ASPEN INSURANCE HOLDINGS LTD
Form 10-Q
May 09, 2018

UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
Washington, D.C. 20549

Form 10-Q

ý QUARTERLY REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934
For the Quarterly Period Ended March 31, 2018
Or
¨ TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934
Commission file number 001-31909

ASPEN INSURANCE HOLDINGS LIMITED
(Exact Name of Registrant as Specified in its Charter)

Bermuda (State or Other Jurisdiction of Incorporation or Organization)	Not Applicable (I.R.S. Employer Identification No.)
141 Front Street Hamilton, Bermuda	HM 19
(Address of Principal Executive Offices)	(Zip Code)

Registrant's telephone number, including area code
(441) 295-8201

Indicate by check mark whether the registrant (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter periods that the registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days. Yes ý No ¨
Indicate by check mark whether the registrant has submitted electronically and posted on its corporate Web site, if any, every Interactive Data File required to be submitted and posted pursuant to Rule 405 of Regulation S-T (§232.405 of this chapter) during the preceding 12 months (or for such shorter period that the registrant was required to submit and post such files). Yes ý No ¨
Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, or a smaller reporting company. See the definitions of "large accelerated filer," "accelerated filer," "smaller reporting company," and "emerging growth company" in Rule 12b-2 of the Exchange Act. (Check one):

Large accelerated filer ý	Accelerated filer ¨
Non-accelerated filer ¨ (Do not check if a smaller reporting company)	Smaller reporting company ¨
	Emerging growth company ¨

If an emerging growth company, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards provided pursuant to Section 13(a) of the Exchange Act. ¨

Indicate by check mark whether the registrant is a shell company (as defined in Rule 12b-2 of the Exchange Act). Yes ¨ No ý

As at March 31, 2018, there were 59,652,826 outstanding ordinary shares, with a par value of 0.15144558¢ per ordinary share, outstanding.

INDEX

		Page
PART I. FINANCIAL INFORMATION		
Item 1.	Unaudited Condensed Consolidated Financial Statements	3
	Unaudited Condensed Consolidated Balance Sheets as at March 31, 2018 and December 31, 2017	3
	Unaudited Condensed Consolidated Statements of Operations and Other Comprehensive Income for the Three Months Ended March 31, 2018 and 2017	5
	Unaudited Condensed Consolidated Statements of Changes in Shareholders' Equity for the Three Months Ended March 31, 2018 and 2017	6
	Unaudited Condensed Consolidated Statements of Cash Flows for the Three Months Ended March 31, 2018 and 2017	7
	Notes to the Unaudited Condensed Consolidated Financial Statements	9
Item 2.	Management's Discussion and Analysis of Financial Condition and Results of Operations	43
Item 3.	Quantitative and Qualitative Disclosures About Market Risk	62
Item 4.	Controls and Procedures	63
PART II. OTHER INFORMATION		
Item 1.	Legal Proceedings	64
Item 1A.	Risk Factors	64
Item 2.	Unregistered Sales of Equity Securities and Use of Proceeds	64
Item 3.	Defaults Upon Senior Securities	64
Item 4.	Mine Safety Disclosures	64
Item 5.	Other Information	64
Item 6.	Exhibits	65
SIGNATURES		66
CERTIFICATIONS		

PART I
FINANCIAL INFORMATION

Item 1. Unaudited Condensed Consolidated Financial Statements

ASPEN INSURANCE HOLDINGS LIMITED
UNAUDITED CONDENSED CONSOLIDATED BALANCE SHEETS
As at March 31, 2018 and December 31, 2017
($ in millions, except share and per share amounts)

	As at March 31, 2018	As at December 31, 2017
ASSETS		
Investments:		
Fixed income securities, available for sale at fair value (amortized cost — $5,465.2 and $5,201.2)	$ 5,412.2	$ 5,231.0
Fixed income securities, trading at fair value (amortized cost — $1,652.7 and $1,643.9)	1,637.6	1,649.3
Equity securities, trading at fair value (cost — $0 and $414.8)	—	491.0
Short-term investments, available for sale at fair value (amortized cost — $54.7 and $90.0)	54.6	89.9
Short-term investments, trading at fair value (amortized cost — $27.0 and $73.0)	27.0	73.0
Catastrophe bonds, trading at fair value (cost — $35.0 and $33.5)	34.8	32.4
Other investments, equity method	66.1	66.4
Total investments	7,232.3	7,633.0
Cash and cash equivalents (including $103.0 and $166.6 within consolidated variable interest entities)	1,246.9	1,054.8
Reinsurance recoverables		
Unpaid losses	1,611.3	1,515.2
Ceded unearned premiums	683.9	515.5
Receivables		
Underwriting premiums	1,743.0	1,496.5
Other	108.6	151.1
Funds withheld	102.9	99.8
Deferred policy acquisition costs	319.9	294.3
Derivatives at fair value	15.6	6.4
Receivables for securities sold	4.1	5.3
Office properties and equipment	77.1	75.5
Tax recoverable	6.5	2.3
Deferred tax assets	27.8	28.3
Other assets	0.5	0.5
Intangible assets and goodwill	27.5	27.9
Total assets	$ 13,207.9	$ 12,906.4

See accompanying notes to unaudited condensed consolidated financial statements.

ASPEN INSURANCE HOLDINGS LIMITED
UNAUDITED CONDENSED CONSOLIDATED BALANCE SHEETS
As at March 31, 2018 and December 31, 2017
($ in millions, except share and per share amounts)

	As at March 31, 2018	As at December 31, 2017
LIABILITIES		
Insurance reserves		
Losses and loss adjustment expenses	$6,679.4	$6,749.5
Unearned premiums	2,097.7	1,820.8
Total insurance reserves	8,777.1	8,570.3
Payables		
Reinsurance premiums	491.3	357.5
Accrued expenses and other payables	496.5	455.4
Liabilities under derivative contracts	2.3	1.0
Total payables	990.1	813.9
Loan notes issued by variable interest entities, at fair value	32.2	44.2
Long-term debt	549.5	549.5
Total liabilities	$10,348.9	$9,977.9
Commitments and contingent liabilities (see Note 16)	—	—
SHAREHOLDERS’ EQUITY		
Ordinary shares:		
59,652,826 shares of par value 0.15144558¢ each (December 31, 2017 - 59,474,085)	$0.1	$0.1
Preference shares:		
11,000,000 5.95% shares of par value 0.15144558¢ each (December 31, 2017 — 11,000,000)	—	—
10,000,000 5.625% shares of par value 0.15144558¢ each (December 31, 2017 — 10,000,000)	—	—
Non-controlling interest	2.9	2.7
Additional paid-in capital	959.5	954.7
Retained earnings	2,035.6	2,026.9
Accumulated other comprehensive income, net of taxes	(139.1)	(55.9)
Total shareholders’ equity	2,859.0	2,928.5
Total liabilities and shareholders’ equity	$13,207.9	$12,906.4

See accompanying notes to unaudited condensed consolidated financial statements.

ASPEN INSURANCE HOLDINGS LIMITED

UNAUDITED CONDENSED CONSOLIDATED STATEMENTS OF OPERATIONS
AND OTHER COMPREHENSIVE INCOME
($ in millions, except share and per share amounts)

	Three Months Ended March 31,	
	2018	2017
Revenues		
Net earned premium	$533.5	$ 581.1
Net investment income	47.3	47.7
Realized and unrealized investment gains	100.6	51.2
Other income	2.1	3.6
Total revenues	683.5	683.6
Expenses		
Losses and loss adjustment expenses	310.2	328.2
Amortization of deferred policy acquisition costs	90.8	113.7
General, administrative and corporate expenses	121.0	121.3
Interest on long-term debt	7.4	7.4
Change in fair value of derivatives	(23.5)	(3.1)
Change in fair value of loan notes issued by variable interest entities	(1.0)	2.9
Realized and unrealized investment losses	138.3	5.0
Net realized and unrealized foreign exchange losses	4.7	8.9
Other expenses	1.2	—
Total expenses	649.1	584.3
Income from operations before income tax	34.4	99.3
Income tax (expense)	(3.6)	(2.8)
Net income	$30.8	$ 96.5
Amount attributable to non-controlling interest	(0.2)	(0.1)
Net income attributable to Aspen Insurance Holdings Limited’s ordinary shareholders	$30.6	$ 96.4
Other Comprehensive (Loss)/Income:		
Available for sale investments:		
Reclassification adjustment for net realized gains on investments included in net income	$(0.1)	$ (1.0)
Change in net unrealized gains/(losses) on available for sale securities held	(82.8)	3.0
Net change from current period hedged transactions	0.9	1.3
Change in foreign currency translation adjustment	(8.1)	(17.2)
Other comprehensive (loss), gross of tax	(90.1)	(13.9)
Tax thereon:		
Reclassification adjustment for net realized gains on investments included in net income	0.1	0.2
Change in net unrealized gains/(losses) on available for sale securities held	5.4	(0.1)
Net change from current period hedged transactions	(0.2)	(0.1)
Change in foreign currency translation adjustment	1.6	4.3
Total tax on other comprehensive income	6.9	4.3
Other comprehensive (loss), net of tax	(83.2)	(9.6)
Total comprehensive (loss)/income attributable to Aspen Insurance Holdings Limited’s ordinary shareholders	$(52.6)	$ 86.8
Per Share Data		
Weighted average number of ordinary share and share equivalents		
Basic	59,546,165	59,862,662
Diluted	60,513,147	61,196,772

Basic earnings per ordinary share adjusted for preference share dividends	$0.39	$ 1.39
Diluted earnings per ordinary share adjusted for preference share dividends	$0.38	$ 1.36

See accompanying notes to unaudited condensed consolidated financial statements.

