rate liabilities and fixed maturity securities due to changes in the designated benchmark interest rate.

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Cash Flow Hedges

Changes in the fair value of a derivative that is designated and qualifies as a cash flow hedge are recorded in accumulated other comprehensive income ("AOCI") and are reclassified into earnings when the variability of the cash flow of the hedged item impacts earnings. Gains and losses on derivative contracts that are reclassified from AOCI to current period earnings are included in the line item in the consolidated statements of operations in which the cash flows of the hedged item are recorded. Any hedge ineffectiveness is recorded immediately in current period earnings as "net realized and unrealized gains and losses on derivative instruments." Periodic derivative net coupon settlements are recorded in net investment income. The Company may designate cash flow hedging relationships where interest rate swaps are used to mitigate interest rate risk associated with anticipated issuances of debt or other forecasted transactions.

Hedges of the Net Investment in a Foreign Operation

Changes in the fair value of a derivative used as a hedge of a net investment in a foreign operation, to the extent effective as a hedge, are recorded in the foreign currency translation adjustments account within AOCI. Cumulative changes in fair value recorded in AOCI are reclassified into earnings upon the sale or complete or substantially complete liquidation of the foreign entity. Any hedge ineffectiveness is recorded immediately in current period earnings as "net realized and unrealized gains (losses) on derivative instruments."

Hedge Documentation and Effectiveness Testing

To qualify for hedge accounting treatment, a derivative must be highly effective in mitigating the designated changes in value or cash flow of the hedged item. At hedge inception, the Company formally documents all relationships between hedging instruments and hedged items, as well as its risk-management objective and strategy for undertaking each hedge transaction. The documentation process includes linking derivatives that are designated as fair value, cash flow, or net investment hedges to specific assets or liabilities on the balance sheet or to specific forecasted transactions. The Company also formally assesses, both at the hedge's inception and on an ongoing basis, whether the derivatives that are used in hedging transactions are highly effective in offsetting changes in fair values or cash flows of hedged items. In addition, certain hedging relationships are considered highly effective if the changes in the fair value or discounted cash flows of the hedging instrument are within a ratio of 80-125% of the inverse changes in the fair value or discounted cash flows of the hedged item. Hedge ineffectiveness is measured using qualitative and quantitative methods. Qualitative methods may include comparison of critical terms of the derivative to the hedged item. Depending on the hedging strategy, quantitative methods may include the "Change in Variable Cash Flows Method," the "Change in Fair Value Method," the "Hypothetical Derivative Method" or the "Dollar Offset Method."

Discontinuance of Hedge Accounting

The Company discontinues hedge accounting prospectively when: it determines that the derivative is no longer highly effective in offsetting changes in the fair value or cash flows of a hedged item; the derivative is dedesignated as a hedging instrument; or the derivative expires or is sold, terminated or exercised. When hedge accounting is discontinued because it is determined that the derivative no longer qualifies as an effective fair-value hedge, the derivative continues to be carried at fair value on the balance sheets with changes in its fair value recognized in current period earnings through "net realized and unrealized gains and losses on derivative instruments." When hedge accounting is discontinued because the Company becomes aware that it is not probable that the forecasted transaction will occur, the derivative continues to be carried on the balance sheets at its fair value, and gains and losses that were accumulated in AOCI are recognized immediately in earnings.

(i) Cash and Cash Equivalents

Cash Equivalents

Cash equivalents include fixed interest deposits placed with a maturity of under 90 days when purchased. Bank deposits are not considered to be fair value measurements and as such are not subject to the authoritative guidance on fair value measurement disclosures. Money market funds are classified as Level 1, as these instruments are considered actively traded; however, certificates of deposit are classified as Level 2.

Restricted Cash

Restricted cash represents cash and cash equivalents that the Company is a) holding for the benefit of a third party and is legally or contractually restricted as to withdrawal or usage for general corporate purposes; and b) not replaceable by another type of asset other than cash or cash equivalents, under the terms of the Company's contractual arrangements with such third

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parties. Restricted cash includes cash and cash equivalents held pursuant to the terms of the Company's contractual obligations relating to the GreyCastle Life Retro Arrangements described in Note 1.

(j) Foreign Currency Revaluation and Translation

Monetary assets and liabilities denominated in currencies other than the functional currency of the applicable Company subsidiaries in which those monetary assets and liabilities reside are revalued into the appropriate functional currency at prevailing balance sheet-date exchange rates. Revenues and expenses denominated in currencies other than the functional currency of the applicable Company subsidiaries in which those revenues and expenses reside, are valued at the exchange rates on the dates on which those underlying revenue and/or expense transactions occur. The net effect of these revaluation adjustments are recognized in the Consolidated Statements of Income as part of "Foreign exchange (gains) losses".

Assets and liabilities of foreign operations whose functional currency is not the U.S. dollar are then translated into the Company's U.S. reporting currency at prevailing balance sheet-date exchange rates, while revenue and expenses of such foreign operations are translated into the Company's U.S. reporting currency at monthly average exchange rates during the year. The net effect of these translation adjustments, as well as any gains or losses on intercompany balances for which settlement is not planned or anticipated in the foreseeable future, net of applicable deferred income taxes, are included in the Consolidated Balance Sheets as part of "Accumulated other comprehensive income."

(k) Goodwill, Intangibles and Other Long-Lived Assets

The Company has recorded goodwill in connection with various acquisitions in prior years. Goodwill represents the excess of the purchase price over the fair value of the net assets acquired. In accordance with GAAP, the Company tests goodwill for potential impairment annually as of June 30, and between annual tests if an event occurs or circumstances change that may indicate that the potential exists for the fair value of a reporting unit to be reduced to a level below its carrying amount. The Company tests for impairment at the reporting unit level in accordance with the authoritative guidance on intangibles and goodwill. The Company has organized its goodwill into two reporting units, reflecting its two operations.

The Company's indefinite-lived intangible assets consist primarily of Lloyd's syndicate capacity plus acquired insurance and reinsurance licenses. These assets are deemed to have indefinite useful lives and are therefore not subject to amortization. In accordance with GAAP, the Company tests non-amortized intangible assets for potential impairment annually, or more frequently if events or changes in circumstances indicate that the asset might be impaired. If the carrying value of a non-amortized intangible asset is in excess of its fair value, the asset must be written down to its fair value through the recognition of an impairment charge to earnings.

All of the Company's depreciable or amortizable intangible assets such as agency relationships, distribution networks, and tradenames are carried at net book value, and are depreciated or amortized on a straight-line basis over their estimated useful lives. The amortization periods approximate the period over which the Company expects to generate future net cash inflows from the use of these assets. All of these assets are subject to impairment testing in accordance with authoritative guidance for the impairment or disposal of long-lived assets when events or conditions indicate that the carrying value of an asset may not be fully recoverable from future cash flows. See Note 9, "Goodwill and Other Intangible Assets" for further information.

(l) Variable Interest Entities ("VIEs")

Investments or other interests that absorb portions of an entity's expected losses or receive portions of the entity's expected residual returns are called variable interests. Entities in which the equity investors, as a group, do not have the characteristic of a controlling financial interest, or that do not have sufficient equity at risk to allow them to finance their own activities without additional financial support are referred to as VIEs.

A VIE must be consolidated by its primary beneficiary, which is the variable interest holder that is determined to have the controlling financial interest in the entity. This is the entity that has both: a) the power to direct the VIE's activities that most significantly impact its economic performance, and b) the obligation to absorb losses or receive benefits of the VIE that could potentially be significant to it. Refer to Note 16, "Variable Interest Entities," for further discussion of the Company's interests in VIEs.

(m) Non-controlling Interests

Non-controlling shareholders' interests are presented separately in the Company's Consolidated Balance Sheets and Consolidated Statements of Shareholders' Equity as required under GAAP. The net loss (income) attributable to non-controlling interests is presented separately in the Company's Consolidated Statements of Comprehensive Income. Refer to Note 16, "Variable Interest Entities," and Note 19, "Share Capital," for further discussion of non-controlling interests in the Company.

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(n) Losses and Loss Expenses

Unpaid losses and loss expenses include reserves for reported unpaid losses and loss expenses and for losses incurred but not reported. The reserve for reported unpaid losses and loss expenses for the Company's property and casualty ("P&C") operations is established by management based on claims reported from insureds or amounts reported from ceding companies, and represent the estimated ultimate cost of events or conditions that have been reported to or specifically identified by the Company.

The reserve for losses incurred but not reported is estimated by management based on loss development patterns determined by reference to the Company's underwriting practices, the policy form, type of program and historical experience. The Company's actuaries employ a variety of generally accepted methodologies to determine estimated ultimate loss reserves, including the "Bornhuetter-Ferguson incurred loss method" and frequency and severity approaches.

Certain workers' compensation and certain U.K. bodily injury liabilities are considered fixed and determinable and are discounted.

Management believes that the reserves for unpaid losses and loss expenses are sufficient to cover losses that fall within coverages assumed by the Company. However, there can be no assurance that losses will not exceed the Company's total reserves. The methodology of estimating loss reserves is periodically reviewed to ensure that the assumptions made continue to be appropriate and any adjustments resulting from such reviews are reflected in income in the year in which the adjustments are made.

(o) Deposit Liabilities

Contracts entered into by the Company that are not deemed to transfer significant underwriting risk and/or timing risk are accounted for as deposits, whereby liabilities are initially recorded at an amount equal to the assets received. The Company uses a portfolio rate of return of equivalent duration to the liabilities in determining risk transfer. An initial accretion rate is established based on actuarial estimates whereby the deposit liability is increased to the estimated amount payable over the term of the contract.

The deposit accretion rate is the rate of return required to fund expected future payment obligations (this is equivalent to the "best estimate" of future cash flows), which are determined actuarially based upon the nature of the underlying indemnifiable losses. Accretion of the liability is recorded as interest expense.

The Company periodically reassesses the estimated ultimate liability. Any changes to this liability are reflected as adjustments to interest expense to reflect the cumulative effect of the period the contract has been in force, and by an adjustment to the future accretion rate of the liability over the remaining estimated contract term.

(p) Future Policy Benefit Reserves

The Company estimates the present value of future policy benefits related to long duration contracts using assumptions for investment yields, mortality, and expenses, including a provision for adverse deviation.

The assumptions used to determine future policy benefit reserves are best estimate assumptions that are determined at the inception of the contracts and are locked-in throughout the life of the contract unless a premium deficiency develops. As the experience on the contracts emerges, the assumptions are reviewed. If such review would produce reserves in excess of those currently held, then the locked-in assumptions will be revised and a claim and policy benefit is recognized at that time. The Company includes the cost of reinsurance in its premium deficiency considerations.

Certain life insurance and annuity contracts provide the holder with a guarantee that the benefit received upon death will be no less than a minimum prescribed amount. The contracts are accounted for in accordance with GAAP, which requires that the best estimate of future experience be combined with actual experience to determine the benefit ratio used to calculate the policy benefit reserve.

(q) Income Taxes

The Company accounts for income taxes under the asset and liability method, which requires the recognition of deferred tax assets and liabilities for the expected future tax consequences of events that have been included in the financial statements. Under this method, we determine deferred tax assets and liabilities on the basis of the differences between the financial statement and tax bases of assets and liabilities by using enacted tax rates in effect for the year in which the differences are expected to reverse. The effect of a change in tax rates on deferred tax assets and liabilities is recognized in income in the period that includes the enactment date.

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The Company recognizes deferred tax assets to the extent that we believe that these assets are more likely than not to be realized. In making such a determination, we consider all available positive and negative evidence, including future reversals of existing temporary differences, projected future taxable income, tax planning strategies, and taxable income in prior years that may be available for carryback. A valuation allowance will be established for any portion of a deferred tax asset that we believe will not be realized, and the impact will be included in the provision for income taxes.

The Company records uncertain tax positions in accordance with ASC 740 on the basis of a two- step process in which (1) we determine whether it is more likely than not that the tax positions will be sustained on the basis of the technical merits of the position and (2) for those tax positions that meet the more likely than not recognition threshold, we recognize the largest amount of tax benefit that is more than 50 percent likely to be realized upon settlement with the tax authority.

The Company recognizes interest and penalties on underpaid tax as a component of income tax expense.

The Company's investment income is allocated to applicable branch operations and is taxable in certain jurisdictions. The method of allocating this income may be different for tax reporting as compared to GAAP. The Company records the tax effects of this allocation entirely through operations.

(r) Recent Accounting Pronouncements

Recently Issued Accounting Standards Adopted in 2018

ASU 2016-01, Financial Instruments: Recognition and Measurement of Financial Assets and Financial Liabilities

In January 2016, the FASB issued an accounting standards update concerning the accounting for financial instruments. The guidance retains the basic existing framework for accounting for financial instruments under GAAP, while achieving limited convergence with IFRS in this area. The guidance: (1) requires equity investments (except consolidated entities and those accounted for under the equity method of accounting) to be measured at fair value with changes in fair value recognized in net income; (2) simplifies the impairment assessment of equity investments without readily determinable fair values by requiring a qualitative assessment to identify impairment; (3) eliminates the requirement to disclose the fair value of financial instruments measured at amortized cost for non-public business entities; (4) eliminates the requirement to disclose the method (s) and significant assumptions used to estimate the fair value of financial instruments measured at amortized cost on the balance sheet; (5) requires public business entities to use the exit price notion when measuring the fair value of financial instruments for disclosure purposes; (6) requires an entity to present separately in other comprehensive income the portion of the total change in the fair value of a liability resulting from a change in the instrument-specific credit risk when the entity has elected to measure the liability at fair value in accordance with the fair value option for financial statements; (7) requires separate presentation of financial assets and financial liabilities by measurement category and form of asset in the financial statements; and (8) clarifies that an entity should evaluate the need for a valuation allowance on a deferred tax asset related to AFS securities in combination with the entity's other deferred tax assets. For public business entities, the guidance was effective for fiscal years beginning after December 15, 2017, including interim periods within those fiscal years. For all other entities, the amendments are effective for fiscal years beginning after December 15, 2018, and interim periods within fiscal years beginning after December 15, 2019. The Company adopted this guidance as of January 1, 2018 by means of a cumulative effect adjustment to the balance sheet at this date, as required by the amendments. As of that adoption date, accumulated unrealized gains and losses relating to investments in equity securities and certain of our other investments, net of tax, which were included in accumulated other comprehensive income, will be classified to retained earnings. At January 1, 2018, the amount subject to reclassification is a net unrealized gain of \$233.8 million, less deferred tax of \$11.9 million. Adoption of this update will have an effect on results of operations going forward, as mark-to-market movements on equity securities will prospectively impact net income; however, it will not have a material impact on the Company's cash flows.

ASU 2016-15, Statement of Cash Flows: Classification of Certain Cash Receipts and Cash Payments

In August 2016, the FASB issued an accounting standards update concerning the presentation and classification of certain cash receipts and cash payments in the statement of cash flows. The amendments address areas where GAAP is unclear and diversity in practice exists. The following areas are covered in this update: (1) debt prepayment or debt extinguishment costs; (2) settlement of zero-coupon debt instruments; (3) contingent consideration payments following a business combination; (4) proceeds from settlement of insurance claims; (5) proceeds from settlement of corporate-owned life insurance policies; (6) distributions received from equity method investees; (7) beneficial interests in securitization transactions; and (8) separation of cash flows. For public business entities, the guidance was effective for fiscal years beginning after December 15, 2017, and interim periods within those fiscal years. For all other entities, the amendments are effective for fiscal years beginning after December 15, 2018, and interim periods within fiscal years beginning after December 15, 2019. The Company adopted this guidance as of January 1, 2018 using the retrospective transition method as required by the standard. Additionally, as required,

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the Company made a formal accounting policy election regarding classification of distributions received from equity method investees, choosing to use the Nature of Distribution approach. This approach is consistent with historical practice utilized by the Company in classifying these distributions. This guidance did not have an impact on the Company's financial position or results of operations.

ASU 2016-16, Income Taxes: Intra-Entity Transfers of Assets Other Than Inventory

In October 2016, the FASB issued an accounting standards update concerning the tax effects of intra-entity asset transfers within a group. The guidance requires an entity to reflect the income tax consequences of an intra-entity transfer of an asset other than inventory when that transfer occurs. This is a departure from previous GAAP, which prohibited recognition of tax on such transfers until the asset had been sold to an external party or otherwise realized. For public business enterprises, the guidance was effective for fiscal years beginning after December 15, 2017, and interim periods within those fiscal years. For all other entities, the amendments are effective for fiscal years beginning after December 15, 2018, and interim reporting periods within fiscal years beginning after December 15, 2019. The Company adopted this guidance as of January 1, 2018. This guidance did not have a material impact on the Company's financial condition, results of operations, or cash flows.

ASU 2016-18, Statement of Cash Flows: Restricted Cash

In November 2016, the FASB issued an accounting standards update concerning the presentation of restricted cash within the statement of cash flows. Previous GAAP did not provide guidance on the presentation or classification of movements in restricted cash. The guidance requires that a statement of cash flows explain the change during the period in the total of cash, cash equivalents, and amounts generally described as restricted cash or restricted cash equivalents. Therefore, amounts generally described as restricted cash and restricted cash equivalents should be included as a component of cash and cash equivalents when reconciling beginning-of-period and end-of-period totals within the statement of cash flows. For public business entities, the guidance was effective for fiscal years beginning after December 15, 2017, and interim periods within those fiscal years. For all other entities, the amendments are effective for fiscal years beginning after December 15, 2018, and interim periods within fiscal years beginning after December 15, 2019. The Company adopted this guidance as of January 1, 2018 using the retrospective transition method, as required by the amendments. As result, the net amount of the change in the restricted cash balances during each reporting period is no longer presented as a discrete line item "Change in restricted cash" within investing cash flows for each applicable period, as was previously reported in the Company's Consolidated Statements of Cash Flows. This guidance did not have an impact on the Company's financial position or results of operations.

ASU 2017-07, Compensation-Retirement Benefits: Improving the Presentation of Net Periodic Pension Cost and Net Periodic Postretirement Benefit Cost

In March 2017, the FASB issued an accounting standards update concerning the presentation of costs related to defined benefit pension plans and similar plans. The amendments in this ASU principally require that an employer report the service cost component in the same line item or items as other compensation costs arising from services rendered by relevant employees during the period. The other components of net benefit cost are required to be presented in the income statement separately from the service cost component and outside a subtotal of income from operations, if one is presented. If a separate line item or items are used to present the other components of net benefit cost, that line item or items must be appropriately described. If a separate line item or items are not used, the line item or items used in the income statement to present the other components of net benefit cost must be disclosed. For public business entities, the guidance was effective for fiscal years beginning after December 15, 2017, including interim periods within those annual periods. For all other entities, the amendments are effective for fiscal years beginning after December 15, 2018, and interim periods within fiscal years beginning after December 15, 2019. The amendments relating to presentation in the income statement are required to be applied retrospectively. Disclosures of the nature of and reason for the change in accounting principle are required in the first interim and annual periods of adoption. The Company adopted this disclosure-related only guidance as of January 1, 2018. This guidance did not have an impact on the Company's financial position, results of operations or cash flows.

ASU 2018-02, Reclassification of Certain Tax Effects from Accumulated Other Comprehensive Income

In February 2018, the FASB issued an accounting standards update concerning the stranded tax effects resulting from tax rate changes legislated by the U.S. Tax Cuts and Jobs Act. Under GAAP, the effects of all changes in tax rates on deferred tax balances are reflected in income, even if the tax balances relate to items of accumulated other comprehensive income. This update permits companies to make an election to reclassify from accumulated other comprehensive income to retained earnings such stranded tax effects resulting from the U.S. Tax Cuts and Jobs Act. It also requires certain new disclosures. The amendments were effective for all entities for fiscal years beginning after December 15, 2018, and interim periods within those fiscal years, but for public business entities early adoption was permitted. The Company early-adopted this guidance by making the permitted election in the first quarter of 2018, recognizing a reclassification of \$3.9 million from accumulated other comprehensive income to retained earnings in the period of adoption, as permitted by the guidance. In general, in accounting

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for the release of income tax effects from accumulated other comprehensive income, the Company applies the individual item approach with respect to available-for-sale debt securities, and the portfolio approach with respect to pension, postretirement benefit plan obligations and currency translation matters. This guidance did not have an impact on the Company's results of operations or cash flows.

ASU 2018-05, Income Taxes: Amendments to SEC Paragraphs Pursuant to SEC Staff Accounting Bulletin No. 118

In March 2018, the FASB issued an accounting standards update concerning the income tax accounting implications of the U.S. Tax Cuts and Jobs Act. The update codifies SEC-related material within the Accounting Standards Codification pursuant to the issuance of SEC Staff Accounting Bulletin No. 118 ('SAB 118'). SAB 118 provided clarifying guidance for how a public business entity should address the situation in which the accounting for certain income tax effects of the U.S. Tax Cuts and Jobs Act was not completed by the time financial statements were issued for the reporting period in which the legislation was enacted. In such circumstances, the incomplete effects are reported when a reasonable estimate can be determined, based on that estimate. Provisional amounts can be updated during a measurement period not exceeding one year. Disclosures concerning any incomplete effects and adjustments are required. The Company has completed its analysis of the U.S. Tax Cuts and Jobs Act based on currently available technical guidance. The Company will continue to assess further guidance issued by the Internal Revenue Service ("IRS") and record the impact of such guidance, if any, in the year issued.

Recently Issued Accounting Standards Not Yet Adopted

ASU 2016-02, Leases; ASU 2018-11, Leases: Targeted Improvements; and ASU 2018-20, Leases: Narrow-Scope Improvements for Lessors

In February 2016, the FASB issued an accounting standards update concerning the accounting for leases. The most significant change to existing GAAP created by this standard will be the lessee recognition of lease assets and lease liabilities for those leases for operating leases, similar to the current accounting for financing leases. The core principle of this guidance stipulates that for all leases a lessee should recognize in the statement of financial position, both a liability for contractual payments due under the lease (initially measured at the present value of the lease payments) and an asset representing its right to use the underlying leased asset for the lease term ("right-of-use asset"). For operating leases, a single net lease cost should be recognized over the lease term, generally on a straight-line basis, and all cash payments related to the lease should be classified within operating activities in the statement of cash flows. However, if the operating lease has a term of 12 months or less, a lessee is permitted to make an accounting policy election - by class of underlying asset - not to recognize the asset or liability but to recognize lease expense on a straight-line basis over the lease term, similar to the current accounting for operating leases. For financing leases, interest on the lease liability should be recognized separately from the amortization of the right-of-use asset in the statement of comprehensive income. Additionally, as regards the presentation of financing lease activities within the statement of cash flows, repayments of the principal portion of the lease liability should be classified within financing activities, while payments of interest on the lease liability should be classified within operating activities. For public business entities, the guidance is effective for fiscal years beginning after December 15, 2018, including interim periods within those fiscal years. For all other entities, the amendments are effective for fiscal years beginning after December 15, 2019, and interim periods within fiscal years beginning after December 15, 2020. Early adoption is permitted. Under amendments as presented in this guidance, transition, lessees and lessors are required to recognize and measure leases at the beginning of the earliest period presented using a modified retrospective approach, which includes a number of optional practical expedients that entities may elect to apply. An entity that elects to apply the practical expedients will substantively continue to account for leases that commence before the effective date in accordance with existing GAAP, except that a right-of-use asset and a lease liability must be recorded for all operating leases at each reporting date based on the present value of the remaining minimum rental payments that were previously tracked and disclosed.

In July 2018, the FASB issued a further accounting standards update that aims to reduce costs and ease implementation of the original leases standard (ASU 2016-02). The amendments in this update: a) provide a practical expedient that allows lessors to avoid separating lease and non-lease components of a contract in certain cases, and instead account for those items as a single component, and b) add a new transition option for the provisions of ASU 2016-02. The practical expedient allows lessors to make a policy election to not separate non-lease components from the associated lease component - similar to the expedient provided for lessees - provided that the timing and pattern of transfers for the lease and non-lease components are similar and the lease component would be an operating lease if accounted for separately. The new additional transition option allows entities to adopt the provisions of ASU 2016-02 by means of a cumulative-effect adjustment to the opening balance of retained earnings in the period of adoption. In this situation any comparative periods prior to adoption would continue to be presented in accordance with existing US GAAP Topic 840, including associated disclosure requirements. The transition option is effective as part of the adoption of ASU 2016-02.

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In December 2018, the FASB issued another accounting standards update that further aims to clarify and ease implementation of the original leases standard (ASU 2016-02), specifically for lessors in relation to three areas: a) sales taxes and other taxes collected from lessees, b) variable costs incurred by lessor as the owner of an underlying asset, and c) recognition of variable payments for contracts with lease and non-lease components. The first amendment permits lessors to make a policy election to not evaluate whether such taxes are lessor or lessee costs and instead automatically consider them lessee costs; thus lessors making the election would exclude from lease considerations the collection taxes from lessees. The second amendment provides a clarification that lessors should exclude from contract revenue any lessor costs paid by lessees directly to third parties on behalf of the lessor, unless such costs are reimbursed to them by the lessee. The third amendment provides a clarification that lessor variable payment amounts relating to both lease and non-lease component should be recognized in profit or loss in the period in which occurs changes in facts and circumstances on which the variable payment is based. These amendments are effective immediately upon adoption of ASU 2016-02.

The Company is currently evaluating the impact of these proposed standards, but expects that they will have an effect on the Company's financial condition as new assets and liabilities related to operating leases are likely to be recorded as a result of adoption. See Note 18(d), "Commitments and Contingencies - Properties," for further information regarding the Company's lease commitments. The Company does not expect this new guidance to have a material impact on the Company's results of operations or cash flows.

ASU 2016-13, Financial Instruments-Credit Losses: Measurement of Credit Loss on Financial Instruments

In June 2016, the FASB issued an accounting standards update concerning the measurement of credit losses on financial instruments. The amendments in this update affect the measurement of various financial assets, including loans, debt securities, trade receivables, reinsurance receivables and net investments in leases. For assets measured at amortized cost, the amendments in this update require presentation at the net amount expected to be collected. This results in an allowance for all expected credit losses over an asset's entire life, with no threshold for recognition. This allowance should be maintained in a valuation account that is deducted from the amortized cost of the asset to result in the net amount for presentation purposes. Credit loss allowances for newly created financial assets and subsequent movements in these allowances will be recognized in the income statement, except for the initial credit losses on assets that are purchased in an already credit-impaired state, which will be added to the purchase price of such assets. For AFS debt securities, credit losses should also be recorded through an allowance. The allowance for credit losses is restricted to the difference between the fair value and amortized cost of the relevant asset. For public business entities, the guidance is effective for fiscal years beginning after December 15, 2019, including interim periods within those fiscal years. For all other entities, the amendments are effective for fiscal years beginning after December 15, 2021, and interim periods within those fiscal years.. Early adoption is permitted. The guidance should be adopted in a modified-retrospective approach, by means of a cumulative-effect adjustment to retained earnings at the beginning of the first reporting period in which the guidance is effective. For securities with an existing other-than-temporary impairment or securities previously acquired with deteriorated quality the relevant provisions should be adopted prospectively. The Company is currently evaluating this guidance and expects that it will have an impact on the Company's financial position and results of operations, but will not have a material impact on the Company's cash flows.

ASU 2017-12, Derivatives and Hedging: Targeted Improvements to Accounting for Hedging Activities

In August 2017, the FASB issued an accounting standards update concerning hedge accounting. This update's targeted amendments to existing hedge accounting requirements better align an entity's risk management activities and financial reporting for hedging relationships via updates to both designation and measurement guidance for qualifying hedges, and the presentation of those results. Regarding designation and measurement, the amendments permit broader use of identified risk components in certain cash flow and fair value hedging relationships involving nonfinancial or interest rate risk. The range of permissible fair value hedges of interest rate risk was also increased. Regarding presentation, the amendments aim to align the recognition of the effects of hedging instruments with hedged items in the financial statements in order to increase the understandability of an entity's intended hedging strategies. As a result, "hedge ineffectiveness" will no longer be separately measured and reported. The entire change in the fair value of a qualifying hedging instrument included in the assessment of hedge effectiveness is either presented in the same income statement line as the hedged item for fair value hedges, or in other comprehensive income for cash flow and net investment hedges. However, in limited situations, certain components of a hedging instrument's change in fair value may be excluded from the assessment of hedge effectiveness.

The update also amends existing external disclosure requirements, while easing internal documentation requirements surrounding hedge effectiveness testing. In particular, the initial quantitative effectiveness test may now be prepared within three months of hedge designation, and subsequent tests may be performed on a qualitative basis in certain cases. . For public business entities, the guidance is effective for fiscal years beginning after December 15, 2018, including interim periods within those fiscal years. For all other entities, the amendments are effective for fiscal years beginning after December 15, 2019, and

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interim periods within fiscal years beginning after December 15, 2020. All transition requirements should be applied to hedging relationships existing on the date of adoption. The effect of adoption should be reflected as of the beginning of the fiscal year of adoption. Early adoption is permitted in any interim period after issuance of the update. The Company is currently evaluating the impact of this guidance.

ASU 2018-12, Financial Services-Insurance: Targeted Improvements to the Accounting for Long-Duration Contracts

In August 2018, the FASB issued an accounting standards update aimed to make targeted improvements to the existing recognition, measurement, presentation, and disclosure requirements for long-duration insurance contracts. The following principal areas are addressed in this update: (1) assumptions used to measure future policy benefits, should be updated at least annually, with re-measurement gains and losses (other than changes in the discount rate) reflected in income; while assumptions regarding the discount rate should be updated each reporting period based on observable fixed-income-market inputs, with re-measurement gains and losses reflected in other comprehensive income; (2) market risk benefits associated with deposit contracts should be measured at fair value; except for the portion attributable to changes in instrument-specific credit risk which should be reflected in other comprehensive income; (3) deferred acquisition costs should be amortized on a constant level basis over the expected terms of the related contract; and written off for unexpected contract terminations rather than being subject to impairment testing and (4) existing disclosure requirements will be expanded to include disaggregated rollforwards of key balance, and to provide information regarding significant inputs and methodologies used in measurements. For public business entities, the guidance is effective for fiscal years, and interim periods within those fiscal years, beginning after December 15, 2020. For all other entities, the amendments are effective for fiscal years beginning after December 15, 2021, and interim periods within fiscal years beginning after December 15, 2022. Early adoption is permitted. The Company is currently evaluating the impact of this guidance.