ASPEN INSURANCE HOLDINGS LIMITED
UNAUDITED CONDENSED CONSOLIDATED STATEMENTS OF CHANGES IN SHAREHOLDERS' EQUITY
($ in millions)

	Three Months Ended March 31,	
	2018	2017
Ordinary shares		
Beginning and end of the period	$0.1	$0.1
Preference shares		
Beginning and end of the period	—	—
Non-controlling interest		
Beginning of the period	2.7	1.4
Net change attributable to non-controlling interest for the period	0.2	0.1
End of the period	2.9	1.5
Additional paid-in capital		
Beginning of the period	954.7	1,259.6
New ordinary shares issued	0.2	0.1
Preference shares redeemed and cancelled	—	(133.2)
Preference shares redemption costs [1]	—	2.4
Share-based compensation [2]	4.6	13.2
End of the period	959.5	1,142.1
Retained earnings		
Beginning of the period	2,026.9	2,392.3
Net income for the period	30.8	96.5
Dividends on ordinary shares	(14.3)	(13.2)
Dividends on preference shares	(7.6)	(10.5)
Preference shares redemption costs [1]	—	(2.4)
Net change attributable to non-controlling interest for the period	(0.2)	(0.1)
Share-based payment [3]	—	2.8
End of the period	2,035.6	2,465.4
Accumulated other comprehensive income:		
Cumulative foreign currency translation adjustments, net of taxes:		
Beginning of the period	(67.7)	(27.1)
Change for the period, net of income tax	(6.5)	(12.9)
End of the period	(74.2)	(40.0)
Loss on derivatives, net of taxes:		
Beginning of the period	2.1	(0.5)
Net change from current period hedged transactions	0.7	1.2
End of the period	2.8	0.7
Unrealized appreciation on investments, net of taxes:		
Beginning of the period	9.7	22.5
Change for the period, net of taxes	(77.4)	2.1
End of the period	(67.7)	24.6
Total accumulated other comprehensive (loss)/income, net of taxes	(139.1)	(14.7)
Total shareholders' equity	$2,859.0	$3,594.4

(1) The $2.4 million deduction from net income in 2017 is attributable to the reclassification from additional paid-in capital to retained earnings representing the difference between the capital raised upon issuance of the 7.401% Perpetual Non-Cumulative Preference Shares, net of issuance costs, and the final redemption costs of $133.2 million.
(2) The balance in 2017 includes $7.9 million reclassification from accrued expenses and other payable as a result of the classification of restricted share units as equity following the adoption of ASU 2016-09.
(3) The $2.8 million relates to the cumulative effect-adjustment to opening retained earnings as a result of the classification of restricted share units as equity following the adoption of ASU 2016-09. The adjustment has been applied using a modified retrospective approach.
See accompanying notes to unaudited condensed consolidated financial statements.

ASPEN INSURANCE HOLDINGS LIMITED
UNAUDITED CONDENSED CONSOLIDATED STATEMENTS OF CASH FLOWS
($ in millions)

	Three Months Ended March 31,	
	2018	2017
Cash flows (used in) operating activities:		
Net income	$30.8	$96.5
Proportion due to non-controlling interest	(0.2)	(0.1)
Adjustments to reconcile net income to net cash flows from operating activities:		
Depreciation and amortization	10.6	11.0
Share-based compensation	4.6	7.9
Realized and unrealized investment gains	(100.6)	(51.2)
Realized and unrealized investment losses	138.3	5.0
Deferred taxes	0.6	1.0
Change in fair value of loan notes issued by variable interest entities	(1.0)	2.9
Net realized and unrealized investment foreign exchange (gains)/losses	(1.7)	5.5
Net change from current period hedged transactions	0.7	1.2
Changes in:		
Insurance reserves:		
Losses and loss adjustment expenses	(91.8)	18.3
Unearned premiums	274.9	263.7
Reinsurance recoverables:		
Unpaid losses	(90.4)	(73.9)
Ceded unearned premiums	(167.7)	(149.5)
Other receivables	42.8	(24.9)
Deferred policy acquisition costs	(25.5)	(7.5)
Reinsurance premiums payable	130.5	20.8
Funds withheld	(3.1)	(17.3)
Premiums receivable	(240.7)	(159.5)
Income tax payable	(3.6)	1.8
Accrued expenses and other payables	(10.4)	(19.2)
Fair value of derivatives and settlement of liabilities under derivatives	(7.9)	(12.1)
Long-term debt and loan notes issued by variable interest entities	(12.0)	(4.7)
Net cash (used in) operating activities	$(122.8)	$(84.3)

See accompanying notes to unaudited condensed consolidated financial statements.

UNAUDITED CONDENSED CONSOLIDATED STATEMENTS OF CASH FLOWS
($ in millions)

	Three Months Ended March 31,	
	2018	2017
Cash flows from/(used in) investing activities:		
(Purchases) of fixed income securities — Available for sale	$(647.9)	$(441.2)
(Purchases) of fixed income securities — Trading	(532.9)	(265.6)
Proceeds from sales and maturities of fixed income securities — Available for sale	388.5	440.6
Proceeds from sales and maturities of fixed income securities — Trading	507.4	237.6
(Purchases) of equity securities — Trading	(16.5)	(26.5)
Net (purchases)/sales of catastrophe bonds — Trading	(1.5)	0.4
Proceeds from sales of equity securities — Trading	505.6	20.9
(Purchases) of short-term investments — Available for sale	(8.6)	(33.2)
Proceeds from sales of short-term investments — Available for sale	44.0	15.9
(Purchases) of short-term investments — Trading	(6.0)	(4.8)
Proceeds from sales of short-term investments — Trading	51.4	6.1
Net change in (payable)/receivable for securities (purchased)/sold	109.8	8.6
Net (purchases) of equipment	(8.0)	(9.9)
Sale of investment	—	9.3
Payments for acquisitions and investments, net of cash acquired	—	(2.3)
Net cash from/(used in) investing activities	385.3	(44.1)
Cash flows (used in)/from financing activities:		
Proceeds from the issuance of ordinary shares, net of issuance costs	0.2	0.1
Preference share redemption	—	(133.2)
Repayment of long-term debt issued by Silverton	(45.8)	(111.2)
Dividends paid on ordinary shares	(14.3)	(13.2)
Dividends paid on preference shares	(7.6)	(10.5)
Cash paid for tax withholding purposes [1]	(4.2)	(7.8)
Net cash (used in) financing activities	(71.7)	(275.8)
Effect of exchange rate movements on cash and cash equivalents	1.3	3.5
Increase/(decrease) in cash and cash equivalents	192.1	(400.7)
Cash and cash equivalents at beginning of period	1,054.8	1,273.8
Cash and cash equivalents at end of period	$1,246.9	$873.1
Supplemental disclosure of cash flow information:		
Net cash paid (received) during the period for income tax	$(0.8)	$0.9
Cash paid during the period for interest	$7.4	$7.4

(1) The cash paid to the tax authority when withholding shares from employees' awards for tax-withholding purposes has been reclassified from operating activity to financing activity following the adoption of ASU 2016-09.
See accompanying notes to unaudited condensed consolidated financial statements.

ASPEN INSURANCE HOLDINGS LIMITED
NOTES TO THE UNAUDITED CONDENSED CONSOLIDATED FINANCIAL STATEMENTS

1. History and Organization

Aspen Insurance Holdings Limited (“Aspen Holdings”) was incorporated on May 23, 2002 as a holding company headquartered in Bermuda. We underwrite specialty insurance and reinsurance on a global basis through our Operating Subsidiaries (as defined below) based in Bermuda, the United States and the United Kingdom: Aspen Insurance UK Limited (“Aspen U.K.”) and Aspen Underwriting Limited (corporate member of Lloyd’s Syndicate 4711, “AUL” and managed by Aspen Managing Agency Limited (“AMAL”)) (United Kingdom), Aspen Bermuda Limited (“Aspen Bermuda”) (Bermuda), Aspen Specialty Insurance Company (“Aspen Specialty”) and Aspen American Insurance Company (“AAIC”) (United States) (collectively, the “Operating Subsidiaries”). We also have branches in Australia, Canada, Ireland, Singapore, Switzerland and the United Arab Emirates. We established Aspen Capital Management, Ltd. and other related entities (collectively, “ACM”) to leverage our existing underwriting franchise, increase our operational flexibility in the capital markets and provide investors direct access to our underwriting expertise.
References to the “Company,” the “Group,” “we,” “us” or “our” refer to Aspen Holdings or Aspen Holdings and its subsidiarie

2. Basis of Preparation

The accompanying unaudited condensed consolidated financial statements have been prepared on the basis of generally accepted accounting principles in the United States (“U.S. GAAP”) for interim financial information and in accordance with the instructions to Form 10-Q and Article 10 of Regulation S-X. Accordingly, they do not include all of the information and footnotes required by U.S. GAAP for complete financial statements. In the opinion of management, all adjustments considered necessary for a fair presentation have been included. Results for the three months ended March 31, 2018 are not necessarily indicative of the results that may be expected for the year ended December 31, 2018. The unaudited condensed consolidated financial statements include the accounts of Aspen Holdings and its subsidiaries. All intercompany transactions and balances have been eliminated on consolidation.
The balance sheet as at December 31, 2017 has been derived from the audited consolidated financial statements at that date, but does not include all of the information and footnotes required by U.S. GAAP for complete financial statements. These unaudited condensed consolidated financial statements and notes thereto should be read in conjunction with the consolidated financial statements and notes thereto for the year ended December 31, 2017 contained in the Company’s Annual Report on Form 10-K filed with the United States Securities and Exchange Commission (the “SEC”) on February 22, 2018 (File No. 001-31909).
Assumptions and estimates made by management have a significant effect on the amounts reported within the unaudited condensed consolidated financial statements. The most significant of these assumptions and estimates relate to losses and loss adjustment expenses, reinsurance recoverables, gross written premiums and commissions which have not been reported to the Company such as those relating to proportional treaty reinsurance contracts, unrecognized tax benefits, the fair value of derivatives and the fair value of other investments. All material assumptions and estimates are regularly reviewed and adjustments made as necessary, but actual results could turn out significantly different from those expected when the assumptions or estimates were made.