ASU 2018-13, Fair Value Measurement: Disclosure Framework - Changes to the Disclosure Requirements for Fair Value Measurement

In August 2018, as part of its disclosure framework project, the FASB issued an accounting standards intended to improve the effectiveness disclosure requirements related to fair value measurements. The amendments remove, modify and add disclosures in this area for both public and non-public business entities. Entity requirements *removed* include: a) amount of transfers between Level 1 and Level 2 of the fair value hierarchy and the reasons therefore, b) policy for the timing of transfers between levels, c) valuation process for Level 3 measurements, and d) for non-public entities only, period changes in unrealized gains and losses included in earnings for Level 3 measurements still held. Entity requirements *modified* include: a) for investments held at calculated net asset value, the timing of liquidation of an investee's assets and the date when restrictions from redemption lapse under certain circumstances, b) uncertainties in measurement as of the reporting date, and c) for non-public entities only, transfers, purchases, and issues in and out of Level 3 assets and liabilities may be provided in lieu of a full Level 3 rollforward. Entity requirements *added* include: a) for public entities only, period changes in unrealized gains and losses included in other comprehensive income for recurring Level 3 fair measurements still held, and b) for public entities only, range and weighted average of significant unobservable inputs used to develop Level 3 measurements. For all entities, the guidance is effective for fiscal years, and interim periods within those fiscal years, beginning after December 15, 2019. The amendments on changes in unrealized gains and losses, the range and weighted average of significant unobservable inputs, and measurement uncertainties should be applied prospectively for the most recent interim or annual period presented in the year of adoption. All other amendments should be applied retrospectively to all periods presented. Early adoption is permitted. As this guidance is financial statement disclosure-related only, the Company expects that it will have an impact on its financial statement note disclosures, but not impact its financial position, results of operations, or cash flows.

ASU 2018-14, Compensation-Retirement Benefits: Disclosure Framework - Changes to the Disclosure Requirements for Defined Benefit Plans

In August 2018, as part of its disclosure framework project, the FASB issued an accounting standards intended to improve the effectiveness disclosure requirements related to defined benefit pension plans. The amendments remove and add disclosures in this area for both public and non-public entities. Entity requirements *removed* include: a) amounts in accumulated other comprehensive income expected to be recognized as components of net periodic benefit cost over the next fiscal year, b) amounts and timing of plan assets expected to be returned to the employer, c) disclosures related to Japanese welfare pension law, d) related party disclosures of benefits covered by insurance and annuity contracts, and other significant transactions. e) for nonpublic entities only, the opening to closing reconciliation of fair value hierarchy Level 3 plan assets (however, transfers, purchases and issues in and out of Level 3 plan must be disclosed separately, and e) for public entities, effects of a one-percentage-point change in assumed health care cost trend rates on the i) aggregate of the service and interest cost components of net periodic benefit costs, and the ii) benefit obligation for postretirement health care benefits. Entity requirements *added*

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included: a) the weighted-average interest crediting rates for cash balance plans and other plans with promised interest crediting rates, b) reasons for significant gains and losses related to changes in the plan benefit obligation. For public business entities the guidance is effective for fiscal years ending after December 15, 2020. For all other entities the guidance is effective for fiscal years ending after December 15, 2021. An entity should apply the amendments in on a retrospective basis to all periods presented. Early adoption is permitted for all entities. As this guidance is financial statement disclosure-related only, the Company expects that it will have an impact on its financial statement note disclosures, but not impact its financial position, results of operations, or cash flows.

Update 2018-17, Consolidation: Targeted Improvements to Related Party Guidance for Variable Interest Entities

In October 2017, the FASB issued an accounting standards update concerning related party guidance for variable interest entities (VIE's). This update's targeted amendments are intended to improve a) VIE guidance to non-public companies under common control and b) consideration of indirect interests held through related parties under common control when determining whether fees paid to decision makers and service providers are variable interests. Under the first portion of the guidance, a private non-public reporting entity may elect not to apply VIE guidance to legal entities under common control if both the parent and the legal entity being evaluated for consolidation are non-public entities. The election would apply to all such current and future legal entities under common control. Additional detailed disclosures about the involvement with and exposure to the legal entity under common control would also be required. Under the second portion of the guidance, indirect interests held through related parties in common control arrangements should be considered on a proportional basis for determining whether fees paid to decision makers and service providers are variable interests. This is consistent with how indirect interests held through related parties under common control are considered for determining whether a reporting entity must consolidate a VIE. For public business entities the guidance is effective for fiscal years ending after December 15, 2019, and interim periods within those fiscal years. For all other entities the guidance is effective for fiscal years ending after December 15, 2020 and interim periods within fiscal years beginning after December 15, 2021. All entities are required to apply the amendments retrospectively with a cumulative-effect adjustment to retained earnings at the beginning of the earliest period presented. Early adoption is permitted. for all entities. The Company is currently evaluating the impact of this guidance.

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3. Acquisition by AXA

(a) Background

On September 12, 2018, XL Group Ltd (the “XL”) completed its previously announced merger with Camelot Holdings Ltd. (“Merger Sub”), a wholly owned subsidiary of AXA. Pursuant to the Agreement and Plan of Merger, dated as of March 5, 2018, by and among XL, Merger Sub and AXA (the “Merger Agreement”), and the statutory merger agreement required in accordance with Section 105 of the Bermuda Companies Act 1981, as amended (the “Companies Act”), by and among XL, Merger Sub and AXA, dated as of September 12, 2018, Merger Sub merged with and into XL in accordance with the Companies Act (the “Merger”), with XL continuing as the surviving corporation and as a direct wholly-owned subsidiary of AXA. Pursuant to the Merger Agreement, each issued and outstanding common share, par value \$0.01 per common share, of XL (each, a “Company Share”) (other than any Company Shares that were owned (i) by XL as treasury shares, (ii) by wholly owned subsidiaries of XL or (iii) by AXA, Merger Sub or by wholly owned subsidiaries of AXA (with certain exceptions)), including each outstanding restricted Company Share (unless otherwise agreed between AXA and the holder of the award), were automatically canceled and converted into the right to receive \$57.60 in cash, without interest and subject to any applicable tax withholdings. The completion of the transaction followed the fulfillment of customary closing conditions, including approval by XL’s shareholders and obtainment of all necessary regulatory approvals.

(b) Transaction

The Company incurred certain costs related to the negotiation, preparation, execution and implementation of the AXA Merger. The Company has recorded \$250.9 million of these costs for the year ended December 31, 2018.

As part of the ongoing integration into AXA’s operations, the Company incurs costs associated with restructuring the systems, processes and workforce. These costs include such items as severance, retention, facilities and other costs. The Company separately identifies such costs as noted below:

<i>(U.S. dollars in thousands)</i>	Compensation Expenses	Other Expenses	Total
Costs incurred in 2018	38,667	17,257	55,924
2018 payments	12,796	9,394	22,190
Liabilities at December 31, 2018	\$ 25,871	\$ 7,863	\$ 33,734

4. Investments

(a) Fixed Maturities, Short-Term Investments and Equity Securities

Amortized Cost and Fair Value Summary

The cost (amortized cost for fixed maturities and short-term investments), fair value, gross unrealized gains and gross unrealized (losses), including non-credit related OTTI recorded in AOCI of the Company’s AFS investments at December 31, 2018 and 2017 were as follows:

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December 31, 2018 <i>(U.S. dollars in thousands)</i>	Included in AOCI			Fair Value	Non-credit Related OTTI (1)
	Cost or Amortized Cost	Gross Unrealized Gains	Gross Unrealized Losses		
Fixed maturities - AFS - Excluding Life Funds Withheld Assets					
U.S. Government and Government-Related/Supported ("U.S. Government")	\$ 2,498,314	\$ 14,740	\$ (26,163)	\$ 2,486,891	\$ —
U.S. States, municipalities and political subdivisions	1,361,688	32,357	(2,471)	1,391,574	—
Non-U.S. Sovereign Government, Provincial, Supranational and Government-Related/Supported ("Non-U.S. Government")	4,208,986	45,588	(47,117)	4,207,457	—
Corporate	11,429,290	69,740	(232,682)	11,266,348	—
Residential mortgage-backed securities ("RMBS")	5,381,509	34,241	(87,577)	5,328,173	(3,612)
Commercial mortgage-backed securities ("CMBS")	1,377,350	2,955	(41,142)	1,339,163	(220)
Other asset-backed securities	1,449,657	23,343	(9,711)	1,463,289	(3,783)
Total fixed maturities - AFS - Excluding Life Funds Withheld Assets	\$ 27,706,794	\$ 222,964	\$ (446,863)	\$ 27,482,895	\$ (7,615)
Total short-term investments - Excluding Life Funds Withheld Assets	580,390	593	(2,869)	578,114	—
Total investments - AFS - Excluding Life Funds Withheld Assets	\$ 28,287,184	\$ 223,557	\$ (449,732)	\$ 28,061,009	\$ (7,615)
Fixed maturities - AFS - Life Funds Withheld Assets					
U.S. Government	\$ 8,509	\$ 1,952	\$ —	\$ 10,461	\$ —
Non-U.S. Governments	296,607	100,141	—	396,748	—
Corporate	612,867	117,712	—	730,579	—
RMBS	393	72	—	465	—
CMBS	88,990	19,856	—	108,846	—
Other asset-backed securities	92,056	17,323	—	109,379	—
Total fixed maturities - AFS - Life Funds Withheld Assets	\$ 1,099,422	\$ 257,056	\$ —	\$ 1,356,478	\$ —
Total fixed maturities - AFS	\$ 29,386,606	\$ 480,613	\$ (449,732)	\$ 29,417,487	\$ (7,615)

(1) Represents the non-credit component of OTTI losses, adjusted for subsequent sales of securities. It does not include the change in fair value subsequent to the impairment measurement date.

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December 31, 2017 <i>(U.S. dollars in thousands)</i>	Included in AOCI			Fair Value	Non-credit Related OTTI (1)
	Cost or Amortized Cost	Gross Unrealized Gains	Gross Unrealized Losses		
Fixed maturities - AFS - Excluding Life Funds Withheld Assets					
U.S. Government	\$ 4,264,563	\$ 37,244	\$ (33,320)	\$ 4,268,486	\$ —
U.S. States, municipalities and political subdivisions	1,977,920	87,718	(998)	2,064,640	—
Non-U.S. Governments	5,133,921	114,918	(48,863)	5,199,976	—
Corporate	9,502,522	203,210	(56,824)	9,648,908	(18)
RMBS	4,464,443	40,623	(33,785)	4,471,281	(4,675)
CMBS	1,245,747	7,336	(9,951)	1,243,132	(280)
Other asset-backed securities	1,468,496	30,341	(6,082)	1,492,755	(4,940)
Total fixed maturities - AFS - Excluding Life Funds Withheld Assets	\$ 28,057,612	\$ 521,390	\$ (189,823)	\$ 28,389,178	\$ (9,913)
Total short-term investments - Excluding Life Funds Withheld Assets	801,210	718	(1,901)	800,027	—
Total equity securities - Excluding Life Funds Withheld Assets	638,455	80,679	(5,167)	713,967	—
Total investments - AFS - Excluding Life Funds Withheld Assets	\$ 29,497,277	\$ 602,787	\$ (196,891)	\$ 29,903,172	\$ (9,913)
Fixed maturities - Life Funds Withheld Assets					
U.S. Government	\$ 9,050	\$ 2,266	\$ —	\$ 11,316	\$ —
Non-U.S. Governments	433,664	150,870	—	584,534	—
Corporate	909,589	227,624	—	1,137,213	—
RMBS	448	67	—	515	—
CMBS	97,356	24,916	—	122,272	—
Other asset-backed securities	137,944	33,318	—	171,262	—
Total fixed maturities - AFS - Life Funds Withheld Assets	\$ 1,588,051	\$ 439,061	\$ —	\$ 2,027,112	\$ —
Total investments - AFS	\$ 31,085,328	\$ 1,041,848	\$ (196,891)	\$ 31,930,284	\$ (9,913)

(1) Represents the non-credit component of OTTI losses, adjusted for subsequent sales of securities. It does not include the change in fair value subsequent to the impairment measurement date.

The cost (amortized cost for fixed maturities and short-term investments) and fair value of the Company's Trading investments at December 31, 2018 and 2017 were as follows:

December 31, 2018 <i>(U.S. dollars in thousands)</i>	Amortized Cost	Fair Value
Fixed maturities - Trading - Life Funds Withheld Assets		
U.S. Government	\$ 8,338	\$ 8,546
Non-U.S. Governments	463,032	474,789
Corporate	1,467,382	1,456,810
RMBS	929	883
CMBS	6,039	5,933
Other asset-backed securities	50,080	49,468
Total fixed maturities - Trading - Life Funds Withheld Assets	\$ 1,995,800	\$ 1,996,429
Total short-term investments - Trading - Life Funds Withheld Assets	\$ 17,043	\$ 17,032
Total investments - Trading - Life Funds Withheld Assets	\$ 2,012,843	\$ 2,013,461

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December 31, 2017 (U.S. dollars in thousands)	Amortized Cost	Fair Value
Fixed maturities - Trading - Life Funds Withheld Assets		
U.S. Government	\$ 11,640	\$ 11,042
U.S. States, municipalities and political subdivisions	\$ 30	\$ 31
Non-U.S. Governments	473,849	485,171
Corporate	1,412,846	1,460,292
RMBS	1,020	932
CMBS	7,345	7,580
Other asset-backed securities	39,771	41,337
Total fixed maturities - Trading - Life Funds Withheld Assets	1,946,501	2,006,385
Total short-term investments - Trading - Life Funds Withheld Assets	14,969	14,965
Total investments - Trading - Life Funds Withheld Assets	1,961,470	2,021,350

At December 31, 2018 and 2017, approximately 3.4% and 3.4%, respectively, of the Company's fixed income investment portfolio at fair value, excluding cash and Life Funds Withheld Assets, was invested in securities that were below investment grade or not rated. Approximately 8.4% and 4.0% of the gross unrealized losses in the Company's fixed income investment portfolio, excluding cash and Life Funds Withheld Assets, at December 31, 2018 and 2017, respectively, related to securities that were below investment grade or not rated.

Contractual Maturities Summary

The contractual maturities of AFS and Trading fixed income securities at December 31, 2018 and 2017 are shown below. Actual maturities may differ from contractual maturities because borrowers may have the right to call or prepay obligations with or without call or prepayment penalties.

(U.S. dollars in thousands)	December 31, 2018		December 31, 2017	
	Amortized Cost	Fair Value	Amortized Cost	Fair Value
Fixed maturities - AFS - Excluding Life Funds Withheld Assets				
Due less than one year	\$ 1,323,868	\$ 1,314,026	\$ 1,495,135	\$ 1,502,699
Due after 1 through 5 years	11,982,750	11,914,255	12,091,740	12,157,474
Due after 5 through 10 years	5,444,470	5,362,317	6,241,029	6,334,149
Due after 10 years	747,190	761,672	1,051,022	1,187,688
	\$ 19,498,278	\$ 19,352,270	\$ 20,878,926	\$ 21,182,010
RMBS	\$ 5,381,509	\$ 5,328,173	\$ 4,464,443	\$ 4,471,281
CMBS	1,377,350	1,339,163	1,245,747	1,243,132
Other asset-backed securities	1,449,657	1,463,289	1,468,496	1,492,755
Total mortgage and asset-backed securities	\$ 8,208,516	\$ 8,130,625	\$ 7,178,686	\$ 7,207,168
Total fixed maturities - AFS - Excluding Life Funds Withheld Assets	\$ 27,706,794	\$ 27,482,895	\$ 28,057,612	\$ 28,389,178

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	December 31, 2018		December 31, 2017	
	Amortized Cost	Fair Value	Amortized Cost	Fair Value
<i>(U.S. dollars in thousands)</i>				
Fixed maturities - AFS - Life Funds Withheld Assets				
Due less than one year	\$ 31,525	\$ 32,333	\$ 47,143	\$ 49,233
Due after 1 through 5 years	180,500	191,054	286,524	313,227
Due after 5 through 10 years	135,286	157,599	168,896	205,536
Due after 10 years	570,672	756,802	849,740	1,165,067
	\$ 917,983	\$ 1,137,788	\$ 1,352,303	\$ 1,733,063
RMBS	393	465	448	515
CMBS	88,990	108,846	97,356	122,272
Other asset-backed securities	92,056	109,379	137,944	171,262
Total mortgage and asset-backed securities	181,439	218,690	235,748	294,049
Total fixed maturities - AFS - Life Funds Withheld Assets	\$ 1,099,422	\$ 1,356,478	\$ 1,588,051	\$ 2,027,112
Total fixed maturities - AFS	\$ 28,806,216	\$ 28,839,373	\$ 29,645,663	\$ 30,416,290
Fixed maturities - Trading - Life Funds Withheld Assets				
Due less than one year	\$ 65,818	\$ 64,605	\$ 59,962	\$ 59,605
Due after 1 through 5 years	483,148	482,729	486,847	492,998
Due after 5 through 10 years	688,825	683,350	645,573	657,093
Due after 10 years	700,961	709,461	705,983	746,840
	\$ 1,938,752	\$ 1,940,145	\$ 1,898,365	\$ 1,956,536
RMBS	929	883	1,020	932
CMBS	6,039	5,933	7,345	7,580
Other asset-backed securities	50,080	49,468	39,771	41,337
Total mortgage and asset-backed securities	57,048	56,284	48,136	49,849
Total fixed maturities - Trading - Life Funds Withheld Assets	1,995,800	1,996,429	1,946,501	2,006,385

Pledged Assets

Certain of the Company's invested assets are pledged in support of insurance and reinsurance liabilities as well as to collateralize XLB's credit facilities. Such pledges are largely required by the Company's operating subsidiaries that are "non-admitted" under U.S. state insurance regulations, in order for the U.S. cedant to receive statutory credit for reinsurance. Also included in pledged assets are Life Funds Withheld Assets. Additionally, certain deposit liabilities and annuity contracts require the use of pledged assets. As of December 31, 2018 and 2017, the Company had \$16.8 billion and \$18.7 billion in pledged assets, respectively.

(b) Gross Unrealized Losses

The following is an analysis of how long the AFS securities at December 31, 2018 and 2017 had been in a continual unrealized loss position:

	Less than 12 months		Equal to or greater than 12 months	
	Fair Value	Gross Unrealized Losses	Fair Value	Gross Unrealized Losses
December 31, 2018				
<i>(U.S. dollars in thousands)</i>				
Fixed maturities and short-term investments - AFS				
U.S. Government	\$ 750,896	\$ (6,073)	\$ 1,125,461	\$ (22,822)
U.S. States, municipalities and political subdivisions	129,441	(386)	138,414	(2,085)
Non-U.S. Governments	770,302	(20,409)	1,137,653	(26,845)
Corporate	4,797,256	(95,121)	3,430,574	(137,561)
RMBS	588,867	(5,079)	2,635,534	(82,498)
CMBS	125,428	(1,637)	1,012,996	(39,505)
Other asset-backed securities	640,764	(6,719)	171,648	(2,992)
Total fixed maturities and short-term investments - AFS	\$ 7,802,954	\$ (135,424)	\$ 9,652,280	\$ (314,308)
Total equity securities	\$ 520,924	\$ (73,467)	\$ 16,594	\$ (24,441)

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December 31, 2017 <i>(U.S. dollars in thousands)</i>	Less than 12 months		Equal to or greater than 12 months	
	Fair Value	Gross Unrealized Losses	Fair Value	Gross Unrealized Losses
Fixed maturities and short-term investments - AFS				
U.S. Government	\$ 2,636,596	\$ (21,329)	\$ 703,645	\$ (13,860)
U.S. States, municipalities and political subdivisions	90,289	(632)	19,583	(366)
Non-U.S. Governments	1,527,323	(14,959)	559,044	(33,931)
Corporate	2,906,666	(25,541)	528,952	(31,284)
RMBS	2,181,376	(14,432)	850,234	(19,354)
CMBS	584,636	(4,214)	137,944	(5,737)
Other asset-backed securities	250,332	(1,528)	138,851	(4,557)
Total fixed maturities and short-term investments - AFS	\$ 10,177,218	\$ (82,635)	\$ 2,938,253	\$ (109,089)
Total equity securities	\$ 58,632	\$ (5,167)	\$ —	\$ —

The Company had gross unrealized losses totaling \$449.7 million on 4,356 securities out of a total of 6,798 held at December 31, 2018 in its AFS Excluding Life Funds Withheld Assets portfolio, which either it considers to be temporarily impaired or reflects non-credit losses on other-than-temporarily impaired assets. Individual security positions comprising this balance have been evaluated by management, in conjunction with the Company's investment managers, to determine the severity of these impairments and whether they should be considered other-than-temporary. Management believes it is more likely than not that the issuer will be able to fund sufficient principal and interest payments to support the current amortized cost.

(c) Net Investment Income

Net investment income for the years ended December 31, 2018 and 2017 is derived from the following sources:

<i>(U.S. dollars in thousands)</i>	2018	2017
Fixed maturities, short term investments and cash equivalents - Excluding Life Funds Withheld Assets	816,172	722,462
Fixed maturities, short term investments and cash equivalents - Life Funds Withheld Assets	115,203	127,047
Equity securities and other investments	38,024	37,495
Interest on funds withheld	20,982	15,167
Total gross investment income	990,381	902,171
Investment expenses	(79,268)	(86,840)
Total net investment income	911,113	815,331

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(d) Net Realized and Unrealized Gains (Losses)

The following represents an analysis of net realized gains (losses), the change in unrealized gains (losses) on trading securities and net realized and unrealized gains (losses) on investment related derivative instruments for the years ended December 31, 2018 and 2017:

<i>(U.S. dollars in thousands)</i>	2018	2017
Net realized gains (losses) on investments AFS - excluding Life Funds Withheld Assets: (1)		
Gross realized gains	\$ 164,325	\$ 287,301
Gross realized (losses)	(260,984)	(154,515)
OTTI on investments, net of amounts transferred to other comprehensive income	(11,454)	(13,345)
Total	<u>\$ (108,113)</u>	<u>\$ 119,441</u>
Net realized and change in net unrealized gains (losses) on equity securities - excluding Life Funds Withheld Assets:		
Gross realized gains	\$ 73,983	\$ —
Gross realized (losses)	(223)	—
Change in net unrealized gains (losses) on equity securities	\$ (160,607)	\$ —
Total	<u>\$ (86,847)</u>	<u>\$ —</u>
Net realized and change in net unrealized gains (losses) on other investments - excluding Life Funds Withheld Assets:		
Gross realized gains	\$ 45,256	\$ —
Gross realized (losses)	(21,569)	—
Change in net unrealized gains (losses) on other investments	\$ (7,026)	\$ —
Total	<u>\$ 16,661</u>	<u>\$ —</u>
Net realized gains (losses) on investments - Excluding Life Funds Withheld Assets	<u>\$ (178,299)</u>	<u>\$ 119,441</u>
Fixed maturities, short term investments, cash and cash equivalents - Life Funds Withheld Assets:		
Gross realized gains	\$ 128,120	\$ 120,922
Gross realized (losses)	(9,416)	(5,011)
Net unrealized gains (losses) on investments, Trading - Life Funds Withheld Assets	(58,218)	(14,805)
OTTI on investments, net of amounts transferred to other comprehensive income	(3,553)	(1,434)
Net realized gains (losses) on investments - Life Funds Withheld Assets	<u>\$ 56,933</u>	<u>\$ 99,672</u>
Total realized investment gains (losses)	<u>\$ (121,366)</u>	<u>\$ 219,113</u>

(1) AFS in the prior year includes net realized gains (losses) on equity securities and other investments. Due to the implementation of ASU 2016-01, as noted in Note 1(b), "Significant Accounting Policies - Recent Accounting Pronouncements," the movements on these investments are now shown separately.

The components of OTTI charges for the years ended December 31, 2018 and 2017, as defined in Note 2(g), "Significant Accounting Policies - Other-Than-Temporary Impairments of Available for Sale," for investments excluding Life Funds Withheld Assets were:

<i>(U.S. dollars in thousands)</i>	Year ended December 31,	
	2018	2017
Fixed maturities		
Credit loss impairments	\$ 3,220	\$ 573
Equities and other investments:		
Impaired more than 11 months or more than 50%	—	5,766
Currency Losses	8,234	7,006
OTTI on investments, net of amounts transferred to other comprehensive income	<u>\$ 11,454</u>	<u>\$ 13,345</u>

The following table sets forth the amount of credit loss impairments on fixed income securities, for which a portion of the OTTI loss was recognized in Other Comprehensive Income ("OCI"), held by the Company at December 31, 2018 and 2017 and the corresponding changes in such amounts.

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Credit Loss Impairments
(U.S. dollars in thousands)

	2018	2017
Opening balance at beginning of indicated period	\$ 18,671	\$ 29,056
Credit loss impairment recognized in the current period on securities not previously impaired	825	124
Credit loss impairments previously recognized on securities which matured, paid down, prepaid or were sold during the period	(1,404)	(9,713)
Additional credit loss impairments recognized in the current period on securities previously impaired	2,395	449
Accretion of credit loss impairments previously recognized due to an increase in cash flows expected to be collected	(1,729)	(1,245)
Closing balance at end of indicated period	<u>\$ 18,758</u>	<u>\$ 18,671</u>

5. Investments in Affiliates

Investments in affiliates comprised the following at December 31, 2018 and 2017.

(U.S. dollars in thousands)

	2018	2017
Investment affiliates	\$ 1,000,344	\$ 1,484,408
Operating affiliates	313,247	427,588
Total investment affiliates	<u>\$ 1,313,591</u>	<u>\$ 1,911,996</u>

See Note 2(c), "Significant Accounting Policies - Investments - Investments in Affiliates," for a description of the Company's accounting policy for these assets.

(a) Investment Affiliates

The Company has invested in certain hedge funds, including funds managed by certain of its investment manager affiliates, and in certain private equity investments and private credit funds (collectively, "private investments") that are accounted for under the equity method due to XLB's ownership percentages in the limited partnerships, LLCs or other similar investment vehicles that form the funds. Collectively, these investments in hedge funds and private investments are classified as "investment affiliates." At December 31, 2018 and 2017, the hedge fund portfolio, accounted for as hedge fund affiliates, employed four strategies: arbitrage, directional, event driven and multi-style.

The Company's equity investment in investment affiliates and equity in net income (loss) from such affiliates as well as certain summarized financial information of the investee on a combined basis (shown as "Combined Funds") are included below:

	XLB Investment			Combined Funds
	Carrying Value	Equity in Net Income (Loss) for the Year	Weighted Average Percentage Ownership	Total Net Assets (Estimated) (1)
<i>(U.S. dollars in thousands, except percentages)</i>				
Year Ended December 31, 2018				
Hedge funds (2)	\$ 601,232	\$ 34,244	6.2%	\$ 9,674,665
Private investments	399,112	29,896	8.1%	4,944,465
Total Investment Affiliates	<u>\$ 1,000,344</u>	<u>\$ 64,140</u>	<u>6.8%</u>	<u>\$ 14,619,130</u>
Year Ended December 31, 2017				
Hedge funds (2)	\$ 1,119,747	\$ 104,169	4.0%	\$ 27,785,552
Private investments	364,661	34,877	10.2%	3,657,118
Total Investment Affiliates	<u>\$ 1,484,408</u>	<u>\$ 139,046</u>	<u>5.1%</u>	<u>\$ 31,442,670</u>

- (1) Total estimated net assets are generally as at November 30 for hedge fund affiliates and September 30 for private investment fund affiliates.
(2) The Company accounts for its investment in certain funds using the equity method where the Company has significant influence over the related investment management company.

In general, the hedge funds in which the Company is invested require at least 30 days notice of redemption, and may be redeemed on a monthly, quarterly, semi-annual, annual or longer basis, depending upon the specific terms of each fund. Certain hedge funds have a lock-up period and/or may also have the ability to impose a redemption gate. A lock-up period refers to the initial amount of time an investor is contractually required to remain invested before having the ability to redeem. Typically, the

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imposition of a gate delays a portion of the requested redemption, with only the portion that is not gated settled in cash shortly after the redemption date.

The carrying value of the Company's holdings in hedge fund affiliates that are subject to lockups and/or that have redemption gate provisions in their governing documents at December 31, 2018 and 2017 was \$151.0 million and \$222.7 million, respectively.

Certain hedge funds may be allowed to invest a portion of their assets in illiquid securities, such as private equity or private debt. In such cases, a common mechanism used is a side-pocket, whereby the illiquid security is assigned to a separate memorandum capital account or other designated account. Typically, the investor loses its redemption rights in the designated account. Only when the illiquid securities in the side-pocket are sold, or otherwise deemed liquid by the fund, may investors redeem that portion of their interest that has been "side-pocketed." At December 31, 2018 and 2017, the carrying value of the Company's hedge fund affiliates held in side-pockets was \$12.1 million and \$20.1 million, respectively. The underlying assets within these positions are generally expected to be liquidated over a period of approximately one to three years.

(b) Operating Affiliates

The Company has invested in securities or other forms of direct ownership interests across the capital structure of strategic (re)insurance affiliates, investment management company affiliates, and other strategic and operating affiliates. Collectively, these investments are classified as "operating affiliates."