Accounting Pronouncements Adopted in 2018

On August 12, 2015, the FASB issued ASU 2015-14, “Revenue from Contracts with Customers (Topic 606)” which delayed the effective date of ASU 2014-09 by one year. ASU 2015-04 is effective for annual periods beginning after December 15, 2017. Adoption of this ASU during the three months ended March 31, 2018 did not have a material impact on the Company’s consolidated financial statements as insurance contracts accounted for within the scope of Topic 944, Financial Services are exempt from this ASU and the Company has immaterial other revenue.
On January 5, 2016, the FASB issued ASU 2016-1, “Financial Instruments - Overall (Subtopic 825-10)” which enhances the reporting model for financial instruments. Included within the requirements of this ASU are the following: a) equity investments to be measured at fair value with changes in fair value recognized in net income; b) a simplification of the impairment assessment of equity investments without readily determinable fair values; c) public business entities to use the exit price notion when measuring the fair value of financial instruments for disclosure purposes; and d) clarifies that an entity should evaluate the need for a valuation allowance on a deferred tax asset

related to available-for-sale securities in combination with the entity's other deferred tax assets. The amendments required as a result of this ASU are effective for fiscal years beginning after December 15, 2017. Adoption of this ASU during the three months ended March 31, 2018 did not have a material impact on the Company's consolidated financial statements as the Company's equity portfolio, prior to being sold, was classified as held for trading with changes in fair value recognized through net income and no valuation allowance was required in relation to deferred tax asset related to available-for-sale securities

Other accounting pronouncements were issued during the three months ended March 31, 2018 which were either not relevant to the Company or did not impact the Company's consolidated financial statements.

Accounting Pronouncements Not Yet Adopted

On February 14, 2018, the FASB issued ASU 2018-02, "Income Statement - Reporting Comprehensive Income (Topic 220)" which allows a reclassification from accumulated other comprehensive income to retained earnings for stranded tax effects resulting from the Tax Cuts and Jobs Act. This ASU is effective for fiscal years beginning after December 15, 2018 and interim periods within those fiscal years. The Company is currently evaluating the provisions of ASU 2018-02 to determine how it will be affected, but no material impact is expected on the consolidated financial statements.

On February 28, 2018, the FASB issued ASU 2018-03, "Technical Corrections and Improvements to Financial Instruments - Overall (Subtopic 825-10)" which amends multiple areas in Subtopic 825-10 via improvements to clarify the Codification or to correct unintended application of guidance. This ASU is effective for fiscal years beginning after December 15, 2017 and for interim periods within those fiscal years beginning after June 15, 2018. The Company is currently evaluating the provisions of ASU 2018-03 to determine how it will be affected, but no material impact is expected on the consolidated financial statements.
Other accounting pronouncements were issued during the three months ended March 31, 2018 which were either not relevant to the Company or did not impact the Company's consolidated financial statements.

3. Reclassifications from Accumulated Other Comprehensive Income

The following tables set out the components of the Company's accumulated other comprehensive income ("AOCI") that are reclassified into the unaudited condensed consolidated statement of operations for the three months ended March 31, 2018 and 2017:

Details about the AOCI Components	Amount Reclassified from AOCI Three Months Ended March 31, 2018	Three Months Ended March 31, 2017	Affected Line Item in the Unaudited Condensed Consolidated Statement of Operations
	($ in millions)		
Available for sale securities:			
Realized gains on sale of securities	$2.0	$2.3	Realized and unrealized investment gains
Realized (losses) on sale of securities	(1.9)	(1.3)	Realized and unrealized investment losses
	0.1	1.0	Income from operations before income tax
Tax on net realized gains of securities	(0.1)	(0.2)	Income tax expense
	$—	$0.8	Net income
Realized derivatives:			
Net realized gains on settled derivatives	$1.7	$0.3	General, administrative and corporate expenses
Tax on settled derivatives	(0.3)	(0.1)	Income tax expense
	$1.4	$0.2	Net income
Total reclassifications from AOCI to the statement of operations, net of income tax	$1.4	$1.0	Net income

4. Earnings per Ordinary Share

Basic earnings per ordinary share are calculated by dividing net income available to holders of Aspen Holdings' ordinary shares by the weighted average number of ordinary shares outstanding. Net income available to ordinary shareholders is calculated by deducting preference share dividends and net income/(loss) attributable to non-controlling interest from net income/ (loss) after tax for the period. Diluted earnings per ordinary share are based on the weighted average number of ordinary shares and dilutive potential ordinary shares outstanding during the period of calculation using the treasury stock method. The following table sets forth the computation of basic and diluted earnings per ordinary share for the three months ended March 31, 2018 and 2017, respectively:

	Three Months Ended March 31,	
	2018	2017
	($ in millions, except share and per share amounts)	
Net income	$30.8	$ 96.5
Preference share dividends	(7.6)	(10.5)
Preference share redemption costs [(1)]	—	(2.4)
Net amount attributable to non-controlling interest	(0.2)	(0.1)
Basic and diluted net income available to ordinary shareholders	$23.0	$ 83.5
Ordinary shares:		
Basic weighted average ordinary shares	59,546,165	59,862,662
Weighted average effect of dilutive securities [(2)]	966,982	1,334,110
Total diluted weighted average ordinary shares	60,513,147	61,196,772
Earnings per ordinary share:		
Basic	$0.39	$ 1.39
Diluted [(3)]	$0.38	$ 1.36

(1) The $2.4 million deduction from net income in 2017 is attributable to the reclassification from additional paid-in capital to retained earnings representing the difference between the capital raised upon issuance of the 7.401% Perpetual Non-Cumulative Preference Shares, net of issuance costs, and the final redemption costs of $133.2 million.

(2) Dilutive securities consist of employee restricted share units and performance shares associated with the Company's long-term incentive plan, employee share purchase plans and director restricted share units as described in Note 14.

Dividends. On May 2, 2018, the Company's Board of Directors (the "Board of Directors") declared the following quarterly dividends:

	Dividend	Payable on:	Record Date:
Ordinary shares	$0.24	June 5, 2018	May 18, 2018
5.95% preference shares	$0.3719	July 1, 2018	June 15, 2018
5.625% preference shares	$0.3516	July 1, 2018	June 15, 2018

5. Segment Reporting

The Company has two reporting business segments: Insurance and Reinsurance. The Company has determined its reportable segments, Aspen Insurance and Aspen Reinsurance, by taking into account the manner in which management makes operating decisions and assesses operating performance. Profit or loss for each of the Company's business segments is measured by underwriting profit or loss. Underwriting profit is the excess of net earned premiums over the sum of losses and loss expenses, amortization of deferred policy acquisition costs and general and administrative expenses. Underwriting profit or loss provides a basis for management to evaluate the business segment's underwriting performance.

Reinsurance Segment. The reinsurance segment consists of property catastrophe reinsurance, other property reinsurance, casualty reinsurance and specialty insurance and reinsurance. ACM forms part of our property catastrophe reinsurance line of business as it focuses primarily on property catastrophe business through the use of alternative capital. For a more detailed description of this business segment, see Part I, Item 1, “Business — Business Segments — Reinsurance” in the Company’s 2017 Annual Report on Form 10-K filed with the SEC.

Insurance Segment. The insurance segment consists of property and casualty insurance, marine, aviation and energy insurance and financial and professional lines insurance. For a more detailed description of this business segment, see Part I, Item 1 "Business — Business Segments — Insurance" in the Company's 2017 Annual Report on Form 10-K filed with the SEC.

Non-underwriting Disclosures. The Company has provided additional disclosures for corporate and other (non-operating) income and expenses. Corporate and other income and expenses include net investment income, net realized and unrealized investment gains or losses, expenses associated with managing the Group, certain strategic and non-recurring costs, changes in fair value of derivatives and changes in fair value of the loan notes issued by variable interest entities, interest expenses, net realized and unrealized foreign exchange gains or losses, and income taxes, none of which are allocated to the business segments. Corporate expenses are not allocated to the Company's business segments as they typically do not fluctuate with the levels of premiums written and are not directly related to the Company's business segment operations. The Company does not allocate its assets by business segment as it evaluates underwriting results of each business segment separately from the results of the Company's investment portfolio.

The following tables provide a summary of gross and net written and earned premiums, underwriting results, ratios and reserves for each of the Company's business segments for the three months ended March 31, 2018 and 2017:

	Three Months Ended March 31, 2018		
	Reinsurance	Insurance	Total
	($ in millions)		
Underwriting Revenues			
Gross written premiums	$623.5	$493.3	$1,116.8
Net written premiums	425.0	210.5	635.5
Gross earned premiums	375.0	467.6	842.6
Net earned premiums	282.5	251.0	533.5
Underwriting Expenses			
Losses and loss adjustment expenses	166.9	143.3	310.2
Amortization of deferred policy acquisition costs	55.9	34.9	90.8
General and administrative expenses	31.6	63.6	95.2
Underwriting income	$28.1	$9.2	37.3
Corporate expenses			(13.7)
Non-operating expenses [1]			(12.1)
Net investment income			47.3
Realized and unrealized investment gains			100.6
Realized and unrealized investment losses			(138.3)
Change in fair value of loan notes issued by variable interest entities			1.0
Change in fair value of derivatives			23.5
Interest expense on long term debt			(7.4)
Net realized and unrealized foreign exchange (losses)			(4.7)
Other income			2.1
Other expenses			(1.2)
Income before tax			$34.4
Net reserves for loss and loss adjustment expenses	$2,823.6	$2,244.5	$5,068.1
Ratios			
Loss ratio	59.1 %	57.1 %	58.1 %
Policy acquisition expense ratio	19.8	13.9	17.0
General and administrative expense ratio	11.2	25.3	22.7 [2]
Expense ratio	31.0	39.2	39.7
Combined ratio	90.1 %	96.3 %	97.8 %

(1) Non-operating expenses includes $11.8 million of expenses related to the Company's Effectiveness and Efficiency Program.

(2) The general and administrative expense ratio in the "Total" column includes corporate and non-operating expenses.