The Company's equity investment in operating affiliates and equity in net income (loss) from such affiliates as well as certain summarized financial information of the investee as a whole are included below:

Year ended December 31, 2018 (U.S. dollars in thousands)	XLB Investment		Combined Investee Summarized Financial Data (Estimated)			
	Carrying Value	Equity in Net Income (Loss) for the Year	Total Assets	Total Liabilities	Total Revenue (Loss)	Net Income (Loss)
Insurance affiliates	\$ 206,226	\$ 14,135	\$ 2,223,591	\$ 1,455,008	\$ 792,116	\$ 128,795
Strategic and other operating affiliates	\$ 100,835	\$ 43,052	\$ 362,259	\$ 62,439	\$ 36,990	\$ (22,960)
Investment manager affiliates (1)	6,186	222	145,556	62,696	169,444	85,735
Total operating affiliates	\$ 313,247	\$ 57,409	\$ 2,731,406	\$ 1,580,143	\$ 998,550	\$ 191,570
Year ended December 31, 2017						
Insurance affiliates	272,801	1,780	2,884,286	2,099,982	1,228,091	14,149
Strategic and other operating affiliates	109,382	21,144	3,045,335	2,628,467	275,677	11,195
Investment manager affiliates (1)	45,405	40,721	412,071	49,028	65,569	29,835
Total operating affiliates	\$ 427,588	\$ 63,645	\$ 6,341,692	\$ 4,777,477	\$ 1,569,337	\$ 55,179

(1) During the years ended December 31, 2018 and 2017, the Company received distributions from its Investment Manager Affiliates of approximately \$32.4 million and \$32.1 million, respectively.

In certain investments, the carrying value is different from the share of the investee's underlying net assets. The differences represent goodwill on acquisition, OTTI recorded with respect to the investment, or differences in the retained capital accounts of the various equity holders (including the Company).

See Note 18(c), "Commitments and Contingencies – Investments in Affiliates," for further information regarding commitments related to investments in affiliates.

The Company's most significant operating affiliate at December 31, 2018 is an investment of \$140.0 million in Privilege Underwriters, Inc. and its affiliates ("PURE Group"), an insurance provider specializing in products for high net worth individuals. The PURE Group investments consist of: (i) a \$77.5 million purchase of 9.9% of the ordinary common units and preferred units of Privilege Group Holdings LP, and 9.9% of the units of Privilege Group Holdings GP, LLC; and (ii) a total of \$50.0 million of purchases, at par value, of ten year surplus notes issued by Privilege Underwriters Reciprocal Exchange. Under the terms of an agreement between the parties, effective January 18, 2018, the PURE Group has exercised its option to require the Company to purchase a remaining \$25.0 million of ten year surplus notes, at par.

The Company also has an investment of \$38.5 million, representing a 20.0% ownership interest in Mahindra Insurance Brokers Limited.

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6. Other Investments

Other investments comprised the following at December 31, 2018 and 2017. See Note 2(c), "Significant Accounting Policies - Investments - Other Investments," for a description of the Company's accounting policy for these assets:

Year ended December 31, <i>(U.S. dollars in thousands)</i>	2018	2017
Hedge funds	\$ 76,139	\$ 205,770
Private investments	183,886	191,986
Overseas deposits	529,195	570,742
Structured transactions	253,691	172,982
Other	6,582	22,383
Total other investments	\$ 1,049,493	\$ 1,163,863

(a) Hedge Funds and Private Investments

At December 31, 2018 and 2017, the hedge fund portfolio, accounted for as other investments, employed four strategies as noted above in Note 5, "Investments in Affiliates."

In general, the funds in which the Company is invested require at least 30 days notice of redemption, and may be redeemed on a monthly, quarterly, semi-annual, annual or longer basis, depending upon the specific terms of each fund.

Certain hedge funds have a lock-up period and/or may also have the ability to impose a redemption gate as noted in Note 5, "Investments in Affiliates." The fair value of the Company's holdings in hedge funds that are subject to lockups and/or that have redemption gate provisions in their governing documents at December 31, 2018 and 2017 was \$65.9 million and \$178.0 million, respectively. The Company did not have any holdings in funds where a redemption gate was imposed at December 31, 2018 or 2017.

Certain hedge funds may be allowed to invest a portion of their assets in illiquid securities, such as private equity or private debt, as noted in Note 5, "Investments in Affiliates." At December 31, 2018 and 2017, the fair value of hedge funds held in side-pockets was \$6.1 million and \$9.2 million, respectively. The underlying assets within these positions are generally expected to be liquidated over a period of approximately one to three years.

The following represents an analysis of the net unrealized gains for the indicated years ended December 31, 2018 and 2017, and the net realized gains as of December 31, 2018 and 2017 on the Company's hedge funds and private investments:

Year ended December 31, <i>(U.S. dollars in thousands)</i>	Net Unrealized Gains (Losses)		Net Realized Gains (Losses)	
	2018	2017	2018	2017
Hedge funds	\$ 41,124	\$ 100,103	\$ 12,494	\$ 15,322
Private investments	53,120	60,624	22,074	13,994
Total	\$ 94,244	\$ 160,727	\$ 34,568	\$ 29,316

(b) Overseas Deposits

Overseas deposits include investments in private funds related to Lloyd's syndicates in which the underlying instruments are primarily government and government-related/supported and corporate fixed income securities. The funds themselves do not trade on an exchange and therefore are not included within AFS securities. Also included in overseas deposits are restricted cash and cash equivalent balances held by Lloyd's syndicates for solvency purposes. Given the restricted nature of these cash balances, they are not included within the cash and cash equivalents category in the Consolidated Balance Sheet.

(c) Structured Transactions

National Indemnity Endorsement

On June 9, 2009, XL Specialty Insurance Company ("XL Specialty"), a wholly-owned subsidiary of the Company, entered into an agreement with National Indemnity Company, an insurance company subsidiary of Berkshire Hathaway Inc. ("National Indemnity"). Under the agreement, and a related reinsurance agreement, National Indemnity agreed to issue endorsements to certain directors and officers liability insurance policies known as "Side A" coverage policies underwritten by XL Specialty (the "Facility") during an eighteen month period that ended on December 31, 2011.

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In connection with the Facility, XLB purchased a payment obligation (the "Obligation") in an aggregate principal amount of \$150.0 million from National Indemnity. At December 31, 2018, the outstanding Obligation was recorded in other investments at a carrying value of \$145.0 million, pays a coupon of 3.5%, and is being accreted to \$150.0 million over the 11.5 years term of the payment obligation. The difference between the estimated fair value of the Obligation and the cost of that Obligation at the time of the transaction was approximately \$21.9 million and was recorded in Other Assets. This difference, together with fees of \$2.5 million, was amortized in relation to the earning of the underlying policies written.

7. Derivative Instruments

The Company enters into derivative instruments for both risk management and investment purposes. The Company is exposed to potential loss from various market risks, and manages its market risks based on a comprehensive framework of investment decision authorities ("Authorities Framework") by the XLB Board of Directors. The Authorities Framework is intended to align the risk profile of the Company's investment portfolio to be consistent with the Company's risk tolerance, and other guidelines established by the XLB Board of Directors. The following table summarizes information on the notional amounts and gross amounts of derivative fair values contained in the Consolidated Balance Sheets at December 31, 2018 and 2017:

<i>(U.S. dollars in thousands)</i>	2018				2017			
	Asset Derivative Notional Amount	Asset Derivative Fair Value	Liability Derivative Notional Amount	Liability Derivative Fair Value	Asset Derivative Notional Amount	Asset Derivative Fair Value	Liability Derivative Notional Amount	Liability Derivative Fair Value
Derivatives designated as hedging instruments:								
Foreign currency exposure	\$ 834,477	\$ 34,528	\$ 225,556	\$ 2,879	\$ 580,194	\$ 5,655	\$ 339,221	\$ 3,968
Total derivatives designated as hedging instruments	\$ 834,477	\$ 34,528	\$ 225,556	\$ 2,879	\$ 580,194	\$ 5,655	\$ 339,221	\$ 3,968
Derivatives not designated as hedging instruments:								
<i>Investment Related Derivatives:</i>								
Interest rate exposure	\$ —	\$ —	\$ 30,310	\$ 124	\$ 181,975	\$ 423	\$ —	\$ —
Foreign currency exposure	74,271	1,520	228,887	1,434	263,722	6,931	141,300	2,256
Credit exposure	—	—	40,000	4,236	5,000	187	45,000	6,784
Financial market exposure	—	—	—	—	30,001	1,271	6,998	42
<i>Other Non-Investment Derivatives:</i>								
Credit exposure	17,896	44	—	—	—	—	25,526	169
Guaranteed minimum income benefit contract	32,294	18,738	32,294	18,738	36,171	18,136	36,171	18,136
Modified coinsurance and funds withheld contracts, including life retrocession embedded derivative (1)	43,367	—	4,324,588	23,000	51,653	—	5,014,284	31,541
Other	\$ 15,000	\$ 516	\$ —	\$ —	\$ 16,000	\$ 191	\$ —	\$ —
Total derivatives not designated as hedging instruments	\$ 182,828	\$ 20,818	\$ 4,656,079	\$ 47,532	\$ 584,522	\$ 27,139	\$ 5,269,279	\$ 58,928
Total derivatives		\$ 55,346		\$ 50,411		\$ 32,794		\$ 62,896
Counterparty netting		(2,723)		(2,723)		(3,579)		(3,579)
Total derivatives net of counterparty netting		52,623		47,688		29,215		59,317
Cash collateral held/paid (2)		(28,946)		(539)		(3,920)		(1,312)
Total derivatives as recorded in the Consolidated Balance Sheet		\$ 23,677		\$ 47,149		\$ 25,295		\$ 58,005

- (1) The fair value movements in derivative assets and liabilities relating to modified coinsurance and funds withheld contracts are included within the associated asset or liability at each period end on the face of the Consolidated Balance Sheets. Notional amounts associated with reinsurance agreements under which the Company assumes reinsurance risk are recorded as asset derivative notional amounts. Notional amounts associated with the GreyCastle Life Retro Arrangements and other outward reinsurance contracts under which the Company cedes risk are recorded as liability derivative notional amounts. Included in the liability derivative notional amount as of December 31, 2018 is the cumulative net realized and unrealized loss on the life retrocession embedded derivative of \$747.2 million.
- (2) At December 31, 2018, the Company held cash collateral related to foreign currency derivative positions and certain other derivative positions of \$28.9 million for derivatives in an asset position and paid cash collateral of \$0.5 million for derivatives in a liability position. At December 31, 2017, the Company held cash collateral related to a foreign currency derivative position and certain other derivative positions of \$3.9 million for derivatives in an asset position and paid cash collateral of \$1.3 million for derivatives in a liability position. The assets and liabilities related to the net collateral paid or held were recorded as Other assets and Other liabilities within the Consolidated Balance Sheets as the collateral and derivative positions are not intended to be settled on a net basis.

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Derivative instruments in an asset or liability position are included within "Other assets" or "Other liabilities," respectively, at fair value in the Consolidated Balance Sheets on a net basis where the Company has both a legal right of offset and the intention to settle the contracts on a net basis. Certain embedded derivatives within reinsurance contracts are included in "Reinsurance balances payable." The Company often enters into different types of derivative contracts with a single counterparty, and these contracts are covered under netting agreements. Changes in the fair values of derivatives are shown in the Consolidated Statements of Income as "Net realized and unrealized gains (losses) on derivative instruments," unless the derivatives are designated as hedging instruments. The accounting for derivatives that are designated as hedging instruments is described in Note 1(h), "Significant Accounting Policies - Derivative Instruments."

(a) Derivative Instruments Designated as Hedges of a Net Investment in a Foreign Operation

The Company utilizes foreign currency contracts to hedge the fair value of certain net investments in foreign operations. During the years ended December 31, 2018 and 2017, the Company entered into foreign currency contracts that were formally designated as hedges of investments in foreign subsidiaries, the majority of which have functional currencies of either the British pound or the Euro. There was no ineffectiveness in these transactions.

The following table provides the weighted average U.S. dollar equivalent of foreign denominated net assets that were hedged and the resulting derivative gain (loss) that was recorded in the foreign currency translation adjustment, net of tax, account within AOCI for the years ended December 31, 2018 and 2017.

Derivative Instruments Designated as Hedges of a Net Investment in a Foreign Operation –

Summary

(U.S. dollars in thousands)

	2018	2017
Weighted average of U.S. dollar equivalent of foreign denominated net assets	\$ 1,140,487	\$ 1,361,477
Derivative gains (losses) (1)	\$ 66,163	\$ (87,954)

(1) Derivative gains (losses) from derivative instruments designated as hedges of the net investment in a foreign operation are recorded in the cumulative translation adjustment account within AOCI for each period.

(b) Derivative Instruments Not Formally Designated As Hedging Instruments

The following table provides the total impact on earnings relating to derivative instruments not formally designated as hedging instruments. The impacts are all recorded through "Net realized and unrealized gains (losses) on derivative instruments" in the Consolidated Statements of Income for the years ended December 31, 2018 and 2017:

Net Realized and Unrealized Gains (Losses) on Derivative Instruments

(U.S. dollars in thousands)

	2018	2017
Investment Related Derivatives:		
Interest rate exposure	\$ (268)	\$ (213)
Foreign currency exposure	(1,388)	(4,384)
Credit exposure	310	(553)
Financial market exposure	9,261	264
Other Non-Investment Derivatives:		
Foreign currency exposure	(35)	(1,542)
Credit exposure	882	770
Modified coinsurance and funds withheld contracts	(3,158)	(34,133)
Other	\$ 4,825	\$ (1,941)
Total derivatives not designated as hedging instruments	\$ 10,429	\$ (41,732)
Amount of gain (loss) recognized in income from ineffective portion of fair value hedges	—	—
Net realized and unrealized gains (losses) on derivative instruments	\$ 10,429	\$ (41,732)
Net realized and unrealized gains (losses) on life retrocession embedded derivative and derivative instruments - Life Funds Withheld Assets	\$ (37,670)	\$ (206,015)

The Company's objectives in using these derivatives are explained below.

Investment Related Derivatives

The Company, either directly or through third party investment managers, may use derivative instruments within its investment portfolio, including interest rate swaps and options on interest rate swaps, total return swaps, credit derivatives (including single name and index credit default swaps and options on credit default swaps), equity options, forward contracts and futures (including foreign exchange, bond and stock index, interest rate and commodity futures), primarily as a means of

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reducing investment risk by economically hedging exposures to interest rate, credit spread, equity price changes and foreign currency risk or, in limited instances, for efficient portfolio management. When using exchange traded or cleared over-the-counter derivatives, the Company is exposed to the credit risk of the applicable clearing house and of the Company's futures commission merchant. When using uncleared over-the-counter derivatives, the Company is exposed to credit risk in the event of non-performance by the counterparties to such derivative contracts. To manage this risk, the Company requires appropriate legal documentation with counterparties that has been reviewed and negotiated by legal counsel on behalf of the Company and complies with the Company's documentation standards, investment guidelines and policies.

Investment Related Derivatives – Interest Rate Exposure

The Company utilizes risk management and overlay strategies that incorporate the use of derivative financial instruments, primarily to manage its fixed income portfolio duration and net economic exposure to interest rate risks. The Company may also use interest rate swaps to convert certain liabilities from a fixed rate to a variable rate of interest or use them to convert a variable rate of interest from one basis to another.

Investment Related Derivatives – Foreign Currency Exposure

The Company has exposure to foreign currency exchange rate fluctuations through its operations and in its investment portfolio. The Company uses foreign currency contracts to manage its exposure to the effects of fluctuating foreign currencies on the value of certain of its foreign currency fixed maturities and equities. These contracts are not designated as specific hedges for financial reporting purposes and, therefore, realized and unrealized gains and losses on these contracts are recorded in income in the period in which they occur. These contracts generally have maturities of twelve months or less.

In addition, certain of the Company's investment managers may, subject to investment guidelines, enter into forward contracts.

Investment Related Derivatives – Credit Exposure

Credit derivatives may be purchased within the Company's investment portfolio in the form of single name and basket credit default swaps and swaptions, which are used to mitigate credit exposure through a reduction in credit spread duration (i.e., macro credit strategies rather than single-name credit hedging) or exposure to securities of selected issuers. Credit derivatives may also be used to efficiently gain exposure to credit markets, subject to guidelines that prohibit the introduction of effective leverage.

Investment Related Derivatives – Financial Market Exposure

Stock index futures may be purchased within the Company's investment portfolio to create synthetic equity exposure and to add value to the portfolio with overlay strategies where market inefficiencies are believed to exist. Stock index futures may be sold to facilitate the timely and efficient reduction of equity exposure. Equity option strategies, including both purchases and sales of options, may be used to add value or reduce exposure with overlay or other strategies. From time to time, the Company may enter into other financial market exposure derivative contracts on various indices and other underlying financial instruments including, but not limited to, equity options, total return swaps, and commodity contracts.

Other Non-Investment Derivatives

Credit Exposure

During the year ended December 31, 2018, the Company entered into a credit derivative relating to a number of reference pool mortgage tranches associated with actual mortgage loans that were securitized into agency mortgage-backed securities and sold as Structured Agency Credit Risk Notes. At December 31, 2018, there was no reported event of default on this obligation. The credit derivative is recorded at fair value based upon models developed by the Company. Significant unobservable inputs considered in the valuation include the impact of changes in interest rates, future defaults, delinquency and prepayment rates, credit spreads, changes in credit quality, and other market factors.

Guaranteed Minimum Income Benefit Contract

The Company has derivatives embedded in certain reinsurance contracts. For a certain life reinsurance contract, the Company pays the ceding company a fixed amount equal to the estimated present value of the excess of the guaranteed benefit over the account balance upon the policyholder's election to take the income benefit. The fair value of this derivative is determined based on the present value of expected cash flows.

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Modified Coinsurance and Funds Withheld Contracts

The Company has modified coinsurance and funds withheld reinsurance agreements that provide for a return to be paid based on a portfolio of fixed income securities. As such, the agreements contain an embedded derivative. The embedded derivative is bifurcated from the funds withheld balance and recorded at fair value, with changes in fair value recognized in earnings through "Net realized and unrealized gains (losses) on derivative instruments."

Life Retrocession Embedded Derivative

In addition, the Company entered into the GreyCastle Life Retro Arrangements as described in Note 2(c), "Significant Accounting Policies - Investments - Investments Related to Life Retrocession Arrangements written on a Funds Withheld Basis," and "Note 2(e), "Significant Accounting Policies - Reinsurance." The embedded derivative related to the GreyCastle Life Retro Arrangements is recorded at fair value with changes in fair value recognized in earnings through "Net realized and unrealized gains (losses) on life retrocession embedded derivative and derivative instruments - Life Funds Withheld Assets."

The impact of the GreyCastle Life Retro Arrangements on the Company's results for the years ended December 31, 2018 and 2017 was as follows:

Impact of GreyCastle Life Retro Arrangements <i>(U.S. dollars in thousands)</i>	2018	2017
Underwriting profit (loss) (1)	\$ —	\$ —
Net investment income - Life Funds Withheld Assets	115,203	127,047
Net realized gains (losses) on investments sold - Life Funds Withheld Assets	118,704	115,911
Net unrealized gains (losses) on investments, Trading - Life Funds Withheld Assets	(58,218)	(14,805)
OTTI on investments - Life Funds Withheld Assets	(3,553)	(1,434)
Foreign exchange (gains) losses	(7,236)	30,711
Other income and expenses	(66)	(108)
Net realized and unrealized gains (losses) on life retrocession embedded derivative and derivative instruments - Life Funds Withheld Assets	(37,670)	(206,015)
Net income (loss)	\$ 127,164	\$ 51,307
Change in net unrealized gains (losses) on investments - Life Funds Withheld Assets	(210,193)	(51,983)
Change in adjustments related to future policy benefit reserves	74,784	27,184
Change in cumulative translation adjustment - Life Funds Withheld Assets	8,245	(26,508)
Total changes to other comprehensive income as a result of GreyCastle Life Retro Arrangements	\$ (127,164)	\$ (51,307)
Comprehensive income (loss)	\$ —	\$ —

(1) The impact to comprehensive income relating to the GreyCastle Life Retro Arrangements was nil for the years ended December 31, 2018 and 2017.

As shown in the table above, although the Company's net income (loss) is subject to variability related to the GreyCastle Life Retro Arrangements, there is minimal net impact on the Company's comprehensive income in any period. The life retrocession embedded derivative value includes the interest income, unrealized gains and losses, and realized gains and losses from sales of the Life Funds Withheld Assets.

Other

The Company has entered into short term weather derivative swap agreements as the fixed rate payer which provide for a return to be paid to the Company based on the occurrence of certain industry weather events. The derivatives are recorded at fair value with changes in fair value recognized in earnings through "Net realized and unrealized gains (losses) on derivative instruments."

(c) Derivative Instruments Designated as Fair Value Hedges

The Company may designate certain of its derivative instruments as fair value hedges or cash flow hedges, in which case it formally and contemporaneously documents all relationships between the hedging instruments and hedged items and links the hedging derivative to specific assets and liabilities. The Company assesses the effectiveness of the hedge both at inception and on an on-going basis, and determines whether the hedge is highly effective in offsetting changes in fair value or cash flows of the linked hedged item.

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Settlement of Fair Value Hedges

During the fourth quarter of 2010 and the third quarter of 2012, the Company settled five interest rate contracts designated as fair value hedges of certain of the Company's structured indemnity contracts. The gain on settlement of these contracts, which represented the effective portion of the hedging relationship, was recorded as an increase in the carrying value of the deposit liabilities and is being amortized through interest expense over the remaining term of the structured indemnity contracts.

A summary of the fair value hedges that have been settled and their impact on results up to the indicated periods, as well as the remaining balance of the fair value hedges and average years remaining to maturity at December 31, 2018 and 2017 are shown below:

Settlement of Fair Value Hedges - Summary <i>(U.S. dollars in thousands, except years)</i>	Fair Value Hedges - Structured Indemnity Contracts	
	December 31,	
	2018	2017
Cumulative reduction to interest expense	\$ 129,306	\$ 122,118
Remaining balance	\$ 103,889	\$ 111,077
Weighted average years remaining to maturity	17.3	18.7

(d) Contingent Credit Features

Certain derivative agreements entered into by the Company or its subsidiaries contain credit rating downgrade provisions that permit early termination of the agreements by the counterparty if collateral is not posted following failure to maintain certain credit ratings from one or more of the principal credit rating agencies. If the Company were required to terminate such agreements early due to a credit rating downgrade, it could potentially be in a net liability position at the time of settlement of such agreements. The aggregate fair value of all derivative agreements containing such rating downgrade provisions that were in a liability position and any collateral posted under these agreements as of December 31, 2018 and 2017 were as follows:

Contingent Credit Features - Summary: <i>(U.S. dollars in thousands)</i>	2018	2017
Aggregate fair value of derivative agreements with downgrade provisions in a net liability position	\$ —	\$ 7,464
Collateral posted to counterparty	\$ —	\$ 40

8. Fair Value Measurements

(a) Fair Value Summary

The following tables set forth the Company's assets and liabilities that were accounted for at fair value at December 31, 2018 and 2017 by level within the fair value hierarchy. For further information, see Note 2 (b), "Significant Accounting Policies – Fair Value Measurements":

December 31, 2018 <i>(U.S. dollars in thousands)</i>	Quoted Prices in Active Markets for Identical Assets (Level 1)	Significant Other Observable Inputs (Level 2)	Significant Other Unobservable Inputs (Level 3)	Counterparty Netting	Balance at December 31, 2018
Assets					
Fixed maturities - AFS - Excluding Life Funds Withheld Assets					
U.S. Government	\$ —	\$ 2,486,891	\$ —	\$ —	\$ 2,486,891
U.S. States, municipalities and political subdivisions	—	1,391,574	—	—	1,391,574
Non-U.S. Governments	—	4,207,457	—	—	4,207,457
Corporate	—	11,265,405	943	—	11,266,348
RMBS	—	5,322,218	5,955	—	5,328,173
CMBS	—	1,339,163	—	—	1,339,163
Other asset-backed securities	—	1,463,289	—	—	1,463,289
Total fixed maturities - AFS - Excluding Funds Withheld Assets, at fair value	\$ —	\$ 27,475,997	\$ 6,898	\$ —	\$ 27,482,895

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Short-term investments, at fair value (1)		578,114			578,114
Total investments AFS - Excluding Life Funds Withheld Assets	\$	—	\$ 28,054,111	\$ 6,898	\$ 28,061,009
Fixed maturities - AFS - Life Funds Withheld Assets					
U.S. Government		—	10,461	—	10,461
Non-U.S. Governments		—	396,748	—	396,748
Corporate		—	730,579	—	730,579
RMBS		—	465	—	465
CMBS		—	108,846	—	108,846
Other asset-backed securities		—	109,379	—	109,379
Total fixed maturities - AFS - Life Funds Withheld Assets, at fair value		—	1,356,478	—	1,356,478
Total investments - AFS, at fair value		—	29,410,589	6,898	29,417,487
Fixed Maturities - Trading					
U.S. Government			8,546		8,546
Non-U.S. Governments			474,789		474,789
Corporate			1,456,810		1,456,810
RMBS			883		883
CMBS			5,933		5,933
Other asset-backed securities			49,468		49,468
Total fixed maturities - Trading - Life Funds Withheld Assets, at fair value		—	1,996,429	—	1,996,429
Short-term investments, at fair value (1)			17,032		17,032
Total investments, Trading		—	2,013,461	—	2,013,461
Cash equivalents (2)	329,973		869,798		1,199,771
Cash equivalents - Life Funds Withheld Assets (2)			55,124		55,124
Equity securities, at fair value	486,539		149,453		635,992
Other investments (3)			529,383	194,495	723,878
Other assets (4)			36,048	19,298	52,623
Total assets accounted for at fair value	\$ 816,512	\$ 33,063,856	\$ 220,691	\$ (2,723)	\$ 34,098,336
Liabilities					
Funds withheld on GreyCastle Life Retro Arrangements (net of future policy benefit reserves recoverable) (5)			\$ 747,152		\$ 747,152
Other liabilities (4)			31,673	18,738	47,688
Total liabilities accounted for at fair value	\$ —	\$ 778,825	\$ 18,738	\$ (2,723)	\$ 794,840

December 31, 2017 <i>(U.S. dollars in thousands)</i>	Quoted Prices in Active Markets for Identical Assets (Level 1)	Significant Other Observable Inputs (Level 2)	Significant Other Unobservable Inputs (Level 3)	Counterparty Netting	Balance at December 31, 2017
Assets					
Fixed maturities - AFS - Excluding Life Funds Withheld Assets					
U.S. Government	\$ —	\$ 4,250,196	\$ 18,290	\$ —	\$ 4,268,486
U.S. States, municipalities and political subdivisions	—	2,064,640	—	—	2,064,640
Non-U.S. Governments	—	5,199,976	—	—	5,199,976
Corporate	—	9,647,616	1,292	—	9,648,908
RMBS	—	4,471,281	—	—	4,471,281
CMBS	—	1,243,132	—	—	1,243,132
Other asset-backed securities	—	1,487,523	5,232	—	1,492,755
Total fixed maturities, - AFS - Excluding Withheld Assets, at fair value	\$ —	\$ 28,364,364	\$ 24,814	\$ —	\$ 28,389,178
Short-term investments, at fair value (1)		800,027	—	—	800,027
Equity securities, at fair value	557,510	156,457	—	—	713,967
Total investments AFS - Excluding Funds Withheld Assets	\$ 557,510	\$ 29,320,848	\$ 24,814	\$ —	\$ 29,903,172

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Fixed maturities - Life Funds Withheld Assets					
U.S. Government	—	\$ 11,316	\$ —	\$ —	\$ 11,316
Non-U.S. Governments	—	584,534	—	—	584,534
Corporate	—	1,137,213	—	—	1,137,213
RMBS	—	515	—	—	515
CMBS	—	122,272	—	—	122,272
Other asset-backed securities	—	171,262	—	—	171,262
Total fixed maturities - AFS - Life Funds Withheld Assets, at fair value	\$ —	\$ 2,027,112	\$ —	\$ —	\$ 2,027,112
Total investments - AFS, at fair value	\$ 557,510	\$ 31,347,960	\$ 24,814	\$ —	\$ 31,930,284
Fixed maturities - Trading - Life Funds Withheld Assets, at fair value					
U.S. Government	\$ —	\$ 11,042	\$ —	\$ —	\$ 11,042
U.S. States, municipalities and political subdivisions	—	31	—	—	31
Non-U.S. Governments	—	485,171	—	—	485,171
Corporate	—	1,460,292	—	—	1,460,292
RMBS	—	932	—	—	932
CMBS	—	7,580	—	—	7,580
Other asset-backed securities	—	41,337	—	—	41,337
Total fixed maturities - Trading - Life Funds Withheld Assets, at fair value	\$ —	\$ 2,006,385	\$ —	\$ —	\$ 2,006,385
Short-term investments, at fair value	—	14,965	—	—	14,965
Total investments, Trading	\$ —	\$ 2,021,350	\$ —	\$ —	\$ 2,021,350
Cash equivalents (2)	279,224	1,218,462	—	—	1,497,686
Cash equivalents - Life Funds Withheld Assets (2)	—	67,982	—	—	67,982
Other Investments (3)	—	570,931	221,708	—	792,639
Other assets (4)	—	14,467	18,327	(3,579)	29,215
Total assets accounted for at fair value	\$ 836,734	\$ 35,241,152	\$ 264,849	\$ (3,579)	\$ 36,339,156
Liabilities					
Funds withheld on life retrocession arrangements (net of future policy benefit reserves recoverable) (5)	\$ —	\$ 1,112,969	\$ —	\$ —	\$ 1,112,969
Other liabilities (4)	—	44,591	18,305	(3,579)	59,317
Total liabilities accounted for at fair value	\$ —	\$ 1,157,560	\$ 18,305	\$ (3,579)	\$ 1,172,286

- (1) Short-term investments consist primarily of U.S. and Non-U.S. Government-Related/Supported securities and Corporate securities.
- (2) Cash equivalents balances subject to fair value measurement include certificates of deposit and money market funds. Operating cash balances are not subject to recurring fair value measurement guidance.
- (3) Excluded from Other Investments are certain investments that are measured using net asset value as a practical expedient in the amount of \$71.9 million and \$198.2 million as of December 31, 2018 and December 31, 2017, respectively. Under GAAP, these investments are excluded from the fair value hierarchy table. In addition, the Other investments balance excludes loans held at amortized cost, which totaled \$253.7 million at December 31, 2018 and \$173.0 million at December 31, 2017. For further information, see Note 6, "Other Investments."
- (4) Other assets and other liabilities include derivative instruments. The derivative balances included in each category are reported gross of cash collateral by level with a counterparty netting adjustment presented separately in the Counterparty Netting column. The fair values of the individual derivative contracts are reported gross in their respective levels based on the fair value hierarchy. For further details regarding derivative fair values and associated collateral received or paid, see Note 7, "Derivative Instruments."
- (5) Funds withheld on life retrocession arrangements (net of future policy benefit reserves recoverable) include balances related to the life retrocession embedded derivative, under which all investment results associated with the Life Funds Withheld Assets related the GreyCastle Life Retro Arrangements described in Note 1, accrue to the benefit of GCLR.