	Three Months Ended March 31, 2017		
	Reinsurance	Insurance	Total
	($ in millions)		
Underwriting Revenues			
Gross written premiums	$565.3	$432.7	$998.0
Net written premiums	448.2	238.0	686.2
Gross earned premiums	327.6	423.7	751.3
Net earned premiums	277.5	303.6	581.1
Underwriting Expenses			
Losses and loss adjustment expenses	143.1	185.1	328.2
Amortization of deferred policy acquisition costs	59.5	54.2	113.7
General and administrative expenses	43.9	61.8	105.7
Underwriting income	$31.0	$2.5	33.5
Corporate expenses			(13.4)
Non-operating expenses			(2.2)
Net investment income			47.7
Realized and unrealized investment gains			51.2
Realized and unrealized investment losses			(5.0)
Change in fair value of loan notes issued by variable interest entities			(2.9)
Change in fair value of derivatives			3.1
Interest expense on long term debt			(7.4)
Net realized and unrealized foreign exchange gains			(8.9)
Other income			3.6
Income before tax			$99.3
Net reserves for loss and loss adjustment expenses	$2,445.4	$2,284.7	$4,730.1
Ratios			
Loss ratio	51.6 %	61.0 %	56.5 %
Policy acquisition expense ratio	21.4	17.9	19.6
General and administrative expense ratio	15.8	20.4	20.9 [(1)]
Expense ratio	37.2	38.3	40.5
Combined ratio	88.8 %	99.3 %	97.0 %

(1) The general and administrative expense ratio in the “Total” column includes corporate and non-operating expenses.

The Company uses underwriting ratios as measures of performance. The loss ratio is the ratio of losses and loss adjustment expenses to net earned premiums. The policy acquisition expense ratio is the ratio of amortization of deferred policy acquisition costs to net earned premiums. The general and administrative expense ratio is the ratio of general, administrative and corporate expenses to net earned premiums. The combined ratio is the sum of the loss ratio, the policy acquisition expense ratio and the general and administrative expense ratio.

6. Investments

Income Statement

Investment Income. The following table summarizes investment income for the three months ended March 31, 2018 and 2017:

	For the Three Months Ended	
	March 31, 2018	March 31, 2017
	($ in millions)	
Fixed income securities — Available for sale	$33.3	$33.9
Fixed income securities — Trading	12.0	10.1
Short-term investments — Available for sale	0.2	0.1
Short-term investments — Trading	0.2	0.2
Fixed term deposits (included in cash and cash equivalents)	2.4	0.7
Equity securities — Trading	1.2	5.2
Catastrophe bonds — Trading	0.6	0.4
Total	$49.9	$50.6
Investment expenses	(2.6)	(2.9)
Net investment income	$47.3	$47.7

The following table summarizes the net realized and unrealized investment gains and losses recorded in the statement of operations and the change in unrealized gains and losses on investments recorded in other comprehensive income for the three months ended March 31, 2018 and 2017:

	For the Three Months Ended	
	March 31, 2018	March 31, 2017
	($ in millions)	
Available for sale:		
Fixed income securities — gross realized gains	$1.8	$2.2
Fixed income securities — gross realized (losses)	(1.8)	(1.3)
Short-term investments — gross realized gains	—	0.1
Cash and cash equivalents — gross realized gains	0.2	—
Cash and cash equivalents — gross realized (losses)	(0.1)	—
Other-than-temporary impairments	—	(0.3)
Trading:		
Fixed income securities — gross realized gains	1.6	1.8
Fixed income securities — gross realized (losses)	(7.0)	(2.0)
Cash and cash equivalents — gross realized gains	1.6	—
Equity securities — gross realized gains	94.5	4.5
Equity securities — gross realized (losses)	(20.3)	(1.4)
Catastrophe bonds — net unrealized (losses)/gains	0.9	—
Net change in gross unrealized (losses)/gains	(108.8)	40.9
Other investments:		
Gross realized and unrealized (loss) in MVI	(0.1)	—
Gross realized (loss)/gain in Chaspark	—	1.7
Gross realized and unrealized (loss) in Bene	(0.2)	—
Total net realized and unrealized investment (losses)/gains recorded in the statement of operations	$(37.7)	$46.2
Change in available for sale net unrealized (losses)/gains:		
Fixed income securities	(82.9)	2.0
Total change in pre-tax available for sale unrealized (losses)/gains	(82.9)	2.0
Change in taxes	5.5	0.1
Total change in net unrealized gains, net of taxes, recorded in other comprehensive income	$(77.4)	$2.1

Balance Sheet

Fixed Income Securities and Short-Term Investments — Available For Sale. The following tables present the cost or amortized cost, gross unrealized gains and losses and estimated fair market value of available for sale investments in fixed income securities and short-term investments as at March 31, 2018 and December 31, 2017:

	As at March 31, 2018			
	Cost or Amortized Cost	Gross Unrealized Gains	Gross Unrealized Losses	Fair Market Value
	($ in millions)			
U.S. government	$1,311.3	$ 2.5	$ (21.6)	$ 1,292.2
U.S. agency	52.9	0.2	(0.4)	52.7
Municipal	46.5	1.7	(0.6)	47.6
Corporate	2,471.3	16.3	(41.4)	2,446.2
Non-U.S. government-backed corporate	98.2	0.1	(0.5)	97.8
Non-U.S. government	480.7	4.5	(1.8)	483.4
Asset-backed	18.7	—	(0.2)	18.5
Agency mortgage-backed	985.6	8.6	(20.4)	973.8
Total fixed income securities — Available for sale	5,465.2	33.9	(86.9)	5,412.2
Total short-term investments — Available for sale	54.7	—	(0.1)	54.6
Total	$5,519.9	$ 33.9	$ (87.0)	$ 5,466.8

	As at December 31, 2017			
	Cost or Amortized Cost	Gross Unrealized Gains	Gross Unrealized Losses	Fair Market Value
	($ in millions)			
U.S. government	$1,166.5	$ 4.5	$ (11.6)	$ 1,159.4
U.S. agency	51.8	0.5	(0.2)	52.1
Municipal	53.0	2.1	(0.2)	54.9
Corporate	2,391.4	36.1	(11.8)	2,415.7
Non-U.S. government-backed corporate	91.5	0.3	(0.5)	91.3
Non-U.S. government	479.7	6.4	(1.2)	484.9
Asset-backed	26.3	—	(0.1)	26.2
Agency mortgage-backed	941.0	13.7	(8.2)	946.5
Total fixed income securities — Available for sale	5,201.2	63.6	(33.8)	5,231.0
Total short-term investments — Available for sale	90.0	—	(0.1)	89.9
Total	$5,291.2	$ 63.6	$ (33.9)	$ 5,320.9

Fixed Income Securities, Short-Term Investments, Equities and Catastrophe Bonds — Trading. The following tables present the cost or amortized cost, gross unrealized gains and losses, and estimated fair market value of trading investments in fixed income securities, short-term investments, equity securities and catastrophe bonds as at March 31, 2018 and December 31, 2017:

	As at March 31, 2018			
	Cost or Amortized Cost	Gross Unrealized Gains	Gross Unrealized Losses	Fair Market Value
	($ in millions)			
U.S. government	$141.8	$ 0.6	$ (0.7)	$ 141.7
Municipal	75.0	—	(0.7)	74.3
Corporate	1,014.5	5.8	(16.7)	1,003.6
Non-U.S government-backed corporate	1.0	—	—	1.0
Non-U.S. government	216.2	3.4	(3.0)	216.6
Asset-backed	8.4	—	(0.1)	8.3
Agency mortgage-backed	195.8	0.3	(4.0)	192.1
Total fixed income securities — Trading	1,652.7	10.1	(25.2)	1,637.6
Total short-term investments — Trading	27.0	—	—	27.0
Total catastrophe bonds — Trading	35.0	—	(0.2)	34.8
Total	$1,714.7	$ 10.1	$ (25.4)	$ 1,699.4

	As at December 31, 2017			
	Cost or Amortized Cost	Gross Unrealized Gains	Gross Unrealized Losses	Fair Market Value
	($ in millions)			
U.S. government	$162.3	$ 0.4	$ (0.8)	$ 161.9
Municipal	32.4	—	(0.2)	32.2
Corporate	1,036.5	14.0	(4.2)	1,046.3
Non-U.S. government-backed corporate	1.0	—	—	1.0
Non-U.S. government	196.1	6.9	(0.5)	202.5
Asset-backed	9.9	—	—	9.9
Agency mortgage-backed	196.7	0.2	(1.4)	195.5
Total fixed income securities — Trading	1,634.9	21.5	(7.1)	1,649.3
Total short-term investments — Trading	73.0	—	—	73.0
Total equity securities — Trading	414.8	83.5	(7.3)	491.0
Total catastrophe bonds — Trading	33.5	—	(1.1)	32.4
Total	$2,156.2	$ 105.0	$ (15.5)	$ 2,245.7

The Company classifies the financial instruments presented in the tables above as held for trading as this most closely reflects the facts and circumstances of the investments held.

Catastrophe Bonds. The Company has invested in catastrophe bonds with a total value of $34.8 million as at March 31, 2018. The bonds receive quarterly interest payments based on variable interest rates with scheduled maturities ranging from 2018 to 2021. The redemption value of the bonds will adjust based on the occurrence of a covered event, such as windstorms and earthquakes in the United States, Canada, the North Atlantic, Japan or Australia.

Other Investments. In January 2015, the Company established, along with seven other insurance companies, a micro-insurance venture consortium and micro-insurance incubator (“MVI”) domiciled in Bermuda. The MVI is a social impact organization that provides micro-insurance products to assist global emerging consumers. The Company’s

initial investment in the MVI was $0.8 million. The Company made an additional investment of $0.1 million in the twelve months ended December 31, 2017.

On July 26, 2016, the Company purchased through its wholly-owned subsidiary, Acorn Limited, a 20% share of Bene Assicurazioni (“Bene”), an Italian-based motor insurer for a total consideration of $3.3 million. The investment is accounted for under the equity method and adjustments to the carrying value of this investment are made based on the Company’s share of capital, including share of income and expenses.

On January 1, 2017, the Company purchased through its wholly-owned subsidiary, Aspen U.S. Holdings, Inc. (“Aspen U.S. Holdings”), a 49% share of Digital Risk Resources, LLC (“Digital Re”), a U.S.-based enterprise engaged in the business of developing, marketing and servicing turnkey information security and privacy liability insurance products, for a total consideration of $2.3 million. The investment is accounted for under the equity method and adjustments to the carrying value of this investment are made based on the Company’s share of capital, including share of income and expenses.

On December 18, 2017, the Company acquired through its wholly-owned subsidiary, Aspen U.S. Holdings, a 23.2% share of Crop Re Services LLC (“Crop Re”), a newly formed U.S.-based subsidiary of CGB Diversified Services, Inc (“CGB DS”) in exchange for the sale of AG Logic Holdings, LLC (“AgriLogic”), the Company’s former U.S. crop insurance business. Total consideration for the sale of AgriLogic consisted of the 23.2% share of Crop Re valued at $62.5 million and cash in the amount of $5.9 million. Crop Re is responsible for directing the placement of reinsurance on behalf of CGB DS and CGB Insurance Company (“CGBIC”), an Indiana insurance company affiliate of CGB DS and an RMA licensed crop insurer. The remaining 76.8% of Crop Re is owned by CGB DS. AAIC’s primary crop insurance coverage will be run-off and AAIC, or an affiliate of AAIC, will provide quota share reinsurance to CGBIC for both federal and state regulated crop insurance as part of Aspen’s ownership in Crop Re. The investment in Crop Re represents the Company’s share of the net assets of Crop Re plus the difference between the cost of the investment and the amount of underlying equity in net assets, the basis difference. The Company has determined that this basis difference of $62.5 million represents the value attributable to the ability of Crop Re to direct the placement of reinsurance business under the reinsurance commitment contained within the operating agreement between Crop Re and the Company. The investment in Crop Re is accounted for under the equity method and adjustments to the carrying value of this investment are made based on the Company’s share of capital, including share of income and expenses.

The tables below show the Company’s investments in the MVI, Bene, Digital Re and Crop Re for the three months ended March 31, 2018:

	For the Three Months Ended March 31, 2018				
	MVI	Bene	Digital Re	Crop Re	Total
	($ in millions)				
Opening undistributed value of investment	$0.5	$2.9	$ 0.5	$62.5	$66.4
Realized/unrealized losses for the three months to March 31, 2018	(0.1)	(0.2)	—	—	(0.3)
Closing undistributed value of investment	$0.4	$2.7	$ 0.5	$62.5	$66.1

Fixed Income Securities. The scheduled maturity distribution of available for sale fixed income securities as at March 31, 2018 and December 31, 2017 is set forth in the tables below. Actual maturities may differ from contractual maturities because issuers of securities may have the right to call or prepay obligations with or without call or prepayment penalties.

	As at March 31, 2018		
	Amortized Cost or Cost	Fair Market Value	Average S&P Ratings by Maturity
	($ in millions)		
Due one year or less	$592.2	$ 593.2	AA

Due after one year through five years	2,608.0	2,582.6	AA-
Due after five years through ten years	1,153.4	1,128.1	AA-
Due after ten years	107.3	116.0	A+
Subtotal	4,460.9	4,419.9	
Agency mortgage-backed	985.6	973.8	AA+
Asset-backed	18.7	18.5	AAA
Total fixed income securities — Available for sale	$ 5,465.2	$ 5,412.2	

	As at December 31, 2017		
	Amortized Cost or Cost	Fair Market Value	Average S&P Ratings by Maturity
	($ in millions)		
Due one year or less	$561.7	$ 562.4	AA
Due after one year through five years	2,486.7	2,492.2	AA-
Due after five years through ten years	1,092.2	1,097.4	A+
Due after ten years	93.3	106.3	A
Subtotal	4,233.9	4,258.3	
Agency mortgage-backed	941.0	946.5	AA+
Asset-backed	26.3	26.2	AAA
Total fixed income securities — Available for sale	$5,201.2	$ 5,231.0	

Guaranteed Investments. The Company held no investments which are guaranteed by mono-line insurers, excluding those with explicit government guarantees as March 31, 2018 and December 31, 2017. The Company's exposure to other third-party guaranteed debt is primarily to investments backed by non-U.S. government guaranteed issuers.

Gross Unrealized Loss. The following tables summarize, by type of security, the aggregate fair value and gross unrealized loss by length of time the security has been in an unrealized loss position in the Company's available for sale portfolio as at March 31, 2018 and December 31, 2017:

	As at March 31, 2018						
	0-12 months		Over 12 months		Total		
	Fair Market Value	Gross Unrealized Loss	Fair Market Value	Gross Unrealized Loss	Fair Market Value	Gross Unrealized Loss	Number of Securities
	($ in millions)						
U.S. government	$772.9	$ (12.7)	$286.8	$ (8.9)	$1,059.7	$ (21.6)	112
U.S. agency	30.8	(0.4)	5.5	—	36.3	(0.4)	12
Municipal	36.0	(0.6)	—	—	36.0	(0.6)	11
Corporate	1,544.3	(26.3)	320.4	(15.0)	1,864.7	(41.3)	661
Non-U.S. government-backed corporate	50.0	(0.4)	10.0	(0.1)	60.0	(0.5)	17
Non-U.S. government	247.5	(1.4)	23.8	(0.4)	271.3	(1.8)	58
Asset-backed	13.4	(0.1)	5.0	(0.1)	18.4	(0.2)	7
Agency mortgage-backed	427.5	(8.6)	290.5	(11.8)	718.0	(20.4)	228
Total fixed income securities — Available for sale	3,122.4	(50.5)	942.0	(36.3)	4,064.4	(86.8)	1,106
Total short-term investments — Available for sale	41.8	(0.1)	—	—	41.8	(0.1)	10
Total	$3,164.2	$ (50.6)	$942.0	$ (36.3)	$4,106.2	$ (86.9)	1,116

	As at December 31, 2017						
	0-12 months		Over 12 months		Total		
	Fair Market Value	Gross Unrealized Loss	Fair Market Value	Gross Unrealized Loss	Fair Market Value	Gross Unrealized Loss	Number of Securities
	($ in millions)						
U.S. government	$652.1	$ (5.1)	$259.8	$ (6.5)	$911.9	$ (11.6)	101
U.S. agency	20.1	(0.2)	6.1	—	26.2	(0.2)	10
Municipal	28.5	(0.2)	—	—	28.5	(0.2)	9
Corporate	699.3	(3.4)	360.7	(8.4)	1,060.0	(11.8)	412
Non-U.S. government-backed corporate	43.5	(0.3)	13.3	(0.2)	56.8	(0.5)	15
Non-U.S. government	206.2	(0.8)	32.0	(0.4)	238.2	(1.2)	47
Asset-backed	11.1	—	10.5	(0.1)	21.6	(0.1)	11
Agency mortgage-backed	257.6	(1.9)	301.9	(6.3)	559.5	(8.2)	156
Total fixed income securities — Available for sale	1,918.4	(11.9)	984.3	(21.9)	2,902.7	(33.8)	761
Total short-term investments — Available for sale	46.9	(0.1)	—	—	46.9	(0.1)	8
Total	$1,965.3	$ (12.0)	$984.3	$ (21.9)	$2,949.6	$ (33.9)	769

Other-Than-Temporary Impairments. A security is potentially impaired when its fair value is below its amortized cost. The Company reviews its available for sale fixed income portfolios on an individual security basis for potential other-than-temporary impairment ("OTTI") each quarter based on criteria including issuer-specific circumstances, credit ratings actions and general macro-economic conditions. The total OTTI charge for the three months ended March 31, 2018 was $Nil (2017 —$0.3 million). For a more detailed description of accounting policies for OTTI, please refer to Note 2(c) of the "Notes to the Audited Consolidated Financial Statements" in the Company's 2017 Annual Report on Form 10-K filed with the SEC.

7. Variable Interest Entities

As at March 31, 2018, the Company had investments in two variable interest entities ("VIE"): Peregrine Reinsurance Ltd ("Peregrine") and Silverton Re Ltd ("Silverton").

Peregrine. In November 2016, Peregrine, a subsidiary of the Company, was registered as a segregated accounts company under the Segregated Accounts Companies Act 2000, as amended. As at March 31, 2018, Peregrine had four segregated accounts which were funded by a third party investor. The segregated accounts have not been consolidated as part of the Company's consolidated financial statements. The Company has, however, determined that Peregrine has the characteristics of a VIE as addressed by the guidance in ASC 810, Consolidation. The Company concluded that it is not the primary beneficiary of the four segregated accounts of Peregrine but is the primary beneficiary of the Peregrine general fund and, similar to prior reporting periods, the Company has included the results of the Peregrine general fund in its consolidated financial statements. The Company's exposure to Peregrine's general fund is not material.

Silverton. On September 10, 2013, the Company established Silverton, a Bermuda domiciled special purpose insurer formed to provide additional collateralized capacity to support Aspen Re's business through retrocession agreements which are collateralized and funded by Silverton through the issuance of one or more series of participating loan notes (collectively, the "Loan Notes"). Silverton is a non-rated insurer and the risks are fully collateralized by way of funds held in trust for the benefit of Aspen Bermuda and Aspen U.K., the ceding reinsurers.

All proceeds from the issuance of the Loan Notes were deposited into separate collateral accounts for each series of Loan Notes to fund Silverton's obligations under a retrocession property quota share agreement entered into with Aspen Bermuda or Aspen Bermuda and Aspen U.K, as the case may be. The holders of the Loan Notes participate in any profit or loss generated by Silverton attributable to the operations of the respective Silverton segregated account.

Any existing value of the Loan Notes will be returned to the noteholders in installments after the expiration of the risk period of the retrocession agreement issued by Silverton for the related series of Loan Notes with the final payment being contractually due on the respective maturity dates.