(b) Level 2 Asset Valuations

U.S. Government, Corporate and Non-U.S Governments

Transaction activity inputs utilized in the valuation of fair value hierarchy Level 2 securities within these sub-categories include actual trades, dealer posts, results of bids-wanted, institutional secondary offerings, primary market offerings and Trade Reporting and Compliance Engine ("TRACE") trade feeds. As part of the evaluation process, transaction activity is compared to prior evaluations and necessary adjustments are made accordingly. Market-color inputs include actively quoted benchmark issues, buy-side/evaluator dialogue, sell-side/evaluator dialogue and credit derivative indices.

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U.S. States, municipalities and political subdivisions

Transaction activity inputs utilized in the valuation of fair value hierarchy Level 2 securities within this sub-category include actual trades, dealer posts, results of bids-wanted, institutional secondary offerings, primary market offerings, and Municipal Securities Rulemaking trade feeds. As part of the evaluation process, transaction activity is compared to prior evaluations and necessary adjustments are made accordingly. Market-color inputs include bids, offerings, two-sided markets, buy-side/evaluator dialogue and sell-side/evaluator dialogue. Credit information inputs include issuer financial statements, default and material event notices, developer reports and liquidation and restructuring analyses.

RMBS, CMBS and Other asset-backed securities

As part of the fair valuation process, Level 2 securities in these sub-categories are analyzed by collateral type, deal structure, deal performance and vintage. Market inputs into the valuation process for each sub-category include reported or observed trades, results of bids-wanted, buy-side/sell-side evaluator dialogue, dealer offering and market research reports. Cash flow inputs into the evaluation process include conditional prepayment rates, conditional decay rates, delinquency and loss severity rates. This assumptive data is reviewed and updated using third party reported information to reflect current market convention.

Equity securities and other investments

Equity securities and other investment securities generally include investments in thinly traded equity funds and fixed income funds (including Overseas Deposits). Fair value is determined based upon prices received from pricing services as well as from net asset values ("NAV") received from the fund administrators.

Other assets and other liabilities

Other assets and other liabilities primarily include over-the-counter ("OTC") derivatives, which are valued using market transactions and other market evidence whenever possible, including market-based inputs to models, model calibration to market clearing transactions, broker or dealer quotations or alternative independent pricing sources where an understanding of the inputs utilized in arriving at the valuations is obtained. Where models are used, the selection of a particular model to value an OTC derivative depends upon the contractual terms and specific risks inherent in the instrument as well as the availability of pricing information in the market. The Company generally uses similar models to value similar instruments. Valuation models require a variety of inputs, including contractual terms, market prices, yield curves, credit curves, measures of volatility, prepayment rates and correlations of such inputs. For OTC derivatives that trade in liquid markets, such as generic forwards, interest rate swaps and options, model inputs can generally be verified against observable inputs and model selection does not involve significant management judgment.

Funds withheld on GreyCastle Life Retro Arrangements (net of future policy benefit reserves recoverable)

The calculation of the change in fair value of the embedded derivative associated with the GreyCastle Life Retro Arrangements includes the interest income, realized and unrealized gains and losses on Life Funds Withheld Assets and certain expenses related to the Life Funds Withheld Assets. The fair value of the embedded derivative is included in "Funds withheld on GreyCastle life retrocession arrangements, net of future policy benefit reserves recoverable" on the Consolidated Balance Sheets. The fair value of the embedded derivative is considered a Level 2 valuation.

There were no significant transfers between Level 1 and Level 2 during each of the years ended December 31, 2018 and 2017.

(c) Level 3 Assets and Liabilities

The tables below present additional information about assets and liabilities measured at fair value on a recurring basis and for which Level 3 inputs were utilized to determine fair value. The tables present a reconciliation of the beginning and ending balances for the years ended December 31, 2018 and 2017 for all financial assets and liabilities measured at fair value using significant unobservable inputs (Level 3) at December 31, 2018 and 2017, respectively. The tables do not include gains or losses that were reported in Level 3 in prior periods for assets that were transferred out of Level 3 prior to December 31, 2018 and 2017, respectively. Gains and losses for assets and liabilities classified within Level 3 in the table below may include changes in fair value that are attributable to both observable inputs (Levels 1 and 2) and unobservable inputs (Level 3). Further, it should be noted that the following tables do not take into consideration the effect of offsetting Level 1 and 2 financial instruments entered into by the Company that are either economically hedged by certain exposures to the Level 3 positions or that hedge the exposures in Level 3 positions.

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In general, Level 3 assets include securities for which values were obtained from brokers where either significant inputs were utilized in determining the values that were difficult to corroborate with observable market data, or sufficient information regarding the specific inputs utilized by the broker was not available to support a Level 2 classification. Transfers into or out of Level 3 primarily arise as a result of the valuations utilized by the Company changing between either those provided by independent pricing services that do not contain significant unobservable inputs and other valuations sourced from brokers that are considered Level 3.

Fixed maturities and short-term investments

The Company's Level 3 assets consist primarily of U.S. Government securities, Corporates and Other asset-backed securities, for which non-binding broker quotes are the primary source of the valuations. Sufficient information regarding the specific inputs utilized by the brokers was not available to support a Level 2 classification. The Company obtains the majority of broker quotes for these securities from third party investment managers who perform independent verifications of these valuations using pricing matrices based upon information gathered by market traders. In addition, for the majority of these securities, the Company compares the broker quotes to independent valuations obtained from pricing services, which may also consist of broker quotes, to assess if the prices received represent a reasonable estimate of the fair value. Although the Company does not have access to the specific unobservable inputs that may have been used in the fair value measurements of these securities provided by brokers, we would expect that the significant inputs considered are prepayment rates, probability of default, loss severity in the event of default, recovery rates, liquidity premiums and reinvestment rates. Significant increases (decreases) in any of those inputs in isolation could result in a significantly different fair value measurement. Generally, a change in the assumption used for the probability of default is accompanied by a directionally similar change in the assumption used for the loss severity and a directionally opposite change in the assumption used for prepayment rates.

The remainder of the Level 3 assets relate primarily to private investments (including funds) and certain derivative positions as described below.

Other investments

Included within the other investments component of the Company's Level 3 valuations are private investments (including funds) and hedge funds where the Company is not deemed to have significant influence over the investee. The fair value of these investments is based upon net asset values received from the investment manager or general partner of the respective entity. The underlying investments held by the investee that form the basis of the net asset value include assets such as private business ventures and are such that significant Level 3 inputs are utilized in the determination of the individual underlying holding values. Accordingly, the fair value of the Company's investment in each entity is classified within Level 3. Management reviews the values and incorporates factors such as the most recent financial information received, annual audited financial statements and the values at which capital transactions with the investee take place when applying judgment regarding whether any adjustments should be made to the net asset value received in recording the fair value of each position. Investments in hedge funds included in other investments utilize strategies including arbitrage, directional, event driven and multi-style. The funds potentially have lockup and gate provisions which may limit redemption liquidity. For further details regarding the nature of other investments and related features, see Note 6, "Other Investments."

Derivative instruments

Derivative instruments recorded within other liabilities and classified within Level 3: include credit derivatives sold providing protection on senior tranches of structured finance transactions where the value is obtained directly from the investment bank counterparty and sufficient information regarding the inputs utilized in such valuation was not obtained to support a Level 2 classification and guaranteed minimum income benefits embedded within one reinsurance contract. The majority of inputs utilized in the valuations of these types of derivative contracts are considered Level 1 or Level 2; however, each valuation includes at least one Level 3 input that was significant to the valuation and, accordingly, the values are disclosed within Level 3.

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Level 3 Assets and Liabilities - Year End December 31, 2018

<i>(U.S. dollars in thousands)</i>	Balance, beginning of period	Realized gains (losses)	Movement in unrealized gains (losses)	Purchases and Issuances	Sales	Settlements	Net transfers into (out of) Level 3 (1)	Balance, end of period	Movement in total gains (losses) relating to investments still held
U.S. Government	\$ 18,290	\$ (354)	\$ 100	\$ —	\$ (13,016)	\$ —	\$ (5,020)	\$ —	\$ —
Corporate	1,292	(219)	341	—	—	(401)	(70)	943	122
RMBS	—	—	(2)	980	—	—	4,977	5,955	(2)
Other asset-backed securities	5,232	(11)	(8)	15,407	(2,648)	(1,067)	(16,905)	—	—
Short-term investments	—	—	—	—	—	—	—	—	—
Other investments	221,708	15,653	(10,721)	44,249	—	(62,902)	(13,492)	194,495	9,775
Derivative Contracts - Net	22	—	(606)	1,144	—	—	—	560	(606)
Total	\$ 246,544	\$ 15,069	\$ (10,896)	\$ 61,780	\$ (15,664)	\$ (64,370)	\$ (30,510)	\$ 201,953	\$ 9,289

Level 3 Assets and Liabilities - Year End December 31, 2017

<i>(U.S. dollars in thousands)</i>	Balance, beginning of period	Realized gains (losses)	Movement in unrealized gains (losses)	Purchases and Issuances	Sales	Settlements	Net transfers into (out of) Level 3 (1)	Balance, end of period	Movement in total gains (losses) relating to investments still held
U.S. Government	\$ 24,751	\$ (80)	\$ (372)	\$ —	\$ —	\$ (1,251)	\$ (4,758)	\$ 18,290	\$ 37
Corporate	20,085	(50)	57	—	(20,014)	(31)	1,245	1,292	(2)
RMBS	—	17	(526)	—	—	(173)	682	—	—
CMBS	99	61	(55)	698	—	(105)	(698)	—	—
Other asset-backed securities	1,131	101	1,114	22,472	(5,216)	(957)	(13,413)	5,232	—
Short-term investments	—	—	—	11,693	(11,662)	(31)	—	—	—
Other investments	205,513	14,538	23,709	32,830	(2,207)	(42,811)	(9,864)	221,708	(189)
Derivative Contracts - Net	2	—	20	—	—	—	—	22	22
Total	\$ 251,581	\$ 14,587	\$ 23,947	\$ 67,693	\$ (39,099)	\$ (45,359)	\$ (26,806)	\$ 246,544	\$ (132)

- (1) Net transfers include both movement in and movement out of Level 3. Corporate for 2018 includes \$5.1 million of outgoing transfers partially offset by incoming transfers of \$5.0 million. RMBS for 2018 includes incoming transfers \$6.0 million partially offset by \$1.0 million of outgoing transfers. Other asset-backed securities for 2018 includes outgoing transfers of \$19.7 million partially offset by \$2.8 million of incoming transfers. Corporate securities for 2017 includes \$1.4 million of incoming transfers partially offset by \$0.1 million outgoing transfers. RMBS for 2017 includes incoming transfers of \$4.1 million partially offset by \$3.4 million of outgoing transfers. Other asset-backed securities for 2017 includes \$25.4 million of outgoing transfers partially offset by \$12.0 million of incoming transfers.

(d) Financial Instruments Not Carried at Fair Value

Authoritative guidance over disclosures about the fair value of financial instruments requires additional disclosure of fair value information for financial instruments not carried at fair value in both interim and annual reporting periods. Certain financial instruments, particularly insurance contracts, are excluded from these fair value disclosure requirements. The carrying values of cash and cash equivalents, accrued investment income, net receivable from investments sold, other assets, net payable for investments purchased, other liabilities and other financial instruments not included below approximated their fair values. The following table includes financial instruments for which the carrying value differs from the estimated fair values at December 31, 2018 and 2017. All of these fair value estimates are considered Level 2 fair value measurements.

<i>(U.S. dollars in thousands)</i>	2018		2017	
	Carrying Value	Fair Value	Carrying Value	Fair Value
Other investments	\$ 253,691	\$ 259,920	172,982	182,222
Deposit liabilities	886,353	1,078,051	1,042,677	1,266,682
Other liabilities	13,643	13,643	—	—
Financial Liabilities	\$ 899,996	\$ 1,091,694	\$ 1,042,677	\$ 1,266,682

The Company historically participated in structured transactions. XLB's remaining structured transaction is largely comprised of an investment in a payment obligation with an insurance company. This transaction is carried at amortized cost. The fair value of this investment held by the Company is determined through use of an internal model utilizing benchmark yields, issuer spreads and reference data.

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Deposit liabilities include obligations under structured insurance and reinsurance transactions. For purposes of fair value disclosures, the Company determined the estimated fair value of the deposit liabilities by assuming a discount rate equal to the appropriate U.S. Treasury rate plus 34.1 basis points and 45.5 basis points at December 31, 2018 and 2017, respectively. The discount rate incorporates the Company's own credit risk into the determination of estimated fair value.

The fair values of the Company's notes payable and debt outstanding were determined based on quoted market prices.

There are no significant concentrations of credit risk within the Company's financial instruments not carried at fair value as defined in the authoritative guidance over necessary disclosures, which excludes certain financial instruments, particularly insurance contracts.

9. Goodwill and Other Intangible Assets

The following table presents an analysis of goodwill, intangible assets with an indefinite life and intangible assets with a definite life for the years ended December 31, 2018 and 2017:

<i>(U.S. dollars in thousands)</i>	Goodwill	Intangible assets with an indefinite life	Intangible assets with a definite life	Total
Balance at December 31, 2016	\$ 1,077,212	\$ 682,779	\$ 307,350	\$ 2,067,341
Amortization	—	—	(21,834)	(21,834)
Foreign currency translation	20,625	16,235	7,071	43,931
Balance at December 31, 2017	\$ 1,097,837	\$ 699,014	\$ 292,587	\$ 2,089,438
Impairments	—	(177,994)	(11,556)	(189,550)
Amortization	—	—	(19,673)	(19,673)
Foreign currency translation	(9,492)	(7,126)	(4,659)	(21,277)
Balance at December 31, 2018	<u>\$ 1,088,345</u>	<u>\$ 513,894</u>	<u>\$ 256,699</u>	<u>\$ 1,858,938</u>

Goodwill

At both December 31, 2018 and 2017, the ending goodwill balance is comprised of gross goodwill of \$1.5 billion, offset by accumulated impairment charges of \$0.4 billion.

The Company tests goodwill for impairment on an annual basis as of June 30 during its third quarter, and on an interim basis whenever events or circumstances indicate that its carrying value may not be recoverable. Management concluded the estimated fair values of the reporting units' goodwill exceeded their estimated net book values at December 31, 2018, and therefore no impairments were recorded during 2018. For further details regarding the Company's impairment process, see Note 2(k), "Significant Accounting Policies - Goodwill, Intangibles and Other Long-Lived Assets."

Other Intangible Assets

At December 31, 2018 and 2017, the ending indefinite-lived intangible assets balance is comprised of gross indefinite-lived intangibles of \$513.9 million and \$699.0 million. At December 31, 2018 and 2017, the ending definite-lived intangible assets balance is comprised of gross definite-lived intangibles of \$342.6 million and \$354.2 million, respectively, of gross intangible assets, offset by accumulated amortization of \$85.9 million and \$61.6 million, respectively.

The Company tests indefinite-lived intangible assets on an annual basis as of June 30 during its third quarter, and on an interim basis whenever events or circumstances indicate that their carrying value may not be recoverable, and tests definite-lived intangible assets whenever events or circumstances indicate that their carrying value may not be recoverable. For further details regarding the Company's impairment process, see Note 2(k), "Significant Accounting Policies - Goodwill, Intangibles and Other Long-Lived Assets."

During 2018, management concluded that as a result of recent deterioration in the Company's underwriting performance within its Lloyds Syndicate operation, which occurred in relation to the the overall weakened Lloyds market conditions experienced by the entire P&C industry, the estimated net book value of our Lloyds Syndicate indefinite-lived intangible assets exceeded their estimated fair market value, and therefore we recorded a non-cash impairment charge of approximately \$178.0 million. The Company also recorded a non-cash impairment of approximately \$11.6 million related to certain non-performing definite-lived intangible assets within our Lloyds Syndicate operations

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The remaining definite-lived intangible assets will be amortized into income over the succeeding 17.3 years as follows:

Year Ended December 31,
(U.S. dollars in thousands)

2019	\$	19,041
2020		18,957
2021		18,957
2022		18,957
2023		18,957
2024-2036		161,830
Total expected amortization expenses	\$	256,699

10. Losses and Loss Expenses

The following table represents a reconciliation of the beginning and ending balances of unpaid losses and loss expenses, including an analysis of the Company's paid and unpaid losses and loss expenses incurred for the years indicated:

(U.S. dollars in thousands)

	2018	2017
Unpaid losses and loss expenses at the beginning of the year	\$ 29,696,779	\$ 25,939,571
Unpaid losses and loss expenses recoverable at the beginning of the year (1)	7,239,446	5,480,300
Net unpaid losses and loss expenses at the beginning of the year	\$ 22,457,333	\$ 20,459,271
Increase (decrease) in net losses and loss expenses incurred in respect of losses occurring in:		
Current year	8,214,314	8,149,690
Prior year	114,549	(147,770)
Total net incurred losses and loss expenses	\$ 8,328,863	\$ 8,001,920
Exchange rate effects	(278,253)	460,187
Less net losses and loss expenses paid in respect of losses occurring in:		
Current year	2,637,922	2,175,250
Prior year	4,796,728	4,288,795
Total net paid losses	\$ 7,434,650	\$ 6,464,045
Net unpaid losses and loss expenses at the end of the year	23,073,293	22,457,333
Unpaid losses and loss expenses recoverable (1)	8,523,998	7,239,446
Unpaid losses and loss expenses at the end of the year	\$ 31,597,291	\$ 29,696,779

(1) P&C business only, net of provision for uncollectible reinsurance. See note 12, "Reinsurance", for further information.

(a) Liability for Unpaid Losses and Loss Expenses

As the Company earns premiums for the underwriting risks it assumes, an estimate of the expected ultimate losses related to the premium is established. Loss reserves for unpaid loss and loss expenses are established due to the significant periods of time that may elapse between the occurrence, reporting and settlement of a loss. The process of establishing reserves for unpaid P&C claims can be complex and is subject to considerable variability, as it requires the use of judgment to make informed estimates. These estimates are based on numerous factors, and may be revised as additional experience and other data become available and are reviewed, as new or improved methodologies are developed or as current laws change. Loss reserves include:

- Case reserves - reserves for reported losses and loss expenses that have not yet been settled; and
- IBNR reserves - reserves for incurred but not reported losses or for reported losses over and above the amount of case reserves.

Case Reserves

Case reserves for the Company's P&C operations are established by management based on amounts reported from insureds or ceding companies and consultation with legal counsel, and represent the estimated ultimate cost of events or conditions that have been reported to or specifically identified by the Company. The method of establishing case reserves for reported claims differs among the Company's operations.

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With respect to the Insurance operations, the Company is notified of insured losses and records a case reserve for the estimated amount of the settlement, if any. The estimate reflects the judgment of claims personnel based on general reserving practices, the experience and knowledge of such personnel regarding the nature of the specific claim and, where appropriate, advice of legal counsel. Reserves are also established to provide for the estimated expense of settling claims, including legal and other fees and the general expenses of administering the claims adjustment process.

With respect to Reinsurance operations, case reserves for reported claims are generally established based on reports received from ceding companies. Additional case reserves may be established by the Company to reflect the estimated ultimate cost of a loss. For reinsurers, uncertainty in the reserving process stems, in part, from timing lags inherent in reporting by the claimant to the primary insurer, and subsequently by the primary insurer to the reinsurer. As a predominantly broker market reinsurer for both excess-of-loss and proportional contracts, the Company is potentially subject to an additional timing lag in the receipt of information, as the primary insurer reports to the broker who in turn reports to the Company.

Since the Company relies on information regarding paid losses, case reserves and IBNR provided by ceding companies to estimate its liability for unpaid losses and loss adjustment expenses ("LAE"), certain procedures are maintained in order to help determine the completeness and accuracy of such information. Periodically, management assesses the reporting activities of its ceding companies on the basis of qualitative and quantitative criteria. In addition to conferring with ceding companies or brokers on claims matters, XLB's claims personnel conduct periodic audits of specific claims and the overall claims procedures of ceding companies at their offices. The Company relies on its ability to effectively monitor the claims handling and claims reserving practices of ceding companies in order to help establish the proper reinsurance premium for reinsurance agreements and to establish proper loss reserves. Disputes with ceding companies have been rare and generally have been resolved through negotiation.

In addition to information received from ceding companies on reported claims, the Company also utilizes information on the pattern of ceding company loss reporting and loss settlements from previous catastrophic events in order to estimate the ultimate liability related to catastrophic events such as hurricanes. Commercial catastrophe model analyses and zonal aggregate exposures are utilized to assess potential client loss before and after an event. Initial cedant loss reports are generally obtained shortly after a catastrophic event, with subsequent updates received as new information becomes available. The Company actively requests loss updates from cedants periodically while there is still considerable uncertainty for an event, often for the first year following an event. The Company's claim settlement processes also incorporate an update to the total loss reserve at the time a claim payment is made to a ceding company.

While the reliance on loss reports from ceding companies may increase the level of uncertainty associated with the estimation of total loss reserves for property catastrophe reinsurance relative to direct property insurance, there are several factors which serve to reduce the uncertainty in loss reserve estimates for property catastrophe reinsurance. First, for large natural catastrophe events, aggregate limits in property catastrophe reinsurance contracts are in some cases fully exhausted by the loss reserve estimates. Second, as a reinsurer, the Company has access to information from a broad cross section of the insurance industry. The Company utilizes such information in order to perform consistency checks on the data provided by ceding companies and is able to identify trends in loss reporting and settlement activity and incorporate such information in the estimate of IBNR reserves. Finally, the Company also supplements the loss information received from cedants with loss estimates developed by market share techniques and/or from third party catastrophe models applied to exposure data supplied by cedants.

IBNR Reserves

IBNR reserves represent management's best estimate, at a given point in time, of the amount in excess of case reserves that is needed for the future settlement and loss adjustment costs associated with claims incurred. It is possible that the ultimate liability may differ materially from these estimates. Because the ultimate amount of unpaid losses and LAE is uncertain, management believes that quantitative techniques to estimate these amounts are enhanced by professional and managerial judgment. Management reviews the IBNR estimates produced by its actuarial department and determines its best estimate of the liabilities to record in the financial statements. The Company considers this single point estimate to be the mean expected outcome.

IBNR reserves are estimated by the Company's actuaries using several standard actuarial methodologies including the loss ratio method, the loss development or chain ladder method, the Bornhuetter-Ferguson ("BF") method and frequency and severity approaches. IBNR related to a specific event may be based on the estimated exposure to an industry loss and may include the use of catastrophe modeling software. On a quarterly basis, IBNR reserves are reviewed by the Company's actuaries, and are adjusted as new information becomes available. Any such adjustments are accounted for as changes in estimates and are reflected in the results of operations in the period in which they are made.

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The Company's actuaries use one set of assumptions in calculating the single point estimate, which includes actual loss data, loss development factors, loss ratios, reported claim frequency and severity. The actuarial reviews and documentation are completed in accordance with professional actuarial standards with reserves established on a basis consistent with GAAP. The selected assumptions reflect the actuary's judgment based on historical data and experience combined with information concerning current underwriting, economic, judicial, regulatory and other influences on ultimate claim settlements.

When estimating IBNR reserves, each insurance and reinsurance business unit segregates business into exposure classes. Within each class, the business is further segregated by either the year in which the contract inception ("underwriting year"), the year in which the claim occurred ("accident year"), or the year in which the claim is reported ("report year"). Within the Insurance Operations, reviews are on an accident year, underwriting year, or report year basis depending on the nature of the business. The Reinsurance operations is reviewed on an underwriting year basis. In each case, management believes the selected method represents an appropriate basis for evaluating the reserve associated with each.

Generally, initial actuarial estimates of IBNR reserves not related to a specific event are based on the loss ratio method applied to each class of business. Actual paid losses and case reserves ("reported losses") are subtracted from expected ultimate losses to determine IBNR reserves. Estimates of the initial expected ultimate losses involve management judgment and are based on historical information for that class of business, which includes loss ratios, market conditions, changes in pricing and conditions, underwriting changes, changes in claims emergence, and other factors that may influence expected ultimate losses.

Over time, as greater numbers of claims are reported, actuarial estimates of IBNR are based on the BF method and loss development techniques. The BF method utilizes actual loss data and the expected patterns of loss emergence, combined with an initial expectation of ultimate losses to determine an estimate of ultimate losses. This method may be appropriate when there is limited actual loss data and a relatively less stable pattern of loss emergence. The chain ladder method utilizes actual loss data and expected patterns of loss emergence to determine an estimate of ultimate losses that is independent of the initial expectation of ultimate losses. This method may be appropriate when there is a relatively stable pattern of loss emergence and a relatively larger number of reported claims. Multiple estimates of ultimate losses using a variety of actuarial methods are calculated for each class of business for each year of loss experience. The Company's actuaries look at each class and determine the most appropriate point estimate based on the characteristics of the particular class and other relevant factors, such as historical ultimate loss ratios, the presence of individual large losses, and known occurrences that have not yet resulted in reported losses. Once the actuaries make their determination of the most appropriate point estimate for each class, this information is aggregated and presented to management for review and approval.

The pattern of loss emergence is determined using actuarial analysis and judgment and is based on the historical patterns of the recording of paid and reported losses, as well as industry information. Information that may cause historical patterns to differ from future patterns is considered and reflected in expected patterns as appropriate. For property, marine and aviation insurance, losses are generally reported within 2 to 3 years from the beginning of the accident year. For casualty insurance, loss emergence patterns can vary from 3 years to over 20 years depending on the type of business. For other insurance, loss emergence patterns generally fall within these ranges. For reinsurance business, loss reporting lags the corresponding insurance classes often by at least one quarter due to the need for loss information to flow from the ceding companies generally via reinsurance intermediaries. Such lags in loss reporting are reflected in the actuary's selections of loss reporting patterns used in establishing our reserves.

Such estimates are not precise because, among other things, they are based on predictions of future developments and estimates of future trends in claim severity, claim frequency and other issues. In the process of estimating IBNR reserves, provisions for economic inflation and changes in the social and legal environment are considered, but involve considerable judgment. When estimating IBNR reserves, more judgment is typically required for lines of business with longer loss emergence patterns.

Due to the low frequency and high severity nature of some of the business the Company underwrites, our reserve estimates are highly dependent on actuarial and management judgment and are therefore uncertain. In property classes, there can be additional uncertainty in loss estimation related to large catastrophe events. With wind events, such as hurricanes, the damage assessment process may take more than a year. The cost of claims is subject to volatility due to supply shortages for construction materials and labor. In the case of earthquakes, the damage assessment process may take several years as buildings are discovered to have structural weaknesses not initially detected. The uncertainty inherent in IBNR reserve estimates is particularly pronounced for casualty coverages, such as excess liability, professional liability and workers' compensation, where information emerges relatively slowly over time.

The three types of property and casualty reserve exposures with the longest tails included in the Company's portfolio are:

- high layer excess casualty insurance;
- casualty reinsurance; and

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- discontinued asbestos and run-off environmental insurance and reinsurance liabilities.

Certain aspects of casualty operations complicate the actuarial process for establishing reserves. Certain casualty business written by insurance operations is high layer excess casualty business, meaning that liability attaches after large deductibles, including self-insurance or insurance from other sources. The Company began writing this type of business in 1986 and issued policies in forms that were different from traditional policies used by the industry at that time. Initially, there was a lack of industry data available for this type of business. Consequently, the basis for establishing loss reserves for this type of business was largely based upon judgment and the Company's reported loss experience, which was used as a basis for determining ultimate losses and, therefore, IBNR reserves. Over time, the amount of available historical loss experience data has increased. As a result, there is a larger statistical base to assist in establishing reserves for these excess casualty insurance claims.

High layer excess casualty insurance claims typically involve claims relating to (i) a "shock loss" such as an explosion or transportation accident causing severe damage to persons and/or property over a short period of time, (ii) a "non-shock" loss where a large number of claimants are exposed to injurious conditions over a longer period of time, such as exposure to chemicals or pharmaceuticals or (iii) a professional liability loss such as a medical malpractice claim. In each case, these claims are ultimately settled following extensive negotiations and legal proceedings. This process typically takes 5 to 15 years following the date of loss.

Reinsurance operations by their nature add further complications to the reserving process, particularly for the casualty business written, in that there is an inherent lag in the timing and reporting of a loss event from an insured or ceding company to the reinsurer. This reporting lag creates an even longer period of time between the policy inception and when a claim is finally settled. As a result, more judgment is required to establish reserves for ultimate claims in reinsurance operations.