The following tables show the total liability balance of the Loan Notes for the three months ended March 31, 2018 and 2017:

	For the Three Months Ended March 31, 2018		
	Third Party	Aspen Holdings	Total
	($ in millions)		
Opening balance	$86.6	$ 20.6	$107.2
Total change in fair value for the period	(1.0)	(0.3)	(1.3)
Total distributed in the period	(45.8)	(10.7)	(56.5)
Closing balance as at March 31, 2018	$39.8	$ 9.6	$49.4
Liability			
Loan notes (long-term liabilities)	$32.2	$ 7.7	$39.9
Accrued expenses (current liabilities)	7.6	1.9	9.5
Total aggregate unpaid balance as at March 31, 2018	$39.8	$ 9.6	$49.4

	For the Three Months Ended March 31, 2017		
	Third Party	Aspen Holdings	Total
	($ in millions)		
Opening balance	$223.4	$ 54.5	$277.9
Total change in fair value for the period	2.9	0.7	3.6
Total distributed in the period	(111.2)	(28.3)	(139.5)
Closing balance as at March 31, 2017	$115.1	$ 26.9	$142.0
Liability			
Loan notes (long-term liabilities)	$110.2	$ 26.9	$137.1
Accrued expenses (current liabilities)	4.9	—	4.9
Total aggregate unpaid balance as at March 31, 2017	$115.1	$ 26.9	$142.0

The Company has determined that Silverton has the characteristics of a VIE that are addressed by the guidance in ASC 810, Consolidation. The Company concluded that it is the primary beneficiary of Silverton as it owns all of Silverton's voting shares and issued share capital, and has a significant financial interest and the power to control Silverton. As a result, the Company consolidated Silverton upon its formation. The Company has no other obligation to provide financial support to Silverton and neither the creditors nor beneficial interest holders of Silverton have recourse to the Company's general credit.

In the event of an extreme catastrophic property reinsurance event or severe credit-related event, there is a risk that Aspen Bermuda and Aspen U.K. would be unable to recover losses from Silverton. These two risks are mitigated as follows:

i. Silverton has collateralized the aggregate limit provided to Aspen Bermuda and Aspen U.K. by way of a trust in favor of Aspen Bermuda and Aspen U.K. as beneficiaries;

ii. the trustee is a large, well-established regulated entity; and

iii. all funds within the trust account are bound by investment guidelines restricting investments to one of the institutional class money market funds run by large international investment managers.

For further information regarding the Loan Notes attributable to the third-party investments in Silverton, refer to Note 8 of these unaudited condensed consolidated financial statements.

8. Fair Value Measurements

The Company's estimates of fair value for financial assets and liabilities are based on the framework established in the fair value accounting guidance included in ASC 820, Fair Value Measurements and Disclosures. The framework

prioritizes the inputs, which refer broadly to assumptions market participants would use in pricing an asset or liability, into three levels.

The Company considers prices for actively traded securities to be derived based on quoted prices in an active market for identical assets, which are Level 1 inputs in the fair value hierarchy. The majority of these securities are valued using prices supplied by index providers.

The Company considers prices for other securities that may not be as actively traded which are priced via pricing services, index providers, vendors and broker-dealers, or with reference to interest rates and yield curves, to be derived based on inputs that are observable for the asset, either directly or indirectly, which are Level 2 inputs in the fair value hierarchy. The majority of these securities are also valued using prices supplied by index providers.

The Company considers securities, other financial instruments and derivative insurance contracts subject to fair value measurement whose valuation is derived by internal valuation models to be based largely on unobservable inputs, which are Level 3 inputs in the fair value hierarchy.

The following tables present the level within the fair value hierarchy at which the Company's financial assets and liabilities are measured on a recurring basis as at March 31, 2018 and December 31, 2017:

	As at March 31, 2018			
	Level 1	Level 2	Level 3	Total
	($ in millions)			
Available for sale financial assets, at fair value				
U.S. government	$1,292.2	$—	$—	$1,292.2
U.S. agency	—	52.7	—	52.7
Municipal	—	47.6	—	47.6
Corporate	—	2,446.2	—	2,446.2
Non-U.S. government-backed corporate	—	97.8	—	97.8
Non-U.S. government	338.0	145.4	—	483.4
Asset-backed	—	18.5	—	18.5
Agency mortgage-backed	—	973.8	—	973.8
Total fixed income securities available for sale, at fair value	1,630.2	3,782.0	—	5,412.2
Short-term investments available for sale, at fair value	52.5	2.1	—	54.6
Held for trading financial assets, at fair value				
U.S. government	141.7	—	—	141.7
Municipal	—	74.3	—	74.3
Corporate	—	1,003.6	—	1,003.6
Non-U.S. government-backed corporate	—	1.0	—	1.0
Non-U.S. government	49.7	166.9	—	216.6
Asset-backed	—	8.3	—	8.3
Agency mortgage-backed	—	192.1	—	192.1
Total fixed income securities trading, at fair value	191.4	1,446.2	—	1,637.6
Short-term investments trading, at fair value	23.3	3.7	—	27.0
Equity investments trading, at fair value	—	—	—	—
Catastrophe bonds trading, at fair value	—	34.8	—	34.8
Other financial assets and liabilities, at fair value				
Derivatives at fair value — foreign exchange contracts	—	15.6	—	15.6
Liabilities under derivative contracts — foreign exchange contracts	—	(2.3)	—	(2.3)
Loan notes issued by variable interest entities, at fair value	—	—	(32.2)	(32.2)
Loan notes issued by variable interest entities, at fair value (included within accrued expenses and other payables)	—	—	(7.6)	(7.6)
Total	$1,897.4	$5,282.1	$(39.8)	$7,139.7

Transfers of assets into or out of a particular level are recorded at their fair values as of the end of each reporting period, consistent with the date of the determination of fair value. There were no transfers between Level 1, Level 2 and Level 3 during the three months ended March 31, 2018.

The Company settled $45.8 million of Level 3 liabilities in respect of the Loan Notes issued by Silverton for the three months ended March 31, 2018. As at March 31, 2018, there were no assets classified as Level 3 and the Company's Level 3 liabilities consisted solely of the Loan Notes issued by Silverton.

	As at December 31, 2017			
	Level 1	Level 2	Level 3	Total
	($ in millions)			
Available for sale financial assets, at fair value				
U.S. government	$1,159.4	$—	$—	$1,159.4
U.S. agency	—	52.1	—	52.1
Municipal	—	54.9	—	54.9
Corporate	—	2,415.7	—	2,415.7
Non-U.S. government-backed corporate	—	91.3	—	91.3
Non-U.S. government	341.2	143.7	—	484.9
Asset-backed	—	26.2	—	26.2
Agency mortgage-backed	—	946.5	—	946.5
Total fixed income securities available for sale, at fair value	1,500.6	3,730.4	—	5,231.0
Short-term investments available for sale, at fair value	87.3	2.6	—	89.9
Held for trading financial assets, at fair value				
U.S. government	161.9	—	—	161.9
Municipal	—	32.2	—	32.2
Corporate	—	1,046.3	—	1,046.3
Non-U.S. government-backed corporate	—	1.0	—	1.0
Non-U.S. government	24.5	178.0	—	202.5
Asset-backed	—	9.9	—	9.9
Agency mortgage-backed	—	195.5	—	195.5
Total fixed income securities trading, at fair value	186.4	1,462.9	—	1,649.3
Short-term investments trading, at fair value	73.0	—	—	73.0
Equity investments trading, at fair value	491.0	—	—	491.0
Catastrophe bonds trading, at fair value	—	32.4	—	32.4
Other financial assets and liabilities, at fair value				
Derivatives at fair value – foreign exchange contracts	—	6.4	—	6.4
Liabilities under derivative contracts – foreign exchange contracts	—	(1.0)	—	(1.0)
Loan notes issued by variable interest entities, at fair value	—	—	(44.2)	(44.2)
Loan notes issued by variable interest entities, at fair value (included within accrued expenses and other payables)	—	—	(42.4)	(42.4)
Total	$2,338.3	$5,233.7	$(86.6)	$7,485.4

Transfers of assets into or out of a particular level are recorded at their fair values as of the end of each reporting period, consistent with the date of the determination of fair value. During the twelve months ended December 31, 2017, there were no transfers between Level 1, 2 and 3.

The Company settled $115.6 million Level 3 liabilities in respect of the Loan Notes issued by Silverton for the twelve months ended December 31, 2017. As at December 31, 2017, there were no assets classified as Level 3 and the Company's Level 3 liabilities consisted of the Loan Notes issued by Silverton.

The following table presents a reconciliation of the beginning and ending balances for all assets and liabilities measured at fair value on a recurring basis using Level 3 inputs for the three months ended March 31, 2018 and 2017:

Reconciliation of Liabilities Using Level 3 Inputs	Three Months Ended March 31, 2018	Three Months Ended March 31, 2017
	($ in millions)	
Balance at the beginning of the period	$86.6	$223.4
Distributed to third party	(45.8)	(111.2)
Total change in fair value included in the statement of operations	(1.0)	2.9
Balance at the end of the period [1]	$39.8	$115.1

[1] The amount classified within accrued expenses and other payables was $7.6 million and $4.9 million as at March 31, 2018 and March 31, 2017, respectively.

Valuation of Fixed Income Securities. The Company’s fixed income securities are classified as either available for sale or trading and carried at fair value. As at March 31, 2018 and December 31, 2017, the Company’s fixed income securities were valued by pricing services, index providers or broker-dealers using standard market conventions. The market conventions utilize market quotations, market transactions in comparable instruments and various relationships between instruments including, but not limited to, yield to maturity, dollar prices and spread prices in determining value.

Independent Pricing Services and Index Providers. The underlying methodology used to determine the fair value of securities in the Company’s available for sale and trading portfolios by the pricing services and index providers the Company uses is very similar. Pricing services will gather observable pricing inputs from multiple external sources, including buy and sell-side contacts and broker-dealers, in order to develop their internal prices. Index providers are those firms which provide prices for a range of securities within one or more asset classes, typically using their own in-house market makers (traders) as the primary pricing source for the indices, although ultimate valuations may also rely on other observable data inputs to derive a dollar price for all index-eligible securities. Index providers without in-house trading desks will function similarly to a pricing service in that they will gather their observable pricing inputs from multiple external sources. All prices for the Company’s securities attributed to index providers are for an individual security within the respective indices.

Pricing services and index providers provide pricing for less complex, liquid securities based on market quotations in active markets. Pricing services and index providers supply prices for a broad range of securities including those for actively traded securities, such as Treasury and other Government securities, in addition to those that trade less frequently or where valuation includes reference to credit spreads, pay down and pre-pay features and other observable inputs. These securities include Government Agency, Municipals, Corporate and Asset-Backed Securities.

For securities that may trade less frequently or do not trade on a listed exchange, these pricing services and index providers may use matrix pricing consisting of observable market inputs to estimate the fair value of a security. These observable market inputs include: reported trades, benchmark yields, broker-dealer quotes, issuer spreads, two-sided markets, benchmark securities, bids, offers, reference data, and industry and economic factors. Additionally, pricing services and index providers may use a valuation model such as an option adjusted spread model commonly used for estimating fair values of mortgage-backed and asset-backed securities. Neither the Company, nor its index providers, derives dollar prices using an index as a pricing input for any individual security.

Broker-Dealers. The Company obtains quotes from broker-dealers who are active in the corresponding markets when prices are unavailable from independent pricing services or index providers. Generally, broker-dealers value securities through their trading desks based on observable market inputs. Their pricing methodologies include mapping securities based on trade data, bids or offers, observed spreads and performance of newly issued securities. They may also establish pricing through observing secondary trading of similar securities.

The Company obtains prices for all of its fixed income investment securities via its third-party accounting service provider, and in the majority of cases receiving a number of quotes so as to obtain the most comprehensive information available to determine a security's fair value. A single valuation is applied to each security based on the vendor hierarchy maintained by the Company's third-party accounting service provider.

As at March 31, 2018 and December 31, 2017, the Company obtained an average of 2.0 quotes per fixed income investment. Pricing sources used in pricing fixed income investments as at March 31, 2018 and December 31, 2017 were as follows:

	As at March 31, 2018		As at December 31, 2017	
Index providers	84	%	84	%
Pricing services	10		11	
Broker-dealers	6		5	
Total	100	%	100	%

Summary Pricing Information Table. A summary of securities priced using pricing information from index providers as at March 31, 2018 and December 31, 2017 is provided below:

	As at March 31, 2018			As at December 31, 2017		
	Fair Market Value Determined using Prices from Index Providers	% of Total Fair Value by Security Type		Fair Market Value Determined using Prices from Index Providers	% of Total Fair Value by Security Type	
	($ in millions, except for percentages)					
U.S. government	$1,433.9	100	%	$1,321.3	100	%
U.S. agency	44.4	84	%	43.4	83	%
Municipal	74.7	61	%	37.4	43	%
Corporate	3,275.2	95	%	3,299.6	83	%
Non-U.S. government-backed corporate	42.9	43	%	44.0	48	%
Non-U.S. government	373.6	53	%	399.4	58	%
Asset-backed	12.7	47	%	13.5	37	%
Agency mortgage-backed	630.2	54	%	605.0	53	%
Total fixed income securities	$5,887.6	84	%	$5,763.6	84	%
Equities	—	—	%	491.0	100	%
Total fixed income securities and equity investments	$5,887.6	84	%	$6,254.6	85	%

The Company, in conjunction with its third-party accounting service provider, obtains an understanding of the methods, models and inputs used by the third-party pricing service and index providers to assess the ongoing appropriateness of vendors' prices. The Company and its third-party accounting service provider also have controls in place to validate that amounts provided represent fair values. Processes to validate and review pricing include, but are not limited to:

- quantitative analysis (e.g., comparing the quarterly return for each managed portfolio to its target benchmark, with significant differences identified and investigated);
- comparison of market values obtained from pricing services, index providers and broker-dealers against alternative price sources for each security where further investigation is completed when significant differences exist for pricing of individual securities between pricing sources;
- initial and ongoing evaluation of methodologies used by outside parties to calculate fair value; and
- comparison of the fair value estimates to the Company's knowledge of the current market.

Prices obtained from pricing services, index providers and broker-dealers are not adjusted by us; however, prices provided by a pricing service, index provider or broker-dealer in certain instances may be challenged based on information available from market or internal sources, including those available to the Company's third-party

investment accounting service provider. Subsequent to any challenge, revisions made by the pricing service, index provider or broker-dealer to the quotes are supplied to the Company's investment accounting service provider. Management reviews the vendor hierarchy maintained by the Company's third-party accounting service provider in order to determine which price source provides the most appropriate fair value (i.e., a price obtained from a pricing service with more seniority in the hierarchy will be used over a less senior one in all cases). The hierarchy level assigned to each security in the Company's available for sale and trading portfolios is based upon its assessment of the transparency and reliability of the inputs used in the valuation as of the measurement date. The hierarchy of index providers and pricing services is determined using various qualitative and quantitative points arising from reviews of the vendors conducted by the Company's third-party accounting service

provider. Vendor reviews include annual onsite due diligence meetings with index providers and pricing services vendors covering valuation methodology, operational walkthroughs and legal and compliance updates. Index providers are assigned the highest priority in the pricing hierarchy due primarily to availability and reliability of pricing information.

Fixed Income Securities. The Company's fixed income securities are traded on the over-the-counter ("OTC") market based on prices provided by one or more market makers in each security. Securities such as U.S. Government, U.S. Agency, Non-U.S. Government and investment grade corporate bonds have multiple market makers in addition to readily observable market value indicators such as expected credit spread, except for Treasury securities, over the yield curve. The Company uses a variety of pricing sources to value fixed income securities including those securities that have pay down/prepay features such as mortgage-backed securities and asset-backed securities in order to ensure fair and accurate pricing. The fair value estimates for the investment grade securities in the Company's portfolio do not use significant unobservable inputs or modeling techniques.

U.S. Government and Agency. U.S. government and agency securities consist primarily of bonds issued by the U.S. Treasury and corporate debt issued by agencies such as the Federal National Mortgage Association ("FNMA"), the Federal Home Loan Mortgage Corporation ("FHLMC") and the Federal Home Loan Bank. As the fair values of U.S. Treasury securities are based on unadjusted market prices in active markets, they are classified within Level 1. The fair values of U.S. government agency securities are priced using the spread above the risk-free yield curve. As the yields for the risk-free yield curve and the spreads for these securities are observable market inputs, the fair values of U.S. government agency securities are classified within Level 2.

Municipals. The Company's municipal portfolio comprises bonds issued by U.S. domiciled state and municipality entities. The fair value of these securities is determined using spreads obtained from broker-dealers, trade prices and the new issue market which are Level 2 inputs in the fair value hierarchy. Consequently, these securities are classified within Level 2.

Foreign Government. The issuers for securities in this category are non-U.S. governments and their agencies. The fair values of certain non-U.S. government bonds, primarily sourced from international indices, are based on unadjusted market prices in active markets and are therefore classified within Level 1. The remaining non-U.S government bonds are classified within Level 2 as they are not actively traded. The fair values of the non-U.S. agency securities, again primarily sourced from international indices, are priced using the spread above the risk-free yield curve. As the yields for the risk-free yield curve and the spreads for these securities are observable market inputs, the fair values of non-U.S. agency securities are classified within Level 2. In addition, foreign government securities include a portion of the Emerging Market Debt ("EMD") portfolio which is also classified within Level 2.

Corporate. Corporate securities consist primarily of U.S. and foreign corporations covering a variety of industries and are for the most part priced by index providers and pricing vendors. Some issuers may participate in government programs which guarantee timely payment of principal and interest in the event of a default. The fair values of these securities are generally determined using the spread above the risk-free yield curve. Inputs used in the evaluation of these securities include credit data, interest rate data, market observations and sector news, broker-dealer quotes and trade volumes. In addition, corporate securities include a portion of the EMD portfolio. The Company classifies all of these securities within Level 2.

Mortgage-backed Securities. The Company's residential and commercial mortgage-backed securities consist of bonds issued by the Government National Mortgage Association, the FNMA and the FHLMC as well as private non-agency issuers. The fair values of these securities are determined through the use of a pricing model (including Option Adjusted Spread) which uses prepayment speeds and spreads to determine the appropriate average life of the mortgage-backed security. These spreads are generally obtained from broker-dealers, trade prices and the new issue market. As the significant inputs used to price mortgage-backed securities are observable market inputs, these securities are classified within Level 2.

Asset-backed Securities. The underlying collateral for the Company's asset-backed securities consists mainly of student loans, automobile loans and credit card receivables. These securities are primarily priced by index providers and pricing vendors. Inputs to the valuation process include broker-dealer quotes and other available trade information, prepayment speeds, interest rate data and credit spreads. The Company classifies these securities within

Level 2.

Short-term Investments. Short-term investments comprise highly liquid debt securities with a maturity greater than three months but less than one year from the date of purchase. Short-term investments are valued in a manner similar to the Company's fixed income investments and are classified within Levels 1 and 2.

Catastrophe Bonds. Catastrophe bonds held by the Company are variable rate fixed income instruments with redemption values adjusted based on the occurrence of a covered event, usually windstorms and earthquakes. These bonds have been classified as trading and carried at fair value. Bonds are priced using an average of multiple broker-dealer quotes and, as such, are classified as Level 2.

Foreign Exchange Contracts. The foreign exchange contracts which the Company uses to mitigate currency risk are characterized as OTC due to their customized nature and the fact that they do not trade on a major exchange. These instruments trade in a deep liquid market, providing substantial price transparency and accordingly are classified as Level 2.

Loan Notes Issued by Silverton. Silverton, a licensed special purpose insurer, is consolidated into the Company's accounts as a VIE. In the fourth quarter of 2014, Silverton issued an additional $85.0 million ($70.0 million third-party funded) of Loan Notes with a maturity date of September 18, 2017. In the fourth quarter of 2015, Silverton issued an additional $125.0 million ($100.0 million third-party funded) of Loan Notes with a maturity date of September 17, 2018. In the fourth quarter of 2016, Silverton issued an additional $130.0 million ($105.0 million third-party funded) of Loan Notes with a maturity date of September 16, 2019. The Company elected to account for the Loan Notes at fair value using the guidance as prescribed under ASC 825, Financial Instruments as the Company believes it represents the most meaningful measurement basis for these liabilities. The Loan Notes are recorded at fair value at each reporting period and, as they are not quoted on an active market and contain significant unobservable inputs, they have been classified as a Level 3 instrument in the Company's fair value hierarchy. The Loan Notes are unique because they are linked to the specific risks of the Company's property catastrophe book.