Casualty reinsurance business involves reserving methods that generally include historical aggregated claim information as reported by ceding companies, combined with the results of claims and underwriting reviews of a sample of the ceding company's claims and underwriting files. Therefore, we do not always receive detailed claim information for this line of business.

Discontinued asbestos and run-off environmental liabilities are attached to certain policies previously written by NAC Re Corp. (now known as XL Reinsurance America Inc.), prior to being acquired by the Company; from business of Winterthur purchased by the Company from AXA Insurance in 2001; from a loss portfolio transfer in 2006; and acquired as a result of the Contribution of Catlin. At December 31, 2017, total gross unpaid losses and loss expenses with respect to these businesses represented less than 1% of unpaid losses and loss expenses of the Company.

Unpaid losses and loss expenses prior to reinsurance recoveries for the years ended December 31, 2018 and 2017 comprise the following:

<i>(U.S. dollars in thousands)</i>	2018	2017
Reserve for reported losses and loss expenses	\$ 13,473,407	\$ 12,869,644
Reserve for losses incurred but not reported	18,123,884	16,827,135
Unpaid losses and loss expenses	\$ 31,597,291	\$ 29,696,779

Claims Development

Management has determined that the appropriate level of disaggregation for the incurred and paid claims development information best falls into six categories within its two operations. This level of disaggregation is consistent with the Company's historical disclosure levels and provides groupings of the Company's insurance and reinsurance businesses of a credible size and with similar claim development characteristics, particularly payment patterns. It should be noted that when estimating IBNR reserves, the Company's Insurance and Reinsurance operations segregate business into exposure classes and a large number of classes are reviewed in total based on coverage, region and policy and loss emergence characteristics. Furthermore, large losses and catastrophe events are evaluated separately.

As noted previously, reserve reviews are carried out on an accident year, underwriting year or report year basis depending on the nature of the business. Typically, reserve reviews are carried out gross of reinsurance with ceded reinsurance recoveries evaluated separately to arrive at net reserves. However, in accordance with accounting guidance, the disclosures presented herein are accident year triangles, presented net of reinsurance recoverables. Underwriting year triangles are converted to an accident year basis using assumptions consistent with the underlying premium earning profiles and considering large losses in their respective accident year. Similarly, ceded reinsurance recoverables are allocated to accident year and class of business in order to present net accident year triangles. While we have compiled the triangles on a best efforts basis, the allocation bases

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required to develop historical net accident year triangles should be viewed as approximations only.

Within the Insurance operations, there are four business groups: Property; Specialty; Professional; and Casualty and other. Within the Reinsurance operations, all major products fall within two categories: Property and Other Short-Tail Lines, and Casualty and Other Long-Tail Lines. The Company has also provided aggregate triangles for the total Company and the Insurance and Reinsurance operations to reflect the levels at which the Company manages its business.

The nature of the Company's high excess of loss liability and catastrophe business can result in loss events that are both irregular and significant. Similarly, adjustments to reserves for individual years can be irregular and significant. Such adjustments are part of the normal course of business of the Company. There is no assurance that conditions and trends that have affected the development of liabilities in the past will continue. Furthermore, changes in business mix over time, including discontinuation of certain classes of business and growth in others, can impact development patterns. Accordingly, it may not be appropriate to extrapolate future redundancies or deficiencies based on the Company's historical results.

As discussed in further detail in part (c), except for certain workers' compensation (including long term disability) liabilities and certain bodily injury liability claims, emanating from U.K. exposures, predominantly from the U.K. motor liability portfolio, the Company does not discount its unpaid losses and loss expenses. The development in the tables included herein is presented on a gross of discount basis, reflecting the undiscounted case reserves established using a tabular reserving methodology and the undiscounted IBNR. The amount of discount is then determined for both Case and IBNR reserves and booked accordingly. The amount of discount is included in the reconciliation of the reserves to the Consolidated Balance Sheet.

As a result of the acquisition of Catlin Group Ltd in 2015, the Company acquired approximately \$5.4 billion of unpaid claims liability, net of reinsurance, as well as \$101.3 million of unpaid claims liability, net of reinsurance due to the acquisition of Allied International Holdings, Inc. in 2016. For purposes of this disclosure, the Company has applied the retrospective method for these acquired reserves, including the combined companies' incurred and paid claim development histories throughout the tables. It should be noted that historical reserves for the acquired businesses were established by the respective companies using methods, assumptions and procedures then in effect which may differ from the Company's current reserving bases.

The Company has also revalued all historical data using exchange rates at December 31, 2018 in order to mitigate the effect of foreign exchange on the development throughout the triangles. Due to currency mix changes from one year end to the next, revaluation of incurred losses will result in different year-on-year movements within the triangles with each annual presentation. This approach for handling foreign exchange movements within the triangles differs somewhat from the underlying calculation of prior year development in the Company's financial statements due to the inclusion of historical loss payments as well as reserves and the level of granularity used in the calculation. The differences have been deemed not to be material.

The number of reported claims is provided for the Insurance operations on a per claim basis and excludes those claims which closed with no payment. It should be noted that certain claims may eventually close with no payment in the future at which time the claims will be excluded on a prospective basis. The number of reported claims can vary over time due to changes in mix of business and policy terms and conditions. For the Reinsurance operations, the number of reported claims is not provided due to the common industry practice of cedants reporting loss information for proportional treaties on a bulk basis without comprehensive claim details. Therefore, it is impractical to provide meaningful claim count detail for the Company's Reinsurance business.

The Average Annual Percentage Payout of Incurred Losses for each age has been derived using a weighted average of all cumulative paid amounts as a percentage of 2018 incurred losses and allocated loss expenses. The average annual percentage payout of incurred losses presented are unaudited and are presented as supplementary information. The average annual percentage payout can change over time due to changes in business mix, policy terms and conditions as well as ceded reinsurance arrangements. As an example, due to a large multi-line quota share contract and multi-year non-standard auto deals written in the more recent years and included within our Reinsurance Casualty and Other Long-Tail portfolio, there is an upward trend in average annual percentage payout observed from last year.

As previously noted, the process of establishing reserves for unpaid P&C claims can be complex and is subject to considerable variability, as it requires the use of judgment to make informed estimates. These estimates are based on numerous factors, and may be revised as additional experience and data become available, as new or improved methodologies are developed or as current laws change. In addition, there is no assurance that conditions and trends that have affected the development of liabilities in the past will continue. This variability may result in either favorable or adverse development in the Incurred Loss and Allocated Loss Expense triangles provided by the Company. The variability experienced to date has been in line with management's expectations given the underlying business written by the Company. We have provided additional commentary for the individual categories below:

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For the Insurance operations in total, while individual accident years have both favorable and adverse incremental development across the triangle, accident years 2009 to 2013 have all developed favorably since the first evaluation. The 2014 to 2017 accident years reflect adverse development due primarily to large loss activity in several lines including professional and casualty.

For the Insurance Property category, individual accident years have generally developed favorably in later development periods, as updated loss estimates were received and volatility in the loss estimates decreased. The 2014 accident year experienced adverse development from the 2014 evaluation to the 2015 evaluation due to development on a large fire loss which occurred in late December 2014. The 2014 accident year then developed favorably from the 2015 evaluation to the 2016 evaluation. The 2015 accident year experienced adverse development from the first evaluation in 2015 to the second evaluation in 2016 due to movements on several claims in the international property and construction businesses. The 2016 accident year experienced adverse development from the first evaluation in 2016 to the second evaluation in 2017 mainly driven by the increased level of natural catastrophe activity in 2016. The 2017 accident year experienced adverse development from the first evaluation in 2017 to the second evaluation in 2018, mainly driven by claims relating to the large 2017 natural catastrophes (Hurricanes Harvey, Irma, Maria and California Wildfires) and also due to some late-notified, large man made losses on the international property and construction businesses.

For the Insurance Specialty category, accident years 2009 to 2014 developed favorably, though with decreasing magnitude over time. The adverse experience emerging on the 2016 and 2017 accident years has been driven by unfavorable attritional and large claims experience in several portfolios, although there has been an improvement from the second to third year of development in 2016, in line 2015 and prior. This category includes a range of businesses with both short-tail and medium-tail exposures. Typically, development in the second year relates to short-tail lines with development on medium-tail business being reflected at subsequent evaluations.

For the Insurance Professional category, individual accident years have both favorable and adverse development across the triangle. These developments relate to the complexity associated with claims in this class of business. In 2008, the Company strengthened its reserves for the 2007 report/accident year due to the developing subprime-credit crisis. Due to the claims-made nature of the underlying Professional policies, the subprime-credit crisis impacted the 2008 to 2012 report years and reserves were re-allocated from the 2007 report year to these later years as claims developed. The cumulative impact of the credit crisis and developing loss trends were more severe than originally expected for these years. The 2015-2017 report years have experienced adverse development primarily due to large loss activity in the International Financial Lines management liability and professional indemnity (including cyber) books and the U.S. Professional commercial excess book.

For the Insurance Casualty and Other category, individual accident years have both favorable and adverse development across the triangle. These developments relate to the complexity associated with claims in this class of business and the high level of attachment of the Company's excess policies. The 2010 accident year experienced more adverse development than other accident years due to development on the Deepwater Horizon event. The 2013 to 2015 accident years reflect adverse development due to large loss activity relating to the excess casualty portfolio and strengthening of the excess and surplus portfolio and the newly acquired Allied business. The 2016 accident year shows minimal adverse development during 2017. The 2017 accident year reflects some initial adverse development during 2018 due to large loss activity.

For the Reinsurance operations in total, while individual accident years have both favorable and adverse incremental development across the triangle, all accident years except for the 2017 and 2016 accident years developed favorably since the first evaluation. The unfavorable development on the 2017 accident year emanates to a large extent from the Property and Other Short Tail category with some contribution from the Casualty and Other Long tailed category. The modest unfavorable development on the 2016 accident year emanates from the Casualty and Other Long tailed category being partially offset by favorable development on the Property and Other Short Tailed category.

For the Reinsurance Property and Other Short Tail category, individual accident years have generally developed favorably except for accident year 2017, where the unfavorable development relates to strengthening on Hurricane Irma and Hurricane Maria being slightly offset by favorable development on Hurricane Harvey. On prior accident years, the 2011 favorable development relates to reductions on the 2011 Japan Earthquake and 2011 Thailand Floods. For accident year 2012, favorable development relates to Costa Concordia and YME Platform loss. The favorable development on the 2013 accident year relates in part to reductions on the Central European Floods, Anglo American Port loss and favorable attritional experience on the Property Treaty book. Favorable development on 2014 and 2015 is being driven by favorable attritional experience and reduction on the 2015 Tianjin Explosions. Favorable development on 2016 is being driven by favorable attritional experience across the whole book.

For the Reinsurance Casualty and Other Long Tail category, the earlier years (specifically 2013 and prior) had favorable development and the later years (2015 to 2017) had adverse development. The adverse development for the later accident

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years is mainly due to reacting to unfavorable attritional experience and strengthening our estimates for accident years 2015 to 2017 on the London General Liability, Professional books, EMEA Large Motor QS business and on the North America Casualty book. The Bermuda non-standard auto business attritional experience drove some of the deterioration on accident years 2016 and 2017. The unfavorable development on the recent accident years as explained above is partially offset by favorable attritional experience on the credit and surety book. The favorable development on the older accident years is mainly due to favorable attritional experience on the London and North America Casualty books on those years.

Total Property and Casualty

(in thousands, except for number of claims)

Incurred Losses and Allocated Loss Expenses, Net of Reinsurance

Accident Year	For the Years Ended December 31,										As of Dec 31, 2018	
	Unaudited	Unaudited	Unaudited	Unaudited	Unaudited	Unaudited	Unaudited	Unaudited	Unaudited	Unaudited	IBNR (1)	Number of Claims
	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018		
2009	\$ 4,686,161	\$ 4,690,365	\$ 4,604,308	\$ 4,623,880	\$ 4,613,761	\$ 4,616,906	\$ 4,486,853	\$ 4,454,814	\$ 4,452,803	\$ 4,450,357	\$ 195,836	N/A
2010		5,064,024	5,193,901	5,082,306	5,103,172	5,052,063	5,032,703	5,061,139	4,976,469	4,899,224	212,425	N/A
2011			6,335,074	6,288,346	6,202,156	6,074,234	6,210,121	6,172,743	6,120,240	6,046,002	339,046	N/A
2012				5,775,334	5,732,385	5,708,325	5,829,042	5,738,892	5,728,366	5,693,275	447,149	N/A
2013					5,661,586	5,664,887	5,628,254	5,527,137	5,423,106	5,427,275	524,284	N/A
2014						5,274,828	5,449,504	5,480,845	5,474,126	5,362,547	692,917	N/A
2015							5,439,759	5,577,245	5,757,026	5,775,313	914,690	N/A
2016								6,071,482	6,302,308	6,411,279	1,342,846	N/A
2017									7,968,722	8,434,085	1,929,602	N/A
2018										7,844,170	4,962,232	N/A
										<u>\$60,343,527</u>	Total	

Cumulative Paid Losses and Allocated Loss Expenses, Net of Reinsurance

Accident Year	For the Years Ended December 31,										
	Unaudited	Unaudited	Unaudited	Unaudited	Unaudited	Unaudited	Unaudited	Unaudited	Unaudited	Unaudited	
	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	
2009	\$ 650,027	\$ 1,554,868	\$ 2,224,998	\$ 2,694,524	\$ 3,161,915	\$ 3,413,251	\$ 3,600,898	\$ 3,714,638	\$ 3,787,804	\$ 3,870,544	
2010		862,050	1,895,049	2,697,459	3,202,727	3,580,093	3,912,514	4,149,224	4,292,187	4,395,626	
2011			1,270,366	2,917,279	3,717,886	4,302,335	4,806,674	5,093,987	5,287,490	5,406,782	
2012				965,440	2,279,800	3,179,775	3,840,593	4,242,685	4,590,317	4,796,701	
2013					990,372	2,237,972	3,106,667	3,681,961	4,126,247	4,431,040	
2014						970,079	2,282,147	3,129,973	3,699,430	4,086,078	
2015							979,863	2,177,738	3,218,105	3,861,547	
2016								1,213,419	2,713,034	3,762,976	
2017									1,663,553	4,547,745	
2018										1,144,874	
										<u>\$40,303,913</u>	
										All outstanding liabilities prior to 2008, net of reinsurance	2,517,421
										Liabilities for unpaid losses and loss expenses, net of reinsurance	<u>\$22,557,035</u>

Average Annual Percentage Payout of Incurred Losses 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
18%	25%	14%	10%	8%	6%	4%	3%	—%	(1)%

(1) Total IBNR Liabilities Plus Expected Development on Reported Claims

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Insurance Operations

(in thousands, except for number of claims)

Incurring Losses and Allocated Loss Expenses, Net of Reinsurance												
For the Years Ended December 31,											As of Dec 31, 2018	
Accident Year	Unaudited 2009	Unaudited 2010	Unaudited 2011	Unaudited 2012	Unaudited 2013	Unaudited 2014	Unaudited 2015	Unaudited 2016	Unaudited 2017	Unaudited 2018	IBNR (1)	Number of Claims
2009	\$ 3,523,853	\$ 3,550,602	\$ 3,509,519	\$ 3,533,426	\$ 3,534,722	\$ 3,553,847	\$ 3,422,104	\$ 3,398,045	\$ 3,399,112	\$ 3,395,927	\$ 101,789	48,933
2010		3,758,430	3,870,487	3,756,345	3,793,716	3,746,296	3,720,056	3,758,234	3,688,821	3,622,559	125,506	55,183
2011			4,080,970	4,057,411	4,074,142	3,987,208	4,092,162	4,063,336	4,016,357	3,949,418	239,324	59,477
2012				3,935,313	3,871,939	3,864,683	3,994,577	3,923,879	3,912,948	3,896,246	298,430	64,164
2013					4,008,660	4,078,767	4,054,197	3,994,400	3,914,178	3,934,499	372,714	70,488
2014						3,808,519	3,980,997	4,042,033	4,056,143	3,957,050	530,207	81,639
2015							3,909,584	4,101,392	4,277,281	4,307,794	677,468	97,226
2016								4,225,779	4,450,522	4,561,298	1,000,833	109,082
2017									4,989,091	5,299,890	1,193,133	116,081
2018										4,905,212	2,927,998	58,293
										<u>\$1,829,893</u>	Total	

Cumulative Paid Losses and Allocated Loss Expenses, Net of Reinsurance													
For the Years Ended December 31,													
Accident Year	Unaudited 2009	Unaudited 2010	Unaudited 2011	Unaudited 2012	Unaudited 2013	Unaudited 2014	Unaudited 2015	Unaudited 2016	Unaudited 2017	Unaudited 2018			
2009	\$ 471,535	\$ 1,159,884	\$ 1,692,676	\$ 2,075,762	\$ 2,467,812	\$ 2,673,018	\$ 2,828,097	\$ 2,908,489	\$ 2,960,881	\$ 3,027,452			
2010		618,434	1,403,051	2,013,750	2,412,047	2,729,091	2,962,920	3,122,428	3,230,108	3,309,752			
2011			662,640	1,647,260	2,253,263	2,696,478	3,112,122	3,344,167	3,480,592	3,558,674			
2012				647,412	1,497,388	2,114,943	2,622,729	2,934,666	3,181,610	3,332,979			
2013					669,928	1,538,120	2,180,158	2,644,080	2,986,125	3,230,114			
2014						679,901	1,623,315	2,297,254	2,724,844	3,032,608			
2015							701,540	1,586,028	2,357,913	2,863,194			
2016								874,544	1,890,182	2,644,117			
2017									1,059,979	2,759,215			
2018										734,307			
										<u>\$8,492,412</u>			
											All outstanding liabilities prior to 2008, net of reinsurance	1,009,695	
												Liabilities for unpaid losses and loss expenses, net of reinsurance	14,347,176

Average Annual Percentage Payout of Incurred Losses 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	
17%	24%	15%	11%	9%	6%	4%	3%	1%	—%	

(1) Total IBNR Liabilities Plus Expected Development on Reported Claims

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Property

(in thousands, except for number of claims)

Incurred Losses and Allocated Loss Expenses, Net of Reinsurance

Accident Year	For the Years Ended December 31,										As of Dec 31, 2018	
	Unaudited	Unaudited	Unaudited	Unaudited	Unaudited	Unaudited	Unaudited	Unaudited	Unaudited	Unaudited	IBNR (1)	Number of Claims
	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018		
2009	\$ 402,091	\$ 378,070	\$ 361,145	\$ 353,498	\$ 347,526	\$ 347,918	\$ 345,451	\$ 343,516	\$ 349,901	\$ 352,061	\$ 186	6,747
2010		602,716	616,690	587,765	570,794	564,750	572,431	569,375	569,701	556,663	10,887	7,622
2011			993,004	928,351	905,750	872,099	862,238	855,387	851,632	849,082	1,057	9,255
2012				695,590	669,371	644,590	645,567	637,087	634,187	645,173	11,259	10,235
2013					751,402	731,411	708,302	701,553	698,347	702,843	2,882	11,446
2014						713,485	748,846	737,537	737,517	716,269	17,111	14,063
2015							804,889	827,217	820,489	825,130	32,449	16,943
2016								971,313	1,091,084	1,105,151	13,509	21,791
2017									1,627,912	1,748,079	(214,697)	25,008
2018										1,489,553	436,287	10,566
										\$ 8,990,004	Total	

Cumulative Paid Losses and Allocated Loss Expenses, Net of Reinsurance

Accident Year	For the Years Ended December 31,										
	Unaudited	Unaudited	Unaudited	Unaudited	Unaudited	Unaudited	Unaudited	Unaudited	Unaudited	Unaudited	
	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	
2009	\$ 86,740	\$ 194,479	\$ 256,828	\$ 289,720	\$ 310,274	\$ 312,461	\$ 331,972	\$ 335,148	\$ 339,907	\$ 341,647	
2010		169,708	388,637	485,853	533,959	544,905	524,342	530,209	534,569	534,427	
2011			215,647	622,582	759,523	800,282	829,552	831,130	838,903	835,993	
2012				164,776	397,426	541,458	585,054	604,783	614,615	624,120	
2013					168,560	463,213	599,721	651,061	667,759	678,644	
2014						183,394	514,570	657,450	690,804	677,067	
2015							227,105	492,811	652,702	739,048	
2016								328,387	685,436	890,170	
2017									493,326	1,361,150	
2018										302,170	
										<u>\$ 6,984,436</u>	
										All outstanding liabilities prior to 2008, net of reinsurance	14,344
										Liabilities for unpaid losses and loss expenses, net of reinsurance	<u>\$ 2,019,912</u>

Average Annual Percentage Payout of Incurred Losses 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
26%	42%	16%	8%	3%	—%	1%	—%	(1)%	1%

(1) Total IBNR Liabilities Plus Expected Development on Reported Claims

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Specialty
(in thousands, except for number of claims)

Incurred Losses and Allocated Loss Expenses, Net of Reinsurance

For the Years Ended December 31,											As of Dec 31, 2018	
	Unaudited	Unaudited	Unaudited	Unaudited	Unaudited	Unaudited	Unaudited	Unaudited	Unaudited	Unaudited		
Accident Year	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	IBNR (1)	Number of Claims
2009	\$ 1,003,627	\$ 1,000,350	\$ 928,235	\$ 901,288	\$ 888,879	\$ 879,698	\$ 823,558	\$ 814,209	\$ 811,575	\$ 805,354	\$ (16,042)	18,340
2010		1,018,901	976,633	908,210	890,403	864,610	852,481	852,445	849,010	852,511	6,637	21,787
2011			992,108	989,907	951,675	915,251	929,303	923,302	909,376	900,354	17,938	22,722
2012				1,027,057	973,668	933,848	924,408	908,259	894,057	885,982	16,049	25,341
2013					956,594	997,456	959,985	960,071	950,129	952,967	16,994	28,487
2014						958,748	975,161	958,805	949,430	940,617	2,585	35,149
2015							980,738	1,039,800	1,038,746	1,024,408	40,685	44,475
2016								1,088,978	1,156,134	1,144,112	37,633	50,992
2017									1,092,368	1,172,951	130,406	54,806
2018										1,281,563	585,591	25,626
										<u>\$ 9,960,819</u>	Total	

Cumulative Paid Losses and Allocated Loss Expenses, Net of Reinsurance

For the Years Ended December 31,											
	Unaudited	Unaudited	Unaudited	Unaudited	Unaudited	Unaudited	Unaudited	Unaudited	Unaudited	Unaudited	
Accident Year	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	
2009	\$ 317,893	\$ 563,611	\$ 673,286	\$ 726,846	\$ 750,988	\$ 769,510	\$ 779,612	\$ 782,519	\$ 787,207	\$ 792,383	
2010		323,346	558,630	672,395	727,382	771,055	788,337	797,579	805,533	808,418	
2011			300,190	615,189	750,301	808,858	832,331	856,039	862,201	873,719	
2012				318,265	601,094	711,737	782,755	818,971	836,565	842,936	
2013					337,613	607,554	730,540	806,176	846,845	883,662	
2014						343,010	626,181	757,562	820,210	856,615	
2015							340,360	664,800	814,933	881,885	
2016								416,298	786,548	944,378	
2017									425,974	898,440	
2018										342,153	
										<u>\$ 8,124,589</u>	
										All outstanding liabilities prior to 2008, net of reinsurance	118,482
										Liabilities for unpaid losses and loss expenses, net of reinsurance	<u>\$ 1,954,712</u>

Average Annual Percentage Payout of Incurred Losses 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
	35%	33%	12%	7%	4%	3%	1%	1%	—%	2%

(1) Total IBNR Liabilities Plus Expected Development on Reported Claims

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Professional
(in thousands, except for number of claims)

Incurred Losses and Allocated Loss Expenses, Net of Reinsurance

For the Years Ended December 31,											As of Dec 31, 2018	
Accident Year	Unaudited	Unaudited	Unaudited	Unaudited	Unaudited	Unaudited	Unaudited	Unaudited	Unaudited	Unaudited	IBNR (1)	Number of Claims
	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018		
2009	\$ 973,416	\$ 1,041,495	\$ 1,101,414	\$ 1,166,141	\$ 1,204,992	\$ 1,213,946	\$ 1,180,166	\$ 1,175,722	\$ 1,182,474	\$ 1,194,662	\$ 34,784	4,854
2010		997,336	993,242	965,212	1,043,881	1,003,996	1,024,940	1,070,794	1,043,063	986,694	29,423	4,515
2011			976,757	969,502	1,023,881	1,039,144	1,112,667	1,121,047	1,118,573	1,081,674	91,487	4,216
2012				985,279	986,073	1,021,078	1,134,972	1,130,264	1,143,255	1,124,290	106,973	4,313
2013					974,416	972,411	949,996	928,397	852,899	881,279	148,818	4,539
2014						754,377	807,125	849,727	875,002	860,978	163,611	4,667
2015							763,269	807,864	925,335	945,076	231,329	5,320
2016								739,787	761,593	846,666	318,928	5,088
2017									840,999	869,802	513,389	4,946
2018										828,570	732,575	2,505
										<u>\$ 9,619,691</u>	Total	

Cumulative Paid Losses and Allocated Loss Expenses, Net of Reinsurance

For the Years Ended December 31,												
Accident Year	Unaudited	Unaudited	Unaudited	Unaudited	Unaudited	Unaudited	Unaudited	Unaudited	Unaudited	Unaudited		
	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018		
2009	\$ 22,447	\$ 161,736	\$ 338,227	\$ 510,450	\$ 749,548	\$ 843,281	\$ 927,483	\$ 953,784	\$ 969,784	\$ 998,074		
2010		21,931	156,700	327,579	484,098	628,092	740,505	809,238	843,647	887,463		
2011			28,770	144,985	316,757	482,899	686,650	820,206	881,781	908,061		
2012				44,595	195,812	379,738	595,225	717,499	832,553	900,045		
2013					36,670	153,291	306,628	461,271	581,038	648,865		
2014						17,059	139,707	314,089	450,362	546,484		
2015							22,561	139,662	317,598	442,565		
2016								23,539	140,746	317,815		
2017									20,780	152,595		
2018										25,091		
										<u>\$ 5,827,058</u>		
										All outstanding liabilities prior to 2008, net of reinsurance	193,680	
										Liabilities for unpaid losses and loss expenses, net of reinsurance	<u>\$ 3,986,313</u>	

Average Annual Percentage Payout of Incurred Losses 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
3%	13%	17%	15%	15%	10%	6%	3%	2%	(2)%

(1) Total IBNR Liabilities Plus Expected Development on Reported Claims

XL BERMUDA LTD
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Casualty and other
(in thousands, except for number of claims)

Incurred Losses and Allocated Loss Expenses, Net of Reinsurance												
For the Years Ended December 31,											As of Dec 31, 2018	
	Unaudited	Unaudited	Unaudited	Unaudited	Unaudited	Unaudited	Unaudited	Unaudited	Unaudited	Unaudited		
Accident Year	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	IBNR (1)	Number of Claims
2009	\$ 1,144,719	\$ 1,130,687	\$ 1,118,725	\$ 1,112,499	\$ 1,093,325	\$ 1,112,285	\$ 1,072,929	\$ 1,064,598	\$ 1,055,162	\$ 1,043,850	\$ 82,861	18,992
2010		1,139,477	1,283,922	1,295,158	1,288,638	1,312,940	1,270,204	1,265,620	1,227,047	1,226,691	78,559	21,259
2011			1,119,101	1,169,651	1,192,836	1,160,714	1,187,954	1,163,600	1,136,776	1,118,308	128,842	23,284
2012				1,227,387	1,242,827	1,265,167	1,289,630	1,248,269	1,241,449	1,240,801	164,149	24,275
2013					1,326,248	1,377,489	1,435,914	1,404,379	1,412,803	1,397,410	204,020	26,016
2014						1,381,909	1,449,865	1,495,964	1,494,194	1,439,186	346,900	27,760
2015							1,360,688	1,426,511	1,492,711	1,513,180	373,005	30,488
2016								1,425,701	1,441,711	1,465,369	630,763	31,211
2017									1,427,812	1,509,058	764,035	31,321
2018										1,305,526	1,173,545	19,596
										<u>\$13,259,379</u>	Total	

Cumulative Paid Losses and Allocated Loss Expenses, Net of Reinsurance												
For the Years Ended December 31,												
	Unaudited	Unaudited	Unaudited	Unaudited	Unaudited	Unaudited	Unaudited	Unaudited	Unaudited	Unaudited		
Accident Year	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018		
2009	\$ 44,455	\$ 240,058	\$ 424,335	\$ 548,746	\$ 657,002	\$ 747,766	\$ 789,030	\$ 837,038	\$ 863,983	\$ 895,348		
2010		103,449	299,084	527,923	666,608	785,039	909,736	985,402	1,046,359	1,079,444		
2011			118,033	264,504	426,682	604,439	763,589	836,792	897,707	940,901		
2012				119,776	303,056	482,010	659,695	793,413	897,877	965,878		
2013					127,085	314,062	543,269	725,572	890,483	1,018,943		
2014						136,438	342,857	568,153	763,468	952,442		
2015							111,514	288,755	572,680	799,696		
2016								106,320	277,452	491,754		
2017									119,899	347,030		
2018										64,893		
										<u>\$ 7,556,329</u>		
											All outstanding liabilities prior to 2008, net of reinsurance	683,189
											Liabilities for unpaid losses and loss expenses, net of reinsurance	<u>\$ 6,386,239</u>

Average Annual Percentage Payout of Incurred Losses 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
	8%	14%	16%	14%	12%	8%	5%	5%	2%	—%

(1) Total IBNR Liabilities Plus Expected Development on Reported Claims

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Reinsurance Operations

(in thousands, except for number of claims)