To determine the fair value of the Loan Notes the Company runs an internal model which considers the seasonality of the risk assumed under the retrocessional agreement between Aspen Bermuda or a combination of Aspen Bermuda and Aspen U.K., as ceding reinsurers, and Silverton. The seasonality used in the model is initially determined by applying the percentage of property catastrophe losses planned by the Company's actuaries to the estimated written premium to determine earned premium for each quarter. The inputs to the internal model are based on Company specific data due to the lack of observable market inputs. Reserves for losses are the most significant unobservable input. An increase in reserves for losses would normally result in a decrease in the fair value of the Loan Notes while a decrease in reserves would normally result in an increase in the fair value of the Loan Notes. The observable and unobservable inputs used to determine the fair value of the Loan Notes as at March 31, 2018 and December 31, 2017 are presented in the tables below:

As at March 31, 2018	Fair Value Level 3	Valuation Method	Observable (O) and Unobservable (U) inputs	Low	High
	($ in millions)			($ in millions)	
Loan Notes	$ 39.8 [(1)]	Internal Valuation Model	Gross premiums written (O)	$50.1	$61.1
			Reserve for losses (U)	$4.2	$64.5
			Contract period (O)	N/A	365 days
			Initial value of issuance (O)	$325.0	$325.0

As at December 31, 2017	Fair Value Level 3	Valuation Method	Observable (O) and Unobservable (U) inputs	Low	High
	($ in millions)			($ in millions)	
Loan Notes	$ 86.6 [(1)]	Internal Valuation Model	Gross premiums written (O)	$50.1	$61.1
			Reserve for losses (U)	$4.2	$61.9
			Contract period (O)	N/A	365 days
			Initial value of issuance (O)	$325.0	$325.0

[(1)] The amounts classified within accrued expenses and other payables were $7.6 million and $42.4 million as at March 31, 2018 and December 31, 2017, respectively.

The observable and unobservable inputs represent the potential variation around the inputs used in the internal model. The contract period is defined in the respective Loan Notes agreements and the initial value represents the funds received from third parties. For further information regarding Silverton, refer to Note 7 of these unaudited condensed consolidated financial statements.

9. Reinsurance

The Company purchases retrocession and reinsurance to limit and diversify the Company's risk exposure and increase its own insurance and reinsurance underwriting capacity. These agreements provide for recovery of a portion of losses and loss adjustment expenses from reinsurers. As is the case with most reinsurance contracts, the Company remains liable to the extent that reinsurers do not meet their obligations under these agreements and therefore, in line with its risk management objectives, the Company evaluates the financial condition of its reinsurers and monitors concentrations of credit risk. The total amount recoverable by the Company from reinsurers as at March 31, 2018 was $1,611.3 million (December 31, 2017 — $1,515.2 million) of which $1,119.8 million was uncollateralized (December 31, 2017 — $1,001.9 million). As at March 31, 2018 17.9% (December 31, 2017 — 17.0%) of the Company's uncollateralized reinsurance recoverables were with Munich Re which is rated A+ by A.M Best and AA- by S&P, 12.5% (December 31, 2017 — 13.8%) with Lloyd's Syndicates which are rated A by A.M Best and A+ by S&P and 7.9% (December 31, 2017 — 7.6%) with Aioi Nissay Dowa Insurance Co which is rated A+ by A.M best and S&P. These are the Company's largest exposures to individual reinsurers. The Company has made no provision for doubtful debts from any of its reinsurers as at March 31, 2018.

10. Derivative Contracts

The following tables summarize information on the location and amounts of derivative fair values on the consolidated balance sheet as at March 31, 2018 and December 31, 2017:

Derivatives Not Designated as Hedging Instruments Under ASC 815	Balance Sheet Location	As at March 31, 2018		As at December 31, 2017	
		Notional Amount	Fair Value	Notional Amount	Fair Value
		($ in millions)		($ in millions)	
Foreign Exchange Contracts	Derivatives at Fair Value	$842.9	$13.7 [1]	$577.7	$5.0
Foreign Exchange Contracts	Liabilities under Derivative Contracts	$266.8	$(2.3)	$173.9	$(1.0)

[1] Net of $Nil cash collateral (December 31, 2017 — $0.6 million).

Derivatives Designated as Hedging Instruments Under ASC 815	Balance Sheet Location	As at March 31, 2018		As at December 31, 2017	
		Notional Amount	Fair Value	Notional Amount	Fair Value
		($ in millions)		($ in millions)	
Foreign Exchange Contracts	Derivatives at Fair Value	$80.8	$ 1.9 [1]	$60.6	$ 1.4

[1] Net of $Nil cash collateral (December 31, 2017 — $Nil).

The following table provides the unrealized and realized gains recorded in the statements of operations and other comprehensive income for derivatives that are not designated or designated as hedging instruments under ASC 815 - "Derivatives and Hedging" for the three months ended March 31, 2018 and 2017.

Amount of Gain Recognized on Derivatives

	Location of Gain Recognized on Derivatives	Three Months Ended	
		March 31, 2018	March 31, 2017
Derivatives not designated as hedges		($ in millions)	
Foreign Exchange Contracts	Change in Fair Value of Derivatives	23.5	3.1
Derivatives designated as hedges			
Foreign Exchange Contracts	General, administrative and corporate expenses	1.7	0.3
Foreign Exchange Contracts	Net change from current period hedged transactions	0.9	1.3

Foreign Exchange Contracts. The Company uses foreign exchange contracts to manage foreign currency risk. A foreign exchange contract involves an obligation to purchase or sell a specified currency at a future date at a price set at the time of the contract. Foreign exchange contracts will not eliminate fluctuations in the value of the Company's assets and liabilities denominated in foreign currencies but rather allow it to establish a rate of exchange for a future point in time.

As at March 31, 2018, the Company held foreign exchange contracts that were not designated as hedging under ASC 815 with an aggregate notional value of $1,109.7 million (December 31, 2017 — $751.6 million). The foreign exchange contracts are recorded as derivatives at fair value with changes recorded as a change in fair value of derivatives in the statement of operations. For the three months ended March 31, 2018, the impact of foreign exchange contracts on net income was a gain of $23.5 million (March 31, 2017 — gain of $3.1 million).

As at March 31, 2018, the Company held foreign exchange contracts that were designated as hedging under ASC 815 with an aggregate nominal amount of $80.8 million (December 31, 2017 — $60.6 million). The foreign exchange contracts are recorded as derivatives at fair value in the balance sheet with the effective portion recorded in other comprehensive income and the ineffective portion recorded as a change in fair value of derivatives in the statement of operations. The contracts are considered to be effective and therefore the movement in other comprehensive income representing the effective portion for the three months ended March 31, 2018 was a net unrealized gain of $0.9 million (March 31, 2017 — gain of $1.3 million).

As the foreign exchange contracts settle, the realized gain or loss is reclassified from other comprehensive income into general, administration and corporate expenses of the statement of operations and other comprehensive income. For the three months ended March 31, 2018, the amount recognized within general, administrative and corporate expenses for settled foreign exchange contracts was a realized gain of $1.7 million (March 31, 2017 — gain of $0.3 million).

11. Deferred Policy Acquisition Costs

The following table represents a reconciliation of beginning and ending deferred policy acquisition costs for the three months ended March 31, 2018 and 2017:

	Three Months Ended March 31,	
	2018	2017
	($ in millions)	
Balance at the beginning of the period	$294.3	$358.4
Acquisition costs deferred	116.4	122.8
Amortization of deferred policy acquisition costs	(90.8)	(113.7)
Balance at the end of the period	$319.9	$367.5

12. Reserves for Losses and Loss Adjustment Expenses

The following table represents a reconciliation of beginning and ending consolidated loss and loss adjustment expenses (“LAE”) reserves for the three months ended March 31, 2018 and 2017 and the twelve months ended December 31, 2017:

	Three Months Ended March 31, 2018	Three Months Ended March 31, 2017	Twelve Months Ended December 31, 2017
	($ in millions)		
Provision for losses and LAE at the start of the year	$6,749.5	$5,319.9	$ 5,319.9
Less reinsurance recoverable	(1,515.2)	(560.7)	(560.7)
Net loss and LAE at the start of the year	5,234.3	4,759.2	4,759.2
Net loss and LAE expenses (disposed)	—	—	(125.5)
Provision for losses and LAE for claims incurred:			
Current year	347.9	354.4	2,100.1
Prior years	(37.7)	(26.2)	(105.4)
Total incurred	310.2	328.2	1,994.7
Losses and LAE payments for claims incurred:			
Current year	(7.4)	(14.8)	(397.5)
Prior years	(483.7)	(383.6)	(1,157.6)
Total paid	(491.1)	(398.4)	(1,555.1)
Foreign exchange losses/(gains)	14.7	41.1	161.0
Net losses and LAE reserves at period end	5,068.1	4,730.1	5,234.3
Plus reinsurance recoverable on unpaid losses at period end	1,611.3	635.8	1,515.2
Provision for losses and LAE at the end of the relevant period	$6,679.4	$5,365.9	$ 6,749.5

For the three months ended March 31, 2018, there was a reduction of $37.7 million in the Company’s estimate of the ultimate claims to be paid in respect of prior accident years compared to a reduction of $26.2 million for the three months ended March 31, 2017. The Company ceded $125.5 million of reserves as part of an adverse development cover purchased during the twelve months ended December 31, 2017. For additional information on the reserve releases, please refer to “Management’s Discussion and Analysis of Financial Condition and Results of Operations — Reserves for Losses and Loss Adjustment Expenses” below.

The following tables show an analysis of incurred claims and allocated loss adjustment expenses, net of reinsurance and cumulative paid claims and allocated claim adjustment expenses, net of reinsurance as at March 31, 2018, December 31, 2017, 2016, 2015, 2014, 2013 and 2012. The loss development triangles are derived from all business written by the Company as although a limited number of contracts are written which have durations of greater than one year the contracts do not meet the definition of a long duration contract. The triangles should be reviewed in conjunction with the loss development triangles included in "Note 12 — Reserves for Losses and Loss Adjustment Expenses" in our 2017 Annual Report on Form 10-K filed