Incurred Losses and Allocated Loss Expenses, Net of Reinsurance

For the Years Ended December 31,											As of Dec 31, 2018	
	Unaudited	Unaudited	Unaudited	Unaudited	Unaudited	Unaudited	Unaudited	Unaudited	Unaudited	Unaudited		
Accident Year	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	IBNR (1)	Number of Claims
2009	\$ 1,162,308	\$ 1,139,763	\$ 1,094,789	\$ 1,090,454	\$ 1,079,039	\$ 1,063,059	\$ 1,064,749	\$ 1,056,769	\$ 1,053,691	\$ 1,054,430	\$ 94,047	N/A
2010		1,305,594	1,323,414	1,325,961	1,309,456	1,305,767	1,312,647	1,302,905	1,287,648	1,276,665	86,919	N/A
2011			2,254,104	2,230,935	2,128,014	2,087,026	2,117,959	2,109,407	2,103,883	2,096,584	99,722	N/A
2012				1,840,021	1,860,446	1,843,642	1,834,465	1,815,013	1,815,418	1,797,029	148,719	N/A
2013					1,652,926	1,586,120	1,574,057	1,532,737	1,508,928	1,492,776	151,570	N/A
2014						1,466,309	1,468,507	1,438,812	1,417,983	1,405,497	162,710	N/A
2015							1,530,175	1,475,853	1,479,745	1,467,519	237,222	N/A
2016								1,845,703	1,851,786	1,849,981	342,013	N/A
2017									2,979,631	3,134,195	736,469	N/A
2018										2,938,958	2,034,234	N/A
										<u>\$18,513,634</u>	Total	

Cumulative Paid Losses and Allocated Loss Expenses, Net of Reinsurance

For the Years Ended December 31,											
	Unaudited	Unaudited	Unaudited	Unaudited	Unaudited	Unaudited	Unaudited	Unaudited	Unaudited	Unaudited	
Accident Year	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	
2009	\$ 178,492	\$ 394,984	\$ 532,322	\$ 618,762	\$ 694,103	\$ 740,233	\$ 772,801	\$ 806,149	\$ 826,923	\$ 843,092	
2010		243,616	491,998	683,709	790,680	851,002	949,594	1,026,796	1,062,079	1,085,874	
2011			607,726	1,270,019	1,464,623	1,605,857	1,694,552	1,749,820	1,806,898	1,848,108	
2012				318,028	782,412	1,064,832	1,217,864	1,308,019	1,408,707	1,463,722	
2013					320,444	699,852	926,509	1,037,881	1,140,122	1,200,926	
2014						290,178	658,832	832,719	974,586	1,053,470	
2015							278,323	591,710	860,192	998,353	
2016								338,875	822,852	1,118,859	
2017									603,574	1,788,530	
2018										410,567	
										<u>\$11,811,501</u>	
										All outstanding liabilities prior to 2008, net of reinsurance	<u>1,507,726</u>
										Liabilities for unpaid losses and loss expenses, net of reinsurance	<u>\$ 8,209,859</u>

Average Annual Percentage Payout of Incurred Losses 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%	29%	12%	8%	5%	4%	3%	2%	(2)%	(2)%

(1) Total IBNR Liabilities Plus Expected Development on Reported Claims

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NOTES TO CONSOLIDATED FINANCIAL STATEMENTS
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Property and Other Short-tail Lines
(in thousands, except for number of claims)

Incurred Losses and Allocated Loss Expenses, Net of Reinsurance

For the Years Ended December 31,											As of Dec 31, 2018	
	Unaudited	Unaudited	Unaudited	Unaudited	Unaudited	Unaudited	Unaudited	Unaudited	Unaudited	Unaudited		
Accident Year	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	IBNR (1)	Number of Claims
2009	\$ 585,015	\$ 546,153	\$ 509,696	\$ 490,943	\$ 481,374	\$ 477,516	\$ 471,255	\$ 475,538	\$ 467,286	\$ 467,264	\$ —	N/A
2010		841,590	856,395	861,862	863,975	870,320	850,791	852,767	833,019	832,899	933	N/A
2011			1,760,679	1,721,981	1,637,411	1,611,164	1,615,362	1,607,343	1,599,355	1,583,720	20,303	N/A
2012				1,276,020	1,287,554	1,277,542	1,247,421	1,236,774	1,238,377	1,228,829	54,448	N/A
2013					1,097,598	1,038,633	996,003	960,102	928,010	916,106	6,814	N/A
2014						881,173	858,253	817,249	791,031	778,406	6,412	N/A
2015							888,941	833,283	840,950	803,303	57,243	N/A
2016								1,135,940	1,145,648	1,120,317	68,977	N/A
2017									1,927,419	2,044,105	204,711	N/A
2018										1,630,516	1,140,744	N/A
										<u>\$11,405,465</u>	Total	

Cumulative Paid Losses and Allocated Loss Expenses, Net of Reinsurance

For the Years Ended December 31,											
	Unaudited	Unaudited	Unaudited	Unaudited	Unaudited	Unaudited	Unaudited	Unaudited	Unaudited	Unaudited	
Accident Year	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	
2009	\$ 146,701	\$ 311,076	\$ 393,816	\$ 425,104	\$ 444,480	\$ 448,995	\$ 448,631	\$ 456,195	\$ 458,794	\$ 460,463	
2010		226,604	443,069	591,924	653,867	678,595	744,487	795,352	812,029	815,358	
2011			592,225	1,210,501	1,359,812	1,448,599	1,489,847	1,510,581	1,533,089	1,538,880	
2012				293,659	710,229	927,057	1,021,356	1,061,502	1,106,959	1,121,694	
2013					293,761	617,501	784,703	837,422	886,397	898,760	
2014						252,017	559,905	661,378	724,277	744,500	
2015							234,951	472,635	638,865	699,984	
2016								272,836	657,350	857,794	
2017									465,627	1,390,602	
2018										205,763	
										<u>\$ 8,733,798</u>	
										All outstanding liabilities prior to 2008, net of reinsurance	252,326
										Liabilities for unpaid losses and loss expenses, net of reinsurance	<u>\$ 2,923,993</u>

Average Annual Percentage Payout of Incurred Losses 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
	26%	39%	15%	8%	3%	2%	1%	3%	1%	1%

(1) Total IBNR Liabilities Plus Expected Development on Reported Claims

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NOTES TO CONSOLIDATED FINANCIAL STATEMENTS
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Casualty and Other Long-Tail Lines
(in thousands, except for number of claims)

Incurred Losses and Allocated Loss Expenses, Net of Reinsurance

Accident Year	For the Years Ended December 31,										As of Dec 31, 2018	
	Unaudited	Unaudited	Unaudited	Unaudited	Unaudited	Unaudited	Unaudited	Unaudited	Unaudited	Unaudited	IBNR (1)	Number of Claims
	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018		
2009	\$ 577,293	\$ 593,610	\$ 585,093	\$ 599,511	\$ 597,665	\$ 585,543	\$ 593,494	\$ 581,231	\$ 586,405	\$ 587,166	\$ 94,047	N/A
2010		464,004	467,019	464,099	445,481	435,447	461,856	450,138	454,629	443,766	85,986	N/A
2011			493,425	508,954	490,603	475,862	502,597	502,064	504,528	512,864	79,419	N/A
2012				564,001	572,892	566,100	587,044	578,239	577,041	568,200	94,271	N/A
2013					555,328	547,487	578,054	572,635	580,918	576,670	144,756	N/A
2014						585,136	610,254	621,563	626,952	627,091	156,298	N/A
2015							641,234	642,570	638,795	664,216	179,979	N/A
2016								709,763	706,138	729,664	273,036	N/A
2017									1,052,212	1,090,090	531,758	N/A
2018										1,308,442	893,490	N/A
										<u>\$ 7,108,169</u>	Total	

Cumulative Paid Losses and Allocated Loss Expenses, Net of Reinsurance

Accident Year	For the Years Ended December 31,										
	Unaudited	Unaudited	Unaudited	Unaudited	Unaudited	Unaudited	Unaudited	Unaudited	Unaudited	Unaudited	
	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	
2009	\$ 31,791	\$ 83,908	\$ 138,506	\$ 193,658	\$ 249,623	\$ 291,238	\$ 324,170	\$ 349,954	\$ 368,129	\$ 382,629	
2010		17,012	48,929	91,785	136,813	172,407	205,107	231,444	250,050	270,516	
2011			15,501	59,518	104,811	157,258	204,705	239,239	273,809	309,228	
2012				24,369	72,183	137,775	196,508	246,517	301,748	342,028	
2013					26,683	82,351	141,806	200,459	253,725	302,166	
2014						38,161	98,927	171,341	250,309	308,970	
2015							43,372	119,075	221,327	298,369	
2016								66,039	165,502	261,065	
2017									137,947	397,928	
2018										204,804	
										<u>\$ 3,077,703</u>	
										All outstanding liabilities prior to 2008, net of reinsurance	1,255,400
										Liabilities for unpaid losses and loss expenses, net of reinsurance	<u>\$ 5,285,866</u>

Average Annual Percentage Payout of Incurred Losses 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
9%	11%	7%	9%	7%	7%	6%	3%	3%	3%

(1) Total IBNR Liabilities Plus Expected Development on Reported Claims

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NOTES TO CONSOLIDATED FINANCIAL STATEMENTS
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Reconciliation

<i>(U.S. dollars in thousands)</i>	December 31, 2018	
Net outstanding liabilities		
Insurance Operations		
Property	\$	2,019,912
Specialty		1,954,712
Professional		3,986,313
Casualty and other		6,386,239
Reinsurance Operations		
Property and Other Short-Tail lines		2,923,993
Casualty and Other Long-Tail lines		5,285,866
Subtotal, disaggregated triangles	\$	22,557,035
Unallocated loss expenses		519,274
Discount (1)		(401,317)
Provision for uncollectible reinsurance		28,073
Other		370,228
Total net liability for unpaid losses and loss expenses		23,073,293
Reinsurance recoverable on unpaid losses		
Insurance Operations		
Property	\$	1,527,090
Specialty		777,894
Professional		1,683,241
Casualty and other		3,733,811
Reinsurance Operations		
Property and Other Short-Tail lines		1,059,605
Casualty and Other Long-Tail lines		227,300
Other		(484,944)
Total recoverable on unpaid losses and loss expenses	\$	8,523,997
Unpaid losses and loss expenses	\$	31,597,290

- (1) As noted in Note 10(c), "Losses and Loss Expenses - Loss Reserve Discounting," the Company discounts only certain workers' compensation (including long term disability) liabilities and certain bodily injury liability claims, emanating from U.K. exposures, predominantly from the U.K. motor liability portfolio.

(b) Net losses and loss expenses incurred

Net losses and loss expenses incurred for the years indicated are comprised of:

<i>(U.S. dollars in thousands)</i>	2018		2017	
Loss and loss expenses payments	\$	9,517,300	\$	8,037,317
Change in unpaid losses and loss expenses		2,549,115		3,184,307
Change in unpaid losses and loss expenses recoverable		(1,654,902)		(1,646,432)
Paid loss recoveries		(2,082,650)		(1,573,272)
Net losses and loss expenses incurred	\$	8,328,863	\$	8,001,920

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The following table presents the net (favorable) adverse prior year loss development of the Company's loss and loss expense reserves for its property and casualty operations for each of the years indicated:

<i>(U.S. dollars in thousands)</i>	2018	2017
Insurance operations	\$ 126,848	\$ (41,759)
Reinsurance operations	(12,299)	(106,011)
Total	\$ 114,549	\$ (147,770)

The significant developments in prior year loss reserve estimates for each of the years indicated within the Company's Insurance and Reinsurance operations are discussed below.

Insurance Operations

The following table summarizes the net (favorable) adverse prior year development by business group relating to the Insurance operations for the years ended December 31, 2018 and 2017:

<i>(U.S. dollars in thousands)</i>	2018	2017
Property	\$ 94,208	\$ 102,697
Specialty	13,580	(4,474)
Professional	31,504	(9,569)
Casualty and other	(12,444)	(130,413)
Total	\$ 126,848	\$ (41,759)

Net favorable prior year reserve development was \$126.8 million for the year ended December 31, 2018 for the Insurance operations. This amount differs from the implied change in ultimate losses that can be calculated from the above triangles because the triangles exclude accident years prior to 2009 as well as minor business and, as noted earlier, utilize a different approach for handling foreign exchange. The total net prior year development of \$126.8 million was driven by the following:

- For property lines, net prior year development was \$94.2 million unfavorable. This was driven by adverse catastrophe development and worse than expected large loss experience, primarily impacting the 2017 accident year.
- For specialty lines, net prior year development was \$13.6 million unfavorable. This was driven by worse than expected large loss experience reported on the 2017 accident year in marine, aerospace and specie, largely offset by better than expected attritional experience across the balance of the portfolio.
- For professional lines, net prior year development was \$31.5 million unfavorable. This was driven by strengthening in the international financial lines portfolio to reflect deteriorations in our view of ceded loss activity, and deteriorations in the miscellaneous select professional book.
- For casualty and other lines, net prior year development was \$12.4 million favorable. This was driven by better than expected loss experience reported in the 2015 and prior years for International Casualty and across all years for Global Risk Management. This was partially offset by strengthening in the Excess and Surplus portfolio to recognize changes in the composition of the business in recent years, and deteriorations in our view of the discontinued New York contractors business.

Net favorable prior year reserve development totaled \$41.8 million for the Insurance operations for the year ended December 31, 2017. Casualty benefited from release in the North America casualty portfolio primarily to reflect consistent better than expected loss experience on the mature portfolio. Additionally, the specialty and professional lines saw better than expected attritional loss experience and releases, respectively. Significant adverse attritional loss experience on the London wholesale property book led to strengthening in property, partially offsetting the favorable development.

There is no assurance that conditions and trends that have affected the development of liabilities in the past will continue. Accordingly, it may not be appropriate to extrapolate future redundancies or deficiencies based on the Company's historical results.

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Reinsurance Operations

The following table summarizes the net (favorable) adverse prior year development by line of business relating to the Reinsurance operations for the years ended December 31, 2018 and 2017:

(U.S. dollars in thousands)

	2018	2017
Property and Other Short-Tail Lines	\$ (33,784)	\$ (140,771)
Casualty and Other Long-Tail Lines	21,485	34,760
Total	\$ (12,299)	\$ (106,011)

Net favorable prior year reserve development for the year ended December 31, 2018 totaled \$12.3 million for the Reinsurance operations. This amount differs from the implied change in ultimate losses that can be calculated from the above triangles because the triangles exclude accident years prior to 2007 as well as minor business and, as noted earlier, utilize a different approach for handling foreign exchange. The total net prior year development of \$12.3 million was attributable to the following:

- Net favorable prior year development for the short-tail lines totaled \$33.8 million. Details of the significant components are as follows:
 - For property catastrophe lines, net prior year development was \$35.2 million unfavorable. This was primarily driven by deteriorations in 2017 catastrophe losses, partially offset by better than expected experience on attritional loss experience.
 - For property other lines, net prior year development was \$17.7 million favorable driven by releases of \$18.5 million from the Crop portfolio to reflect better than expected attritional loss experience. Deteriorations in 2017 catastrophe events on property facultative and treaty business were largely offset by better than expected attritional experience reported across these lines.
 - For specialty lines, net prior year development was \$51.3 million favorable. This was mainly due to favorable catastrophe development and better than expected attritional experience reported on the marine book, resulting in a reduction of \$48.0 million on this business in aggregate.
- Net unfavorable prior year development for the long-tail lines totaled \$21.5 million. Details of the significant components are as follows:
 - For casualty lines, net prior year development was \$36.6 million unfavorable driven by large loss deteriorations on older years and worse than expected experience on the 2014 underwriting year for the London professional indemnity and European motor casualty books.
 - For other lines, net prior year development was \$15.2 million favorable largely due to better than expected experience on attritional losses, mainly on the credit and surety book.

Net favorable prior year reserve development totaled \$106.0 million for the year ended December 31, 2017. The short-tail lines benefited from releases in property catastrophe, and better than expected experience on catastrophe, large and attritional losses in property other and specialty. The unfavorable development in long tail lines was primarily due to the change in the Ogden discount rate used to determine lump sum compensation for claimants in the U.K..

There is no assurance that conditions and trends that have affected the development of liabilities in the past will continue. Accordingly, it may not be appropriate to extrapolate future redundancies or deficiencies based on the Company's historical results.

(c) Loss Reserve Discounting

Except for certain workers' compensation (including long term disability) liabilities and certain bodily injury liability claims, emanating from U.K. exposures, predominantly from the U.K. motor liability portfolio, the Company does not discount its unpaid losses and loss expenses.

The Company utilizes tabular reserving for workers' compensation (including long-term disability) unpaid losses that are considered fixed and determinable, and discounts such losses using an interest rate of 3.75% in 2018 and 2017. The interest rate approximates the implied return on the market-based assets supporting the expected cash flows of the Company's liabilities. The tabular reserving methodology results in applying uniform and consistent criteria for establishing expected future indemnity and medical payments (including an explicit factor for inflation) and the use of mortality tables to determine expected payment periods. Tabular unpaid losses and loss expenses, net of reinsurance, at December 31, 2018 and 2017 on an

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undiscounted basis were \$711.3 million and \$762.8 million, respectively. The aggregate discount for the time value of money deducted to derive the liability for unpaid losses and loss expenses were \$272.8 million and \$295.8 million at December 31, 2018 and 2017, respectively.

The related discounted unpaid losses and loss expenses were \$438.5 million and \$467.0 million at December 31, 2018 and 2017, respectively. The interest accretion related to the unwind of the discounted reserves was \$19.4 million and \$19.2 million during the years ended December 31, 2018 and 2017, respectively. This interest accretion was recorded in the incurred loss line as adverse prior year development.

The Company records a specific reserve allowance for Periodical Payment Orders ("PPOs") related to bodily injury liability claims. This allowance includes the unpaid losses for claims already settled and notified as PPOs at December 31, 2018, as well as the unpaid losses for claims to be settled in the future. The future care element of the unpaid losses was discounted using an interest rate of 2% at both December 31, 2018 and 2017. Unpaid losses and loss expenses, net of reinsurance, at December 31, 2018 and 2017 on an undiscounted basis were \$279.5 million and \$269.9 million, respectively. The aggregate discount for the time value of money deducted to derive the liability for the unpaid losses and loss expenses were \$116.5 million and \$119.7 million at December 31, 2018 and 2017. After discounting the future care element, the unpaid losses and loss expenses were \$163.0 million and \$150.2 million at December 31, 2018 and 2017, respectively. The decrease in the net undiscounted unpaid losses and loss expenses between December 31, 2018 and 2017 is mainly due to foreign exchange rate movements. The interest accretion related to the unwind of the discounted reserves was \$2.2 million and \$2.8 million during the calendar years ended December 31, 2018 and 2017. This interest accretion was recorded in the incurred loss line as adverse prior year development.

(d) Discontinued Asbestos and Run-Off Environmental Related Claims

The Company's reserving process includes a continuing evaluation of the potential impact on unpaid liabilities from exposure to discontinued asbestos and run-off environmental related claims, including related loss adjustment expenses. Liabilities are established to cover both known and incurred but not reported claims. The Company's reserving and exposures to environmental liability business currently written within the Casualty underwriting division are not included in this note, which only relates to specific discontinued and/or run-off coverages that were not originally written specifically to cover environmental hazards.

The Company's exposure to discontinued asbestos and run-off environmental related claims arises from the following four sources:

- (1) Reinsurance contracts written, both on a proportional and excess basis, after 1972. The Company discontinued writing contracts with these exposures in 1985. Business written was across many different policies, each with a relatively small contract limit. The Company's reported asbestos claims relate to both traditional products and premises and operations coverage.
- (2) Winterthur - contractual liabilities assumed as part of the Company's acquisition of Winterthur International subsidiaries in 2001. Pursuant to the Sale and Purchase Agreement and related agreements, a remaining subsidiary of the Parent Seller is responsible for reimbursing the Company for all gross asbestos losses paid and incurred under these contracts. In 2006, this subsidiary was subsequently purchased by and merged into AXA, now also the ultimate parent of the Company.
- (3) During 2006, the Company acquired \$40.2 million in losses through a loss portfolio transfer contract of which \$18.3 million in losses related to asbestos and environmental claims. Given the terms of the policy, the combined aggregate limit on the total acquired reserves is \$60.0 million, not including coverage for claims handling costs over a defined period.
- (4) Contribution of Catlin - aviation insurance contracts written by Catlin in the Lloyd's market where the specific asbestos exclusion language was not implemented until 2003. Exposures only extend back to 1993 as Equitas was established to take on the Lloyd's market exposure for 1992 and prior. Exposure is due to asbestos-containing products in use by the aviation industry leading to claims against aviation manufacturers for asbestosis, mesothelioma and lung cancer.

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A reconciliation of the opening and closing unpaid losses and loss expenses related to discontinued asbestos and run-off environmental exposure claims for the years indicated is as follows:

Year ended December 31, <i>(U.S. dollars in thousands)</i>	2018	2017
Net unpaid losses and loss expenses at beginning of year	\$ 87,481	\$ 92,834
Net incurred losses and loss expenses	9,595	(175)
Less net paid losses and loss expenses	4,757	5,178
Net increase (decrease) in unpaid losses and loss expenses	\$ 4,838	\$ (5,353)
Net unpaid losses and loss expenses at end of year	92,318	87,481
Unpaid losses and loss expenses recoverable at end of year	79,978	83,305
Gross unpaid losses and loss expenses at end of year	\$ 172,296	\$ 170,786

Reserves for incurred but not reported losses, net of reinsurance, included in the above table were \$56.8 million and \$51.3 million at December 31, 2018 and 2017, respectively. Unpaid losses recoverable are net of potential uncollectible amounts.

At December 31, 2018, the Company had 2,096 open claim files for potential discontinued asbestos claims exposures and 449 open claim files for potential run-off environmental claims exposures. Approximately 38% and 37% of the open claim files are due to precautionary claim notices in 2018 and 2017, respectively. Precautionary claim notices are submitted by the ceding companies in order to preserve their right to receive coverage under the reinsurance contract. Such notices do not contain an incurred loss amount to the Company.

The development of the number of open claim files for potential discontinued asbestos and run-off environmental claims, including precautionary claims, is as follows:

	Asbestos Claims	Environmental Claims
Total number of claims outstanding at December 31, 2016	2,417	458
New claims reported in 2017	435	24
Claims resolved in 2017	(676)	(47)
Total number of claims outstanding at December 31, 2017	2,176	435
New claims reported in 2018	335	57
Claims resolved in 2018	(415)	(43)
Total number of claims outstanding at December 31, 2018	2,096	449

The Company's reserving process includes an ongoing evaluation of the potential impact on unpaid liabilities from exposure to discontinued asbestos and run-off environmental claims, including related loss adjustment expenses. Liabilities are established to cover both known and IBNR claims.

The estimation of loss and loss expense liabilities for discontinued asbestos and run-off environmental exposures is subject to much greater uncertainty than is normally associated with the establishment of liabilities for certain other exposures due to several factors, including: (i) uncertain legal interpretations and application of insurance and reinsurance coverage and liability; (ii) the lack of reliable available historical claims data as an indicator of future claims development; (iii) an uncertain political climate which may impact, among other areas, the nature and amount of costs for remediating waste sites; and (iv) the potential of insurers and reinsurers to reach agreements in order to avoid further significant legal costs. Due to the potential significance of these uncertainties, the Company believes that no meaningful range of loss and loss expense liabilities beyond recorded reserves can be established. As the Company's net unpaid loss and loss expense reserves related to discontinued asbestos and run-off environmental exposures are less than 1% of the total net reserves at December 31, 2018 and 2017, further adverse development is not expected to be material to the Company's overall net loss reserves. The Company believes it has made reasonable provisions for its discontinued asbestos and run-off environmental exposures and is unaware of any specific issues that would significantly affect its estimate of loss and loss expenses.

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11. Future Policy Benefit Reserves

Net future policy benefit reserves are comprised of the following:

As of December 31 <i>(U.S. dollars in thousands)</i>	2018	2017
Traditional Life	\$ 740,892	\$ 756,470
Annuities	2,467,388	2,854,456
Gross future policy benefit reserves	<u>\$ 3,208,280</u>	<u>\$ 3,610,926</u>
Reinsurance recoverable - GreyCastle Life Retro Arrangements	\$ (2,779,698)	\$ (3,191,584)
Reinsurance recoverable - U.S. Term Life Retro Arrangements	\$ (217,732)	\$ (242,762)
Reinsurance recoverable - Other life retrocessions	\$ (10,035)	\$ (8,321)
Net future policy benefit reserves	<u><u>\$ 200,815</u></u>	<u><u>\$ 168,259</u></u>

The Company entered into long duration contracts that subject the Company to mortality and morbidity risks and that were accounted for as life premiums earned. Future policy benefit reserves were established using appropriate assumptions for investment yields, mortality, and expenses, including a provision for adverse deviation. The average interest rate used for the determination of the future policy benefits for these contracts was 4.0% at December 31, 2018 and 2017.

Under the terms of the sale of the life reinsurance subsidiary to GreyCastle in 2014, the Company has reinsured \$2.8 billion and \$3.2 billion at December 31, 2018 and 2017 respectively, of its future policy benefit reserves under the GreyCastle Life Retro Arrangements. The Company continues to own, on a funds withheld basis, assets supporting the GreyCastle Life Retro Arrangements consisting of cash, fixed maturity securities and accrued interest. Based upon the contractual right of offset, the funds withheld liability owing to GCLR is recorded net of future policy benefit reserves recoverable, and is included within "Funds withheld on GreyCastle life retrocession arrangements (net of future policy benefit reserves recoverable)" on the Consolidated Balance Sheets, and is comprised of the following at December 31, 2018 and 2017:

<i>(U.S. dollars in thousands)</i>	2018	2017
Assets held on a funds withheld basis relating to the GreyCastle Life Retro Arrangements	\$ 3,482,845	\$ 4,190,803
Reinsurance recoverable from GCLR	(2,779,698)	(3,191,584)
Funds withheld on GreyCastle life retrocession arrangements (net of future policy benefit reserves recoverable)	<u><u>\$ 703,147</u></u>	<u><u>\$ 999,219</u></u>

The Company has also reinsured an additional \$217.7 million and \$242.8 million at December 31, 2018 and 2017, respectively, of its U.S. Term Life future policy benefit reserves ("U.S. Term Life Retro Arrangements"). The Company continues to own, on a funds withheld basis, assets supporting the U.S. Term Life Retro Arrangements. Based upon the contractual right of offset, the funds withheld liability is recorded net of future policy benefit reserves recoverable, and is included within "Reinsurance balances payable" on the Consolidated Balance Sheets.

12. Reinsurance

The Company utilizes reinsurance and retrocession agreements principally to increase aggregate capacity and to reduce the risk of loss on business assumed. The Company's reinsurance and retrocession agreements provide for recovery of a portion of losses and loss expenses from reinsurers, and reinsurance recoverables are recorded as assets. The purchase of reinsurance does not relieve the Company of its obligation to policyholders. Under its reinsurance security policy, the Company seeks to cede business to reinsurers generally with a financial strength rating of "A" or better. The Company considers reinsurers that are not rated or do not fall within the above rating categories and may grant exceptions to the Company's general policy on a case-by-case basis.

The effect of reinsurance and retrocessional activity on premiums written and earned from property and casualty operations is shown below:

<i>(U.S. dollars in thousands)</i>	Premiums Written Year Ended December 31,		Premiums Earned Year Ended December 31,	
	2018	2017	2018	2017
Direct	\$ 9,895,391	\$ 8,965,259	\$ 9,395,126	\$ 9,078,575
Assumed	6,155,563	5,787,313	5,939,847	4,903,909
Ceded	(4,971,373)	(4,084,148)	(4,728,566)	(3,658,206)
Net	<u><u>\$ 11,079,581</u></u>	<u><u>\$ 10,668,424</u></u>	<u><u>\$ 10,606,407</u></u>	<u><u>\$ 10,324,278</u></u>

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The Company recorded reinsurance recoveries on losses and loss expenses incurred of \$3.7 billion and \$3.2 billion for the years ended December 31, 2018 and 2017, respectively.

The following table presents a summary of total reinsurance assets for the years ended December 31, 2018 and 2017:

<i>(U.S. dollars in thousands)</i>	2018	2017
Unpaid losses and loss expenses recoverable - P&C Operations	\$ 8,523,998	\$ 7,239,446
Unpaid losses and loss expenses recoverable - Corporate and Other	10,035	8,277
Total unpaid losses and loss expenses recoverable	8,534,033	7,247,723
Reinsurance balances receivable	1,325,709	930,114
Ceded unearned premiums	2,348,869	2,198,217
Total reinsurance assets	\$ 12,208,611	\$ 10,376,054

The table above excludes a combined \$2.8 billion and \$0.2 billion of the Company's future policy benefit reserve recoverables under the GreyCastle Life Retro Arrangements and U.S. Term Life Retro Arrangements, as defined in Note 11, "Future Policy Benefit Reserves," respectively, and are also excluded from the remainder of this disclosure.

Reinsurance assets include amounts recoverable from reinsurers on both paid and unpaid losses and loss expenses which are contractual rights subject to credit risk. Amounts recoverable on unpaid losses and loss expenses will not be due for collection until sometime in the future. Economic conditions and operational performance of a particular reinsurer may impact its ability to fully meet these obligations. As such, the collectibility of such amounts requires significant estimation by the Company.

The provision for uncollectible reinsurance on unpaid losses and loss expenses recoverable is established principally based on an analysis of reinsurer credit quality, using default factors derived from reinsurer financial strength ratings. This analysis contemplates collateral in place, which is generally limited to assets held in trust, letters of credit and funds held by the Company with the same legal entity for which the Company believes there is a right of offset. The Company is the beneficiary of letters of credit, trust accounts and funds withheld in the aggregate amount of \$8.5 billion and \$6.7 billion at December 31, 2018 and 2017, respectively, collateralizing reinsurance recoverables with respect to certain reinsurers.

The Company uses an aging analysis to estimate uncollectible reinsurance balances receivable relating to paid losses in addition to recording allowances relating to any specific balances with known collectibility issues, irrespective of aging. The balances are aged from the date the expected recovery was billed to the reinsurer. Provisions are applied at specified percentages of the outstanding balances based upon the aging profile. Allowances otherwise required as a result of the aging process may not be recorded to the extent that specific facts and circumstances exist that lead management to believe that amounts will ultimately be collectible.

The following table presents a summary of the Company's allowance for uncollectible reinsurance at December 31, 2018 and 2017:

<i>(U.S. dollars in thousands)</i>	2018	2017
Allowance relating to unpaid losses and loss expenses recoverable	\$ 35,938	\$ 41,103
Allowance relating to reinsurance balances receivable	26,062	22,733
Total allowance for uncollectible reinsurance	\$ 62,000	\$ 63,836

At December 31, 2018 and 2017, approximately 95.5% and 95.6%, respectively, of the total reinsurance assets, net of collateral held, was due from reinsurers with a financial strength rating of "A" or better. The following table sets forth the ratings profile of the Company's reinsurers at December 31, 2018:

Reinsurer Financial Strength Rating	% of Total
AAA	0.1%
AA	31.0%
A	64.4%
BBB	0.3%
BB and below	0.6%
Captives	3.6%
Not Rated	—%
Total	100.0%

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The following is an analysis of the total reinsurance assets, net of collateral held, at December 31, 2018, by reinsurers owing 3% or more of such total:

Name of Reinsurer	Reinsurer Financial Strength Rating	% of Total
Munich Reinsurance Co.	AA-/Stable	12%
Lloyd's Syndicates	A+/Negative	7.9%
Arch Reinsurance Company	A+/Stable	5.6%
Endurance Assurance Corporation	A+/Stable	4.3%
Transatlantic Reinsurance Company	A+/Stable	4.2%
AXIS Reinsurance Co.	A+/Stable	4.0%
Everest Reinsurance (Bermuda) Ltd.	A+/Stable	3.8%
Swiss Reinsurance Co.	AA-/Stable	3.8%
Hannover Rueck SE	AA-/Stable	3.5%
Renaissance Reinsurance U.S. Inc.	A+/Negative	3.4%

13. Deposit Liabilities

The Company has entered into certain insurance and reinsurance policies that transfer insufficient risk under GAAP to be accounted for as insurance or reinsurance transactions and are recognized as deposits. These structured P&C agreements have been recorded as deposit liabilities and are initially matched by an equivalent amount of investments. The Company has investment risk related to its ability to generate sufficient investment income to enable the total invested assets to cover the payment of the ultimate liability. Each deposit liability accrues at a rate equal to the internal rate of return of the payment receipts and obligations due during the life of the agreement. Where the timing and/or amount of future payments are uncertain, cash flows reflecting the Company's actuarially determined best estimates are utilized. Deposit liabilities are initially recorded at an amount equal to the assets received.

At December 31, 2018 and 2017, total deposit liabilities were \$886.4 million and \$1.0 billion, respectively. For the years ended December 31, 2018 and 2017 interest expense of \$29.5 million and \$25.3 million, respectively, was recorded related to the accretion of deposit liabilities.

14. Financing Arrangements

(a) Letter of Credit ("LOC") Facilities and Other Sources of Collateral

The Company has several credit facilities provided on both syndicated and bilateral bases from commercial banks. As described in more detail below, the Company may utilize the full capacity of these credit facilities to issue LOC in support of non-admitted insurance and reinsurance operations in the U.S. and to meet capital requirements at Lloyd's. Alternatively, under certain of the credit facilities, the Company instead may elect to utilize a stated portion of such facilities' capacity for revolving loans to support other operating or financing needs, which would reduce the amount available for LOC. The Company and several of its wholly-owned subsidiaries provide guarantees, on a joint and several basis, for obligations of the Company under certain of these facilities.

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The following table presents the Company's ten and nine unsecured LOC facilities and revolving credit facilities at December 31, 2018 and 2017, respectively:

(U.S. dollars in thousands)

Facility Name:	December 31, 2018		December 31, 2017	
	Commitment	In Use/ Outstanding	Commitment	In Use/ Outstanding
2016 Credit Agricole Facility I	125,000	125,000	125,000	125,000
2016 Credit Agricole Facility II	125,000	125,000	125,000	125,000
2017 Commonwealth Bank Facility	215,000	215,000	215,000	215,000
2017 Credit Suisse Facility	100,000	100,000	100,000	100,000
FAL Facility I	150,000	150,000	125,000	125,000
FAL Facility II	150,000	150,000	125,000	125,000
FAL Facility III	150,000	150,000	125,000	125,000
FAL Facility IV	150,000	150,000	125,000	125,000
Syndicated Unsecured Facility	750,000	82,545	750,000	2,000
2017 Commerzbank Facility	100,000	100,000	100,000	100,000
	\$ 2,015,000	\$ 1,347,545	\$ 1,915,000	\$ 1,167,000
Facilities collateralized by certain investment assets	1,581,851	1,579,045	1,477,986	1,382,226
Total LOC facilities	\$ 3,596,851	\$ 2,926,590	\$ 3,392,986	\$ 2,549,226

Percentage of facilities collateralized by certain investment assets	54.0%	54.2%
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Certain credit facilities permit the Company to utilize up to \$750.0 million as of December 31, 2018 and 2017, for revolving loans to support general operating and financing needs. At December 31, 2018 and 2017, \$82.5 million and \$2.0 million, respectively, were utilized under these facilities to issue letters of credit, leaving \$667.5 million and \$748.0 million, respectively, available to support other operating and financing needs.

Funds at Lloyd's

In November 2015, the Company entered into four bilateral unsecured credit agreements, each providing for \$125 million of letters of credit for Funds at Lloyd's purposes (FAL Facility I, FAL Facility II, FAL Facility III, and FAL Facility IV, collectively the "FAL Facilities") for an aggregate amount of \$500 million. Each of the FAL Facilities expires in 2019. The FAL Facilities replaced four unsecured bilateral facilities available for utilization by Catlin Insurance Company Ltd. ("Catlin-Bermuda") for Funds at Lloyd's purposes that were terminated in November 2015. These facilities were each increased to \$150 million during 2018.

Syndicated Facilities

In August, 2016, the Company entered into agreements with a banking syndicate to provide: (a) a secured credit facility that provides for the issuance of letters of credit up to \$750 million (the "Secured Syndicated Facility"), and (b) an unsecured credit facility that provides for the issuance of letters of credit and revolving credit loans up to \$750 million (the "Unsecured Syndicated Facility", and together with the Secured Syndicated Facility, the "Syndicated Facilities"). The Company has the option to increase the maximum amount of letters of credit available under the facilities by \$500 million in aggregate across the facilities.

In connection with the Syndicated Facilities, the Company's previous syndicated credit agreements originally entered into in November 2013, as well as certain related security arrangements, were terminated. The commitments under the Syndicated Facilities are available until, the earlier of (i) August 5, 2021 (unless extended by the parties), and (ii) the date of termination in whole of the commitments upon an optional termination or reduction of the commitments by the account parties or upon the occurrence of certain events of default.

The availability of letters of credit under the Secured Syndicated Facility is subject to a borrowing base requirement, determined on the basis of specified percentages of the face value of eligible categories of assets varying by type of collateral. In the event that such credit support is insufficient, the Company could be required to provide alternative security to cedants. This could take the form of insurance trusts supported by the investment portfolio or funds withheld (amounts retained by ceding companies to collateralize loss or premium reserves) using the Company's cash resources or combinations thereof. The

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face amount of letters of credit required is driven by, among other things, loss development of existing reserves, the payment pattern of such reserves, the expansion of business written by the Company and the loss experience of such business.

Credit Agricole Facilities

In November and December of 2016, we entered into two credit agreements with Credit Agricole Corporate and Investment Bank ("Credit Agricole Facility I" and "Credit Agricole Facility II," respectively, and collectively, the "Credit Agricole Facilities"). Each credit agreement provides for the issuance of letters of credit in an amount up to \$125 million. The commitments under the Credit Agricole Facilities expire on, and such facilities are available until, the earlier of (i) December 15, 2019, provided that, if neither the Company nor the lender provides notice to the other not more than 90 days, but at least 30 days, prior to such date, the commitment termination date will be extended to December 15, 2020, and (ii) the date of termination in whole of the commitments upon an optional termination or reduction of the commitments by the account parties or upon the occurrence of certain events of default. These facilities were terminated in 2019.

Commonwealth Bank Facility

On June 19, 2017, the Company entered into a credit agreement with Commonwealth Bank of Australia, as administrative agent and issuing lender ("2017 Commonwealth Bank Facility"). The capacity available under this standby letter of credit is \$215 million. The commitments under the 2017 Commonwealth Bank Facility expire on, and such credit facility is available until, the earlier of (i) September 15, 2020 and (ii) the date of termination in whole of the commitment upon an optional termination or reduction of the commitment by the account party or upon the occurrence of certain events of default. This facility was terminated in 2019.

Credit Suisse Bank Facility

On September 15, 2017, the Company entered into a credit agreement with Credit Suisse Bank, as administrative agent and issuing lender ("2017 Credit Suisse Facility"). The capacity available under this standby letter of credit is \$100 million. The commitments under the 2017 Credit Suisse Facility expire on, and such credit facility is available until, the earlier of (i) June 19, 2020 and (ii) the date of termination in whole of the commitment upon an optional termination or reduction of the commitment by the account party or upon the occurrence of certain events of default. This facility was terminated in 2019.

Commerzbank Bank Facility

On September 15, 2017, the Company entered into a credit agreement with Commerzbank AG, as administrative agent and issuing lender ("2017 Commerzbank Facility"). The capacity available under this standby letter of credit is \$100 million. The commitments under the 2017 Commerzbank Facility expire on, and such credit facility is available until, the earlier of (i) September 15, 2022 and (ii) the date of termination in whole of the commitment upon an optional termination or reduction of the commitment by the account party or upon the occurrence of certain events of default.

Insurance Trusts and other matters

In addition to letters of credit, the Company has established insurance trusts in the U.S. that provide cedants with statutory relief required under state insurance regulation in the U.S. It is anticipated that the commercial facilities may be renewed on expiry but such renewals are subject to the availability of credit from banks utilized by the Company and may be renewed with materially different terms and conditions. In the event that such credit support is insufficient, the Company could be required to provide alternative security to cedants. This could take the form of additional insurance trusts supported by the Company's investment portfolio or funds withheld using the Company's cash resources. The value of letters of credit required is driven by, among other things, loss development of existing reserves, the payment pattern of such reserves, the expansion of business written by the Company and the loss experience of such business.

The majority of the Company's bank facilities, indentures and other documents relating to the Company's outstanding indebtedness (collectively, the "Company's Debt Documents"), which are described above, contain cross acceleration or cross default provisions to each other and the Company's Debt Documents contain affirmative and negative covenants as well as certain customary events of default. These covenants provide for, among other things, a maximum ratio of total consolidated debt plus consolidated net worth. Generally, each of the Company's Debt Documents provide for an event of default in the event of bankruptcy, insolvency or reorganization of the Company, and the majority of the Company's bank facilities provide an event of default if there is a change of control in the Company.

Given that many of the Company's Debt Documents contain cross acceleration or cross default provisions, a default by one of these subsidiaries may result in all holders declaring their debt due and payable and accelerating all debt due under those

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documents. If this were to occur, the Company may not have funds sufficient at that time to repay any or all of such indebtedness.

15. Related Party Transactions

(a) Investment Manager Affiliates

At December 31, 2018 and 2017, the Company owned minority stakes in two and three independent investment management companies ("Investment Manager Affiliates"), respectively, that are managing client capital and seeking growth opportunities. The Company also invests in certain of the funds and limited partnerships and other legal entities managed by these affiliates, and through these funds and partnerships pays management fees and in some instances performance fees to the Company's Investment Manager Affiliates. In addition, at December 31, 2018 and 2017, the Company owned a minority stake in an independent firm, that provides technology and other services to alternative asset managers and allocators. The Company's interest in this enterprise is reported as an Investment Manager Affiliate, and the Company pays fees to this Investment Manager Affiliate, in exchange for it providing its services to the Company. Investment Manager Affiliate results are reported in the Consolidated Statements of Income as "Income (loss) from operating affiliates." See Note 5, "Investments in Affiliates," included herein, for further information.

(b) Assumed Reinsurance Contracts

In the normal course of business, the Company enters into assumed reinsurance contracts with certain of its insurance affiliates, or their subsidiaries. During the years ended December 31, 2018 and 2017, these contracts resulted in reported net premiums, reported net losses and reported net acquisition costs with these affiliates, or their subsidiaries, which are included within the Consolidated Statements of Income as summarized below.

<i>(U.S. dollars in thousands)</i>	2018	2017
Reported net premiums written	\$ 148,472	\$ 128,148
Reported net losses incurred	\$ 94,580	\$ 97,759
Reported net acquisition costs incurred	\$ 59,518	\$ 51,917

(c) New Ocean

Commencing in 2014, several of the Company's wholly-owned subsidiaries retroceded assumed reinsurance business to special purpose reinsurers that receive capital from funds managed by the Company's subsidiary, New Ocean Capital Management Ltd ("New Ocean Management") a Bermuda exempted company, as, discussed in Note 16, "Variable Interest Entities." Underwriting administration services are provided to the special purpose reinsurers by other subsidiaries of the Company under service fee agreements, while investment advisory services are provided by New Ocean. During the years ended December 31, 2018 and 2017, ceded premiums earned, ceded losses and loss expenses incurred, ceding commission income, and other fee income related to these retrocessional contracts were not material to the Company.

(d) XL Innovate

The Company's wholly-owned subsidiary XL Innovate Fund, LP ("XL Innovate") is a venture capital initiative with a strategic focus on developing new capabilities in the insurance sector. XL Innovate primarily seeks investments in equity positions of entities that provide new market opportunities for the Company throughout the world, striving to create partnerships outside of the traditional underwriting space to find ways to underwrite currently uninsured risks.

The family trust of an employee of the Company owns 5.21% non-controlling equity interest in XL Innovate, while the employee serves as a member of the board of directors of XL Innovate, and maintains management responsibility over its operations. The underlying investments held by XL Innovate are reflected in the Company's Consolidated Financial Statements in accordance with the Accounting Policies provided in Note 1, "Significant Accounting Policies," based on the Company's level of investment in, and control over, such entities. Aside from investments made where the employee's family trust maintains non-controlling interest, there were no other material transactions between the Company and this employee for the years ended December 31, 2018 and 2017.

In addition, in the normal course of business, the Company enters into assumed reinsurance contracts with one of the insurance entities in which XL Innovate holds an investment. The underwriting results associated with these contracts are included in the table in section (b) of this Note above.

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(e) AXA

As described in Note 3 "Acquisition by AXA", on September 12, 2018, the Company was acquired by, and became a wholly-owned subsidiary of AXA, a French holding company with its own global insurance operations. In the normal course of business, the Company enters into both life and property & casualty assumed and ceded contracts which include various subsidiaries and affiliates of AXA as other parties. During the period from September 12, 2018 to December 31, 2018, these contracts resulted in intergroup net premiums, net losses and net acquisition costs with the AXA entities, which are included in the Consolidated Statements of Income as summarized below.

<i>(U.S. dollars in thousands)</i>	2018
P&C premiums earned	\$ 11,241
P&C net losses incurred	\$ 4,600
P&C net acquisition costs	\$ 1,516

In addition, as of December 31, 2018 under these same contracts, the Company held intergroup net premiums receivable, net unpaid losses and loss expense reserves, net unearned premium reserves, and net future policy benefit reserves with the AXA entities, which are included in the Consolidated Balance Sheets as summarized below.

<i>(U.S. dollars in thousands)</i>	2018
P&C premiums receivable	\$ 18,498
P&C net unearned premium reserves	\$ 1,513
P&C net loss and unpaid loss expense reserves	\$ 100,752
Life net future policy benefit reserves	\$ 85,815

16. Variable Interest Entities

At times, the Company has utilized VIEs both indirectly and directly in the ordinary course of the Company's business. Within its investment portfolio, the Company has holdings in hedge funds, private equity entities and other investment vehicles. A number of these vehicles are considered VIEs based on their legal form and the generally passive role of their investors. As the Company lacks the ability to control the activities that most significantly impact the economic performance of these VIEs, the Company is not considered the primary beneficiary and does not consolidate these entities. The activities of the entities are generally limited to holding investments. The exposure to loss from these investments is limited to the carrying value of the investments at the balance sheet date.

In 2013, the Company, along with other investors, formed New Ocean to act as an investment manager that focuses on providing third-party investors access to insurance-linked securities and other insurance and reinsurance capital markets products through the funds it manages, as discussed in Note 15 "Related Party Transactions". During the third quarter of 2018, the Company acquired all remaining ownership interests in New Ocean Management, and it became a wholly-owned subsidiary of the Company. None of the assets, liabilities, revenues, or net income of New Ocean were material to the Company during the period from January 1, 2017 until it became a wholly-owned subsidiary. The equity interests attributable to third party investors in New Ocean recorded in the Company's Consolidated Balance Sheets as "Non-controlling interest in equity of consolidated subsidiaries" was \$0.5 million at December 31, 2017.

After the establishment of New Ocean in 2013, the Company, along with other investors, formed a new Bermuda-based company, New Ocean Focus Cat Fund Ltd. ("New Ocean FCFL"), which is considered a VIE under GAAP. During the second quarter of 2014, the company formed another Bermuda-based investment company, New Ocean Market Value Cat Funds, Ltd. ("New Ocean MVCFL"), which is also considered a VIE under GAAP.

New Ocean FCFL is primarily invested in business generated by a special purpose Bermuda reinsurer, Vector Reinsurance Ltd ("Vector Re"), which was formed by the Company for the purpose of underwriting collateralized excess-of-loss reinsurance with a focus on global property catastrophe risks. New Ocean MVCFL primarily invests in insurance-linked securities, with a focus on catastrophe bonds, but also maintains an investment in Vector Re. Most of Vector Re's underwriting activity relates to reinsurance business assumed from the Company's insurance subsidiaries. Underwriting administration and claims services are

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provided to Vector Re by the Company under service fee contracts, while investment advisory services are provided by New Ocean Management.

In the first quarter of 2018, MVCFL invested in the Segregated Cell 9 segregated account of New Ocean Capital Reinsurance Ltd (“NOCR Cell 9”) a newly formed segregated account within New Ocean Capital Reinsurance Ltd, a Bermuda segregated accounts company. Similar to Vector Re, NOCR Cell 9 also underwrites business with a focus on global property catastrophe risks, primarily business assumed from the Company's (re)insurance subsidiaries.

The Company currently holds a controlling financial interest in New Ocean FCFL, New Ocean MVCFL, Vector Re, and, through New Ocean MVCFL, NOCR Cell 9. Accordingly, the total net assets of these VIE's are included in the Consolidated Financial Statements of the Company as noted below. The Company's shares of revenue and net income in these VIEs were not material to the Company for the years ended December 31, 2018 and 2017. All inter-company transactions between the Company's entities have been eliminated in consolidation.

In the first quarter of 2019, the Company, made a strategic decision to cease ceding business to Vector Re and NOCR Cell 9. As a result, New Ocean FCFL, New Ocean MVCFL, Vector Re and NOCR Cell 9 are expected to begin winding down operations and go into run-off.

<i>(U.S. dollars in thousands)</i>	December 31, 2018	December 31, 2017
Total net assets	\$ 123,971	\$ 242,605
Non-controlling interest	23,584	134,139
Total net assets attributable to XLB	\$ 100,387	\$ 108,466

17. Retirement Plans

The Company provides pension benefits to eligible employees through various defined contribution and defined benefit retirement plans sponsored by the Company, which vary for each subsidiary. Plan assets are invested principally in equity securities and fixed maturities.

(a) Defined contribution plans

The Company has qualified defined contribution plans that are managed externally and to which employees and the Company contribute a certain percentage of the employee's pensionable salary each month. The Company's contribution generally vests after an employee has been with the Company for five years. The Company's expenses for its qualified contributory defined contribution retirement plans were \$82.7 million and \$72.2 million at December 31, 2018 and 2017, respectively.

(b) Defined benefit plans

The Company maintains defined benefit plans that cover certain employees as follows:

U.S. Plan

A qualified non-contributory defined benefit pension plan exists to cover a number of U.S. employees. The plan was curtailed in 2002 and was closed to new entrants at that time. Under the terms of the curtailment, existing plan participants were no longer entitled to earn additional defined benefits for future services performed after the curtailment date; however, accrued benefits are eligible for annual cost-of-living increases. This plan also includes a non-qualified supplemental defined benefit plan designed to compensate individuals to the extent that their benefits under the Company's qualified plan are curtailed due to IRS Code limitations. Benefits are based on years of service and compensation, as defined in the plan, during the highest consecutive three years of the employee's last ten years of employment.

In addition, pursuant to agreements entered into by the Company, certain former employees have received benefit type guarantees, not formally a part of any established plan. The Company's liabilities for these benefits are included in the quantitative disclosures below.

U.K. Plans

A contributory defined benefit pension plan exists in the U.K., but has been closed to new entrants since 1996. Benefits are based on length of service and compensation as defined in the trust deed and rules.

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In connection with the Contribution of Catlin, the Company assumed additional assets and liabilities associated with a further U.K. defined benefit plan within Catlin. This plan has been closed to new members since 1993. The current membership consists only of pensioners and deferred members. Benefits are based on length of service and compensation.

Other European Plans

Certain contributory defined benefit pension plans exist in Germany which are closed to new entrants. Benefits are generally based on length of service and compensation defined in the related agreements.

Other Plans

The Company also acquired certain defined benefit pension liabilities with the acquisition of XL GAPS in 2007. The related balances are not included in the quantitative disclosures below as the liabilities are insured under an annuity type contract.

Funded Status - All Plans

The projected benefit obligation of the Company's retirement plans at December 31, 2018 and 2017 are \$116.0 million and \$124.4 million, respectively, while the fair value in plan assets at December 31, 2018 and 2017 are \$77.9 million and \$85.8 million, respectively.

The funded status of all the Company's retirement plans at December 31, 2018 and 2017 are \$(38.1) million and \$(38.6) million, respectively, resulting in an accrued pension liability.

The components of the net benefit cost for the years ended December 31, 2018 and 2017 are \$1.9 million and \$3.6 million, respectively.

Assumptions - All Plans

Several assumptions and statistical variables are used in the models to calculate the expenses and liability related to the plans. The Company, in consultation with its actuaries, determines assumptions about the discount rate, the expected rate of return on plan assets and the rate of compensation increase. The table below includes disclosure of these rates on a weighted - average basis, for the years ended December 31, 2018 and 2017 as indicated:

	2018			2017		
	U.S. Plans	U.K. Plans	Other European Plans	U.S. Plans	U.K. Plans	Other European Plans
Net Benefit Cost – Weighted-average assumptions						
Discount rate	4.20%	2.76%	2.08%	4.04%	2.56%	2.00%
Expected long-term rate of return on plan assets	6.00%	2.77%	N/A	6.00%	2.57%	N/A
Rate of compensation increase	N/A	2.01%	2.50%	N/A	3.51%	2.50%
Benefit Obligation – Weighted-average assumptions						
Discount rate	4.22%	2.76%	2.08%	3.49%	2.56%	2.00%
Rate of compensation increase	N/A	2.01%	2.50%	N/A	3.51%	2.50%

The expected long-term rate of return assumption is determined by adding expected inflation to the expected long-term real rates of various asset classes taking into account expected volatility and correlation between the various asset classes.

Plan Assets - All Plans

The fair value of the U.S. Plan assets at December 31, 2018 and 2017 was \$39.9 million and \$42.7 million, respectively. As the investments of the retirement plan consist of one publicly-traded long term bond mutual fund and one publicly-traded global equity mutual fund, they fall within Level 1 in the fair value hierarchy. The inputs and methodologies used in determining the fair value of these assets are consistent with those used to measure the Company's assets as set out in Note 8, "Fair Value Measurements."

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The U.K. pension plan assets, including those acquired as part of the Contribution of Catlin, are held in a separate trustee administered fund to meet long term liabilities to past and present employees. The table below shows the composition of the plans' assets and the fair value of each major category of plan assets at December 31, 2018 and 2017, as well as the potential returns of the different asset classes. The totals of the asset values held in various externally managed portfolios are provided by third party pricing vendors. There is no significant concentration of risk within plan assets. The assets in the plans and the expected rates of return were as follows:

<i>(U.S. dollars in thousands, except percentages)</i>	Expected Return on Assets for 2018	Weighted Value at December 31, 2018	Expected Return on Assets for 2017	Weighted Value at December 31, 2017
Equities and growth funds	5.6%	\$ 9,559	5.6%	\$ 11,035
Gilts	1.8%	14,091	1.9%	15,785
Corporate bonds	2.8%	14,191	2.6%	16,021
Other (cash)	0.6%	201	0.5%	320
Total market fair value of assets		\$ 38,042		\$ 43,161

As the remaining other European plans are unfunded, they held no plan assets at December 31, 2018 and 2017.

18. Commitments and Contingencies

(a) Concentrations of Credit Risk

The creditworthiness of any counterparty is evaluated by the Company, taking into account credit ratings assigned by rating agencies. The credit approval process involves an assessment of factors including, among others, the counterparty and country and industry credit exposure limits. Collateral may be required, at the discretion of the Company, on certain transactions based on the creditworthiness of the counterparty.

The areas where significant concentrations of credit risk may exist include total reinsurance assets as noted in Note 12, "Reinsurance," and in the investment fixed income portfolio.

Reinsurance Assets

The Company's reinsurance assets result from reinsurance arrangements in the course of its operations. A credit exposure exists with respect to reinsurance assets as they may be uncollectible. The Company manages its credit risk in its reinsurance relationships by transacting with reinsurers that it considers financially sound, and if necessary, the Company may hold collateral in the form of funds, trust accounts and/or irrevocable letters of credit. This collateral can be drawn on for amounts that remain unpaid beyond specified time periods on an individual reinsurer basis.

Fixed Income Portfolio

The Company did not have an aggregate direct investment in any single corporate issuer in excess of 5% of the Company's shareholders' equity at December 31, 2018 and 2017. Corporate issuers represent only direct exposure to fixed maturities and short-term investments of the parent issuer and its subsidiaries. These exposures exclude asset and mortgage backed securities that were issued, sponsored or serviced by the parent and government-guaranteed issues, but do include covered bonds.

Broker credit risk

In addition, the Company underwrites a significant amount of its insurance and reinsurance property and casualty business through brokers and a credit risk exists should any of these brokers be unable to fulfill their contractual obligations with respect to the payments of insurance and reinsurance balances to the Company. During the two years ended December 31, 2018 and 2017, P&C gross written premiums generated from or placed by the below companies individually accounted for more than 10% of the Company's consolidated gross written premiums from P&C operations, as follows:

(Percentage of consolidated gross written premiums from P&C operations)	2018	2017
Marsh & McLennan Companies	21%	18%
AON Corporation and subsidiaries	17%	17%
Willis Group and subsidiaries	10%	10%

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These brokers are large, well established companies and there are no indications that any of them are financially troubled. No other broker and no one insured or reinsured accounted for more than 10% of gross premiums written from P&C operations in any of the two years ended December 31, 2018 and 2017.

(b) Other Investments

The Company has committed to invest in certain private equity and private credit limited partnerships, limited liability companies or similar structures. At December 31, 2018, the Company had unfunded commitments with these entities totaling \$63.8 million over a weighted average period of 4.5 years.

(c) Investments in Affiliates

The Company has committed to invest in certain private equity and private credit limited partnerships, limited liability companies or similar structures where it accounts for its holdings in these structures under the equity method. At December 31, 2018, the Company had unfunded commitments, with these entities totaling to \$228.7 million over a weighted average period of 4.5 years.

(d) Properties

The Company rents space for certain of its offices under leases that expire through 2031. Total rent expense under operating leases for the years ended December 31, 2018 and 2017 was approximately \$72.9 million and \$76.3 million, respectively. Future minimum rental commitments under existing operating leases are expected to be as follows:

Year Ended December 31,
(U.S. dollars in thousands)

2019	\$	70,508
2020		59,735
2021		54,299
2022		47,643
2023		31,939
2024 - 2031		46,611
Total minimum future rentals	\$	310,735

In 2003, the Company entered into a purchase, sale and leaseback transaction to acquire new office space in London. The Company has recognized a capital lease asset net of accumulated depreciation of \$49.1 million and \$55.7 million, a capital lease liability of \$86.7 million and \$94.2 million, and a deferred gain liability of \$14.9 million and \$16.9 million, related to the sale and leaseback, at December 31, 2018 and 2017, respectively. The gain is being amortized to income in line with the amortization of the asset. The future minimum lease payments annually for the next five years are noted in the following table, as well as the aggregate for beyond five years. The total future minimum lease payments in the aggregate are expected to be \$118.8 million.

Year Ended December 31,
(U.S. dollars in thousands)

2019	\$	11,240
2020		11,521
2021		11,809
2022		12,104
2023		12,407
2024-2028		59,739
Total minimum future lease payments	\$	118,820

(e) Tax Matters

Neither the Company nor its non-U.S. subsidiaries have paid U.S. corporate income taxes on the basis that they are not engaged in a trade or business or otherwise subject to taxation in the United States. However, because definitive identification of activities that constitute being engaged in a trade or business in the United States is not provided by the Internal Revenue Code ("IRS Code"), regulations or court decisions, there can be no assurance that the Internal Revenue Service will not contend that the Company or its non-U.S. subsidiaries are engaged in a trade or business or otherwise subject to taxation in the United States. If the Company or its non-U.S. subsidiaries were considered to be engaged in a trade or business in the United States

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(and, if the Company or such subsidiaries were to qualify for the benefits under the income tax treaty between the United States and Bermuda and other countries in which the Company operates, such businesses would be considered to be attributable to a "permanent establishment" in the United States), the Company or such subsidiaries could be subject to U.S. tax at regular tax rates on their respective taxable income that is effectively connected with their U.S. trade or business plus an additional "branch profits" tax (at a rate as high as 30%) on such income remaining after the regular tax, in which case there could be a significant adverse effect on the Company's results of operations and financial position.

(f) Letters of Credit

At December 31, 2018 and 2017, \$2.9 billion and \$2.5 billion of letters of credit were outstanding, of which 54.0% and 54.2%, respectively, were collateralized by the Company's investment portfolios, primarily supporting U.S. non-admitted business and the Company's Lloyd's syndicates' capital requirements.

(g) Litigation

The Company and its subsidiaries are subject to litigation and arbitration in the normal course of business. These lawsuits and arbitrations principally involve claims on policies of insurance and contracts of reinsurance and are typical for the Company and for the property and casualty insurance and reinsurance industry in general. Such claims proceedings are considered in connection with the Company's loss and loss expense reserves. Reserves in varying amounts may or may not be established in respect of particular claims proceedings based on many factors, including the legal merits thereof. In addition to litigation relating to insurance and reinsurance claims, the Company and its subsidiaries are subject to lawsuits and regulatory actions in the normal course of business that do not arise from or directly relate to claims on insurance or reinsurance policies. This category of business litigation typically involves, among other things, allegations of underwriting errors or misconduct, employment claims, regulatory activity, shareholder disputes or disputes arising from business ventures. The status of these legal actions is actively monitored by management.

Legal actions are subject to inherent uncertainties, and future events could change management's assessment of the probability or estimated amount of potential losses from pending or threatened legal actions. Based on available information, it is the opinion of management that the ultimate resolution of pending or threatened legal actions other than claims proceedings, both individually and in the aggregate, will not result in losses having a material adverse effect on the Company's financial position or liquidity at December 31, 2018.

If management believes that, based on available information, it is at least reasonably possible that a material loss (or additional material loss in excess of any accrual) will be incurred in connection with any legal actions other than claims proceedings, the Company discloses an estimate of the possible loss or range of loss, either individually or in the aggregate, as appropriate, if such an estimate can be made, or discloses that an estimate cannot be made. Based on the Company's assessment at December 31, 2018, no such disclosures were considered necessary.

(h) Financial Guarantee Exposures

In February 2017, the Company negotiated the termination of its final outstanding financial guarantee contracts. These contracts provided credit support for a variety of collateral types, including some issued by European financial institutions. The Company will not recognize any financial costs or any security valuation losses as a result of these terminations.

19. Share Capital

a) Authorized and Issued

The authorized share capital of XLB is 15,000,000 shares, par value \$0.10 each, and the total issued and outstanding shares as at December 31, 2018 and 2017 was 12,500,000 representing \$1.3 million of share capital.

b) Acquisition of Non-controlling Preferred Shares

Catlin-Bermuda, a subsidiary of the Company, has outstanding 0.6 million non-cumulative perpetual preferred shares, par value of \$0.01 per share, with liquidation preference of \$1,000 per share, plus declared and unpaid dividends ("CICL Prefs"). Dividends are payable quarterly at a rate equal to 2.975 percent plus the three-month LIBOR rate of the liquidation preference.

There were no repurchases or cancellations of preference shares during 2018. On July 7, 2017, the Company repurchased through a tender offer 46,635 of the outstanding CICL Prefs with a net carrying value of \$43.7 million for \$45.6 million, inclusive of transaction costs and other consideration. The preference shares were canceled on July 19, 2017. As a result of

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these repurchases, the Company recorded a loss of \$1.9 million through "Non-controlling interests" in the Consolidated Statements of Income.

20. Dividends and Return of Surplus

The Company did not pay any common share dividends during 2018. In 2017 the Company paid a dividend to its parent, EXEL Holdings Limited ("EXEL"), an intermediate holding company, of \$750 million in cash.

In addition, the Company had no return of capital for 2018, and returned \$500 million of additional paid in capital to EXEL during 2018.

21. Accumulated Other Comprehensive Income (Loss)

The changes in AOCI, net of tax, by component for the years ended December 31, 2018 and 2017 are as follows:

<i>(U.S. dollars in thousands)</i>	Unrealized Gains (Losses) on Investments (1)	OTTI Losses Recognized in AOCI	Foreign Currency Translation Adjustments	Underfunded Pension Liability	Total
Balance, net of tax, December 31, 2016	\$ 519,211	\$ (12,229)	\$ 59,806	\$ (24,888)	\$ 541,900
OCI before reclassifications	437,384	—	46,845	735	484,964
Amounts reclassified from AOCI	(274,841)	2,478	—	127	(272,236)
Tax (benefit) expense	(10,646)	(63)	(3,668)	1,669	(12,708)
Net current period OCI - net of tax	151,897	2,415	43,177	2,531	200,020
Balance, net of tax, December 31, 2017	\$ 671,108	\$ (9,814)	\$ 102,983	\$ (22,357)	\$ 741,920
OCI before reclassifications (1)	(679,173)	—	(61,125)	1,888	(738,410)
Amounts reclassified from AOCI	(35,454)	2,299	—	977	(32,178)
Tax (benefit) expense	47,317	(107)	8,548	986	56,744
Net current period OCI - net of tax	(667,310)	2,192	(52,577)	3,851	(713,844)
Reclassification due to the adoption of Accounting Standards Update ("ASU") 2016-01 (2)	\$ (221,856)				\$ (221,856)
Reclassification due to the adoption of ASU 2018-02 (2)	\$ 6,358		\$ (216)	\$ (2,238)	\$ 3,904
Balance, net of tax, December 31, 2018	<u>\$ (211,700)</u>	<u>\$ (7,622)</u>	<u>\$ 50,190</u>	<u>\$ (20,744)</u>	<u>\$ (189,876)</u>

- (1) For certain annuity contracts that are subject to the GreyCastle Life Retro Arrangements, policy benefit reserves were historically increased for the impact of changes in unrealized gains on investments supporting such contracts as if the gains had been realized, with a corresponding entry to other comprehensive income ("Shadow Adjustments"). Upon completion of the GreyCastle Life Retro Arrangements, no further Shadow Adjustments were recorded. As of December 31, 2017, the cumulative impact of the Shadow Adjustments was \$184.9 million. During the year ended December 31, 2018, net movement of \$(74.8) million were recorded, resulting in a total cumulative net impact of Shadow Adjustments on future policy benefit reserves of \$110.2 million at December 31, 2018.
- (2) Amounts presented include reclassifications out of AOCI due to the adoption of ASU 2016-01 (\$233.8 million of net unrealized gains less \$11.9 million of deferred tax on net unrealized gains) as discussed in Note 2 (r), "Significant Accounting Policies - Recent Accounting Pronouncements".

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The reclassifications out of AOCI along with the associated Consolidated Statements of Income line items affected by component, and the total related tax (expense) benefit for indicated years ended December 31, 2018 and 2017, are as follows:

Details About AOCI Components <i>(U.S. dollars in thousands)</i>	2018	2017
Unrealized gains and losses on investments:		
Net realized gains (losses) on investments sold	\$ 20,681	\$ (234,579)
OTTI on investments	14,072	14,422
Net realized and unrealized gains (losses) on life retrocession embedded derivative and derivative instruments - Life Funds Withheld Assets	(70,207)	(54,684)
Income (loss) from investment affiliates	—	—
Total before tax	\$ (35,454)	\$ (274,841)
Provision (benefit) for income tax	(2,457)	3,161
Net of tax	\$ (37,911)	\$ (271,680)
OTTI losses recognized in OCI:		
Net realized gains (losses) on investments sold	\$ 1,364	\$ 2,119
OTTI on investments transferred to (from) OCI	935	359
Total before tax	\$ 2,299	\$ 2,478
Provision (benefit) for income tax	(4)	(4)
Net of tax	\$ 2,295	\$ 2,474
Underfunded Pension Liability:		
Operating Expenses	\$ 977	\$ 127
Provision (benefit) for income tax	(205)	(45)
Net of tax	\$ 772	\$ 82
Total reclassifications for the period, gross of tax	\$ (32,178)	\$ (272,236)
Tax (benefit) expense	(2,666)	3,112
Total reclassifications for the period, net of tax	<u>\$ (34,844)</u>	<u>\$ (269,124)</u>

22. Taxation

The Company conducts global operations through its subsidiaries in various jurisdictions around the world, including but not limited to Bermuda, the U.S., the U.K., Switzerland, Ireland, France, Germany, Italy, and Spain. The Company is subject to tax in accordance with the relevant tax laws and regulations governing taxation in the jurisdictions in which it operates.

The Company, and its Bermuda subsidiaries, are not subject to any income or capital gains taxes under current Bermuda law. In the event that there is a change such that these taxes are imposed, the Bermuda subsidiaries would be exempted from any such tax until March 2035 pursuant to the Bermuda Exempted Undertakings Tax Protection Act 1966, and the Exempted Undertakings Tax Protection Amendment Act 2011.

The Company's U.S. subsidiaries are subject to federal, state and local corporate income taxes, as well as premium, excise and other taxes applicable to U.S. corporations. The U.S. related provision for federal income taxes has been determined under the principles of the consolidated tax provisions of the IRS Code and Regulations thereunder.

On December 22, 2017, the U.S. Tax Cuts and Jobs Act was enacted. The new law took effect for taxable years beginning on or after January 1, 2018, includes numerous changes in tax law, including: (1) a reduction in the federal corporate income tax rate from 35% to 21%; (2) repeal of the corporate Alternative Minimum Tax, with existing credit carryforwards refundable no later than 2021; (3) limitations on the deductibility of certain elements of executive compensation; and (4) a number of base erosion provisions designed to reduce the ability of multinational companies to reduce the U.S. tax base through payments to offshore affiliates.

The Company recorded a net income tax expense of \$100.5 million in the period ended December 31, 2017, primarily to reduce the value of its net deferred tax assets to reflect the reduction in the U.S. federal corporate income tax rate.

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With the exception of the U.S., deferred income taxes have not been accrued with respect to certain undistributed earnings of subsidiaries located outside of Bermuda. If the earnings were to be distributed, as dividends or otherwise, such amounts may be subject to withholding taxation in the jurisdiction of the paying entity. The Company does not assert that all earnings arising in the U.S. will be permanently reinvested in the U.S., and accordingly, the Company provides for withholding taxes arising in respect of any applicable current period U.S. earnings. No withholding taxes are accrued with respect to the earnings of the Company's subsidiaries arising outside the U.S. However, if there is a change in tax law, interpretation of existing law, or change in way in which the Company conducts its business, then the company would accrue the required withholding tax.

The Company's current corporate structure is such that distribution of earnings from subsidiaries located outside of the United States would not be subject to significant incremental taxation. It is not practicable to estimate the amount of additional withholding taxes that might be payable on such earnings due to a variety of factors, including the timing, extent and nature of any repatriation.

The table below details the tax years that are open to assessment and under examination by local tax authorities, by major tax jurisdictions. While the Company cannot estimate with certainty the outcome of these examinations, the Company does not believe that adjustments from open tax years will result in a significant change to the Company's financial results.

Jurisdiction	Tax Years Open to Assessment	Tax Years Under Examination
France	2013 - 2018	2013 - 2014
Germany	2014 - 2018	
Ireland	2014 - 2018	
Italy	2014 - 2018	
Spain	2011 - 2018	2011 - 2012
Switzerland	2014 - 2018	
U.K.	2016 - 2018	
U.S.	2016 - 2018	2016

The Company's income (loss) before income tax and non-controlling interests for the years ended December 31, 2018 and 2017 was distributed between U.S. and non-U.S. jurisdictions as follows:

Income (loss) before income tax and non-controlling interest: (U.S. dollars in thousands)	2018	2017
U.S.	\$ (82,932)	\$ 115,086
Non U.S.	(679,552)	(334,762)
Total	\$ (762,484)	\$ (219,676)

The income tax provisions for the years ended December 31, 2018 and 2017 are as follows:

(U.S. dollars in thousands)	2018	2017
Current expense: (benefit)		
U.S.	\$ (8,328)	\$ 715
Non U.S.	64,728	103,339
Total current expense (benefit)	\$ 56,400	\$ 104,054
Deferred expense (benefit):		
U.S.	\$ (44,140)	\$ 100,126
Non U.S.	86,695	(145,110)
Total deferred expense (benefit)	\$ 42,555	\$ (44,984)
Total tax expense (benefit)	\$ 98,955	\$ 59,070

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The applicable statutory tax rates for the current year of the most significant jurisdictions contributing to the overall taxation of the Company are:

Jurisdiction	Applicable Statutory Corporate Income Tax Rates
Bermuda	—%
France (1)	33.33%
Germany (2)	15.00%
Ireland (3)	12.50%
Switzerland (4)	21.15%
U.K. (5)	19.00%
U.S. (6)	21.00%

- (1) The statutory corporate income tax rate is 33.33%. However, with the mandatory social surcharge, the combined statutory rate would increase to 34.43%. Statutory tax rate will progressively be reduced to 25% by 2022.
- (2) The statutory corporate income tax rate is 15%. However, including applicable surcharges and local trade tax, which can vary by location, would increase the combined statutory rate to approximately 33%.
- (3) The 12.50% statutory corporate income tax rate applies to active income from the conduct of a trade in Ireland. For passive income or income from other defined activities the statutory rate increases to 25%.
- (4) Represents the combined federal and cantonal rate primarily applicable to the Company's Swiss entities.
- (5) The statutory rate is 19%. Statutory tax rate will progressively be reduced to 17% by 2021.
- (6) Under the Tax Cuts and Jobs Act of 2017, the federal corporate tax rate has been reduced from 35% to 21% for taxable years beginning January 1, 2018.

The expected tax provision has been calculated using the pre-tax accounting income (loss) in each jurisdiction multiplied by that jurisdiction's applicable statutory tax rate. A reconciliation of the difference between the provision for income taxes and the expected tax provision for the years ended December 31, 2018 and 2017 is provided below:

<i>(U.S. dollars in thousands)</i>	2018	2017
Expected tax (benefit) provision	\$ (82,616)	\$ (2,534)
Permanent differences:		
Non-taxable (income) loss	(9,963)	(41,043)
Revision to prior year adjustments	13,744	9,428
Prior year adjustments on completion of IRS examinations	10,125	—
State, local and foreign taxes	(1,155)	37,454
Valuation allowance	147,262	2,510
Net allocated investment income	3,312	8,531
Stock awards	(29,229)	(3,132)
Non-deductible expenses	39,335	3,313
Other Investment related adjustments	(111)	(1,753)
Adjustments related to GreyCastle Life Retro Arrangements	(20,715)	(9,815)
Change in Tax Rate	4,175	(8,105)
U.S. Tax Cuts and Jobs Act of 2017, net deferred tax asset revaluation	—	100,500
Uncertain tax positions	24,791	(36,284)
Total tax expense (benefit)	\$ 98,955	\$ 59,070

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Significant components of the Company's deferred tax assets and liabilities at December 31, 2018 and 2017 were as follows:

<i>(U.S. dollars in thousands)</i>	2018	2017
Deferred tax asset:		
Net unpaid loss reserve discount	\$ 77,609	\$ 82,026
Net unearned premiums	110,472	104,168
Compensation liabilities	52,950	56,760
Net operating losses	326,005	285,294
Investment adjustments	18,970	18,570
Pension	12,495	10,770
Bad debt reserve	15,825	14,844
Net unrealized depreciation on investments	11,775	2,719
Stock options	439	624
Depreciation	16,606	23,411
Net realized capital losses	54,423	63,757
Deferred intercompany capital losses	8,100	9,997
Untaxed Lloyd's result	107,284	91,056
Deferred acquisition costs	75,215	65,432
Tax Credits	45,012	53,304
Other	42,258	27,270
Deferred tax asset, gross of valuation allowance	\$ 975,438	\$ 910,002
Valuation allowance	373,158	282,445
Deferred tax asset, net of valuation allowance	\$ 602,280	\$ 627,557
Deferred tax liability:		
Net unrealized appreciation on investments	\$ 4,568	\$ 16,170
Deferred acquisition costs	47,012	62,871
Currency translation adjustments	7,552	13,170
Regulatory reserves	125,288	99,265
Net unearned premiums	24,414	9,270
Investment adjustments	1,864	4,232
Depreciation	14,677	11,355
Syndicate capacity	60,412	87,714
Intangible asset	21,221	24,473
Other	19,939	24,587
Deferred tax liability	\$ 326,947	\$ 353,107
Net Deferred Tax Asset	\$ 275,333	\$ 274,450

The deferred tax asset and deferred tax liability balances presented above represent the gross deferred tax asset and liability balances across each tax jurisdiction. As disclosed on the Consolidated Balance Sheets, the deferred tax asset balances of \$337.5 million and \$332.0 million at December 31, 2018 and 2017, respectively, and deferred tax liability balances of \$62.2 million and \$57.6 million at December 31, 2018 and 2017, respectively, include netting of certain deferred tax assets and liabilities within a tax jurisdiction to the extent such netting is consistent with ASC 740 "Income Taxes".

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At December 31, 2018 and 2017, the valuation allowance of \$373.2 million and \$282.4 million, respectively, related primarily to net operating loss and realized capital loss carryforwards in the following major tax jurisdictions:

Jurisdiction <i>(U.S. dollars in thousands)</i>	2018	2017
Australia	\$ 12,347	\$ 18,849
Austria	7,818	919
Brazil	12,645	14,909
France	19,370	28,656
Germany	28,789	32,566
Hong Kong	2,333	5,749
Ireland	30,535	30,536
Italy	—	—
Luxembourg	21,842	8,025
Singapore	1,573	9,331
Spain	17,035	20,387
Switzerland	16,707	20,935
U.K.	148,683	28,328
U.S.	48,829	53,761
Other	4,652	9,494
Valuation Allowance Total	\$ 373,158	\$ 282,445

The increase in the valuation allowance in 2018 of \$90.7 million was primarily driven by the establishment of valuation allowance on certain U.K. entities given the significant losses experienced during 2018 and insufficient, objectively verifiable evidence of future profitability.

Management believes it is more likely than not that the tax benefit associated with the Company's deferred tax assets, not offset by a valuation allowance, will be realized.

The following table summarizes the net operating loss carryforwards the Company had at December 31, 2018:

Jurisdiction <i>(U.S. dollars in thousands)</i>	Carryforward Amount	Gross Deferred Tax Asset	Valuation Allowance	Net Deferred Tax Asset	Expiration Period
Australia	67,169	13,023	(12,518)	505	No Expiration
Austria	34,206	6,588	(6,588)	—	No Expiration
France	123,449	21,669	(19,380)	2,289	No Expiration
Germany	244,730	67,296	(28,789)	38,507	No Expiration
Ireland	57,098	7,137	—	7,137	No Expiration
Spain	130,306	16,868	(16,868)	—	No Expiration
Switzerland (1)	196,068	16,579	(16,376)	202	2018-2025
U.K.	283,326	52,120	(33,931)	18,190	No Expiration
U.S. (2)	422,176	88,657	(1,757)	86,900	2033-2037
Other	250,148	36,067	(31,803)	4,264	Various
Total Net Operating Loss Carryforwards	1,808,676	326,004	(168,010)	157,994	

- (1) Net operating loss of \$7.3 million and \$7.1 million will expire in 2019 and 2020, respectively, with the remaining \$180.5 million expiring through 2025.
- (2) Approximately \$47.0 million of the net operating loss carryforwards is subject to restrictions on timing and utilization under §382 of the IRS Code.

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The following table summarizes, the capital loss carryforwards the Company had at December 31, 2018:

Jurisdiction <i>(U.S. dollars in thousands)</i>	Carryforward Amount	Gross Deferred Tax Asset	Valuation Allowance	Net Deferred Tax Asset	Expiration Period
Ireland	122,142	30,536	(30,536)	—	No Expiration
U.K.	12,212	2,320	(2,320)	—	No Expiration
U.S. (1)	102,702	21,567	(21,567)	—	2018 - 2021
Total Capital Loss Carryforwards	237,056	54,423	(54,423)	—	

(1) Capital loss carryforwards of \$79.2 million and \$23.5 million will expire at the end of 2020 and 2021 respectively.

At December 31, 2018, the Company had total tax credits of \$45.0 million comprised of: (1) \$16.3 million of U.S. Alternative Minimum Tax Credits, which are refundable no later than 2021; (2) \$8.7 million of U.S. foreign tax credits that expire through 2028; (3) \$2.6 million of U.S. Research and Development tax credits which expire through 2037; and (4) \$17.4 million of U.K. foreign tax credits that do not expire.

For the years ended December 31, 2018 and 2017, the Company had unrecognized tax benefits of \$131.1 million and \$65.0 million, respectively. Due to the offsetting of tax attributes, \$69.5 million of future changes to the Company's unrecognized tax benefit is not expected to impact the Company's effective tax rate. The Company does not currently anticipate any significant change in unrecognized tax benefits during 2019.

The following table presents a reconciliation of the Company's unrecognized tax benefits:

<i>(U.S. dollars in thousands)</i>	2018	2017
Unrecognized tax benefits, beginning of the year	\$ 64,960	\$ 97,780
Increases for tax positions taken during the year	24,791	3,290
Increases for tax positions taken in prior years	77,514	15,940
Decreases for tax positions taken in prior years	(22,066)	(35,230)
Decreases for settlement with taxing authorities	(2,169)	(16,320)
Decreases for lapse of the applicable statute of limitations	(11,975)	(500)
Unrecognized tax benefits, end of year	\$ 131,055	\$ 64,960

The Company's policy is to recognize any interest and penalties related to unrecognized tax benefits as a component of tax expense. For the years ended December 31, 2018 and 2017 the Company had accrued interest and penalties of \$6.3 million and \$3.8 million, respectively.

23. Statutory Financial Data

The Company's ability to pay dividends or return capital from shareholders' equity is limited by the applicable laws and regulations of the various jurisdictions in which the Company's principal operating subsidiaries operate, certain additional required regulatory approvals and financial covenants contained in the Company's credit facilities and other debt documents. The payment of dividends to XLB by the Company's principal operating subsidiaries is regulated under the laws of various jurisdictions including Bermuda, the U.K., Ireland and Switzerland and certain insurance statutes of various U.S. states in which the principal operating subsidiaries are domiciled and the other jurisdictions where the Company has regulated subsidiaries.

Statutory capital and surplus for the principal operating subsidiaries of the Company for the years ended December 31, 2018 and 2017 are summarized below:

<i>(U.S. dollars in thousands)</i>	Bermuda (1)		U.S. (2)		U.K., Europe and Other	
	2018	2017	2018	2017	2018	2017
Required statutory capital and surplus	\$ 6,107,299	\$ 6,431,266	\$ 882,423	\$ 821,442	\$ 4,269,156	\$ 4,551,068
Actual statutory capital and surplus (3)	\$ 9,652,933	\$ 11,454,639	\$ 2,346,433	\$ 2,347,380	\$ 5,038,740	\$ 5,711,162

- (1) Required statutory capital and surplus at December 31, 2018 represents 100% of the Bermuda Solvency Capital Requirement ("BSCR") level for the Company, calculated on a consolidated basis (and therefore includes a BSCR requirement for all regions).
(2) Required statutory capital and surplus represents 100% of the Risk-Based Capital level for principal U.S. operating subsidiaries.
(3) Statutory assets in Bermuda include investments in other U.S. and international subsidiaries reported separately herein.

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Statutory net income (loss) for the principal operating subsidiaries of the Company for the years ended December 31, 2018 and 2017 is summarized below:

<i>(U.S. dollars in thousands)</i>	2018	2017
Bermuda	\$ (854,923)	\$ (309,220)
U.S.	\$ (18,609)	\$ (76,788)
U.K., Europe and Other	\$ (480,769)	\$ (335,422)

The difference between statutory financial statements and statements prepared in accordance with GAAP varies by jurisdiction, however, the primary difference is that statutory financial statements do not reflect deferred policy acquisition costs, deferred income tax net assets, intangible assets, or unrealized appreciation on investments, but they do reflect any unauthorized/authorized reinsurance charges.

Certain restrictions on the payment of dividends from retained earnings by the Company's principal operating subsidiaries are further detailed below.

Management has evaluated the Company and principal operating subsidiaries' ability to maintain adequate levels of statutory capital, liquidity and rating agency capital and believes they will be able to do so. In performing this analysis, management has considered the most recent statutory capital position of each of the principal operating subsidiaries as well as the ability of the holding companies to allocate capital and liquidity around the group as and when needed.

Bermuda Operations

In early July 2008, the Insurance Amendment Act of 2008 was passed, which introduced a number of changes to the Bermuda Insurance Act 1978, such as allowing the BMA to prescribe standards for an enhanced capital requirement and a capital and solvency return with which insurers and reinsurers must comply. The BSCR employs a standard mathematical model that can relate more accurately the risks undertaken by (re)insurers to the capital that is dedicated to their business. Insurers and reinsurers may adopt the BSCR model or, where an insurer or reinsurer believes that its own internal model better reflects the inherent risk of its business, an in-house model approved by the BMA. Class 4 (re)insurers, such as the Company, were required to implement the new capital requirements under the BSCR model beginning with fiscal years ending on or after December 31, 2009. The Company's principal Bermuda operating subsidiaries are XLB and Catlin-Bermuda. The BSCR requirements for XLB are aggregated in the statutory capital and surplus table above, of which Catlin-Bermuda is a subsidiary. In addition to the BSCR based requirements, the BMA also prescribes minimum liquidity standards that must be met.

Under the Insurance Act 1978, amendments thereto and related regulations of Bermuda, Class 4 (re)insurers are prohibited from declaring or paying dividends of more than 25% of each of their prior year's statutory capital and surplus unless they file with the BMA an affidavit stating that the dividend has not caused the Class 4 (re)insurer to fail to meet its relevant margins. At December 31, 2018 and 2017, the maximum dividend that XLB's Bermuda Class 4 (re)insurers could pay, without a signed affidavit, having met minimum levels of statutory capital and surplus and liquidity requirements, was approximately \$2.0 billion and \$3.1 billion, respectively. In addition, no Class 4 (re)insurer may reduce its total statutory capital by 15% or more unless it has received the prior approval of the BMA, and it must also submit an affidavit stating that the proposed reduction will not cause it to fail to meet its minimum solvency margin or minimum liquidity ratio.

U.S. Operations

The Company has two lead property and casualty subsidiaries in the U.S., XLRA and Catlin Specialty Insurance Company ("CSIC"), which are domiciled in the States of New York and Delaware, respectively. Both XLRA and CSIC are the lead companies in their respective insurance pools. Including the pool leaders, these insurance pools include seven and three P&C companies, respectively. The Company also has another property and casualty subsidiary, T.H.E. Insurance Company ("THE"), a Louisiana-domiciled insurer which exists outside of the existing pools at December 31, 2018.

Unless permitted by the New York Superintendent of Financial Services, XLRA cannot declare or distribute any dividend to shareholders during any twelve month period that exceeds the lesser of 10 percent of XLRA's statutory policyholders' surplus or 100 percent of its "adjusted net investment income," as defined. The New York State insurance laws also provide that any distribution that is a dividend may only be paid out of statutory earned surplus. At December 31, 2018 and 2017, XLRA had statutory earned deficit of \$285.1 million and \$138.9 million, respectively. At December 31, 2018, XLRA's statutory policyholders' surplus was \$2.0 billion, and no dividends can be declared and paid in 2019 without prior regulatory approval. At December 31, 2018 and 2017, six and five, respectively, of the seven P&C members of the XLRA insurance pool had a statutory earned deficit.

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Unless permitted by the Insurance Commissioner of the State of Delaware, CSIC cannot declare or distribute any dividend to shareholders during any twelve month period that exceeds the greater of 10 percent of statutory policyholders' surplus or 100 percent of net income excluding realized gains. The Delaware State insurance laws also provide that any distribution that is a dividend may only be paid out of statutory earned surplus. At December 31, 2018 and 2017, CSIC had a statutory earned deficit of \$20.0 million, and \$10.1 million, respectively. At December 31, 2018, CSIC's statutory policyholders' surplus was \$232.8 million, and no dividends can be declared and paid in 2019 without prior regulatory approval. At December 31, 2018 and 2017, all three of the P&C members of the CSIC insurance pool had a statutory earned deficit.

Unless permitted by the Insurance Commissioner of the State of Louisiana, THE cannot declare or distribute any dividend to shareholders during any twelve month period that exceeds the greater of 10 percent of statutory policyholders' surplus or 100 percent of net income excluding realized gains. At December 31, 2018, THE's statutory policyholders' surplus was \$67.0 million, and no dividends can be declared and paid in 2019 without regulatory approval.

International Operations

The Company's international principal operating subsidiaries prepare statutory financial statements based on local laws and regulations. Some jurisdictions impose enhanced regulatory requirements on insurance companies while other jurisdictions impose fewer requirements. In some countries, such subsidiaries must obtain licenses issued by governmental authorities to conduct local insurance business. These licenses may be subject to minimum reserves and minimum capital and solvency tests. Jurisdictions may impose fines, censure, and/or impose criminal sanctions for violation of regulatory requirements. As at December 31, 2018, the majority of the actual statutory capital outside of the U.S. and Bermuda is held in the U.K. (\$1.2 billion), in Switzerland (\$1.4 billion), and Ireland (\$864.6 million). The Company also has approximately \$1.6 billion of capital available, which is sufficient to meet Funds at Lloyd's requirements.

Other Restrictions

The ability to declare and pay dividends may also be restricted by financial covenants in the Company's credit facilities and other debt documents. The Company was in compliance with all covenants at December 31, 2018, and the Company remains in compliance.

24. Subsequent Events

Management has evaluated subsequent events for recognition or disclosure through April 30, 2019, which is the date the financial statements were available for issuance. There are no subsequent events requiring recognition or disclosure as of this date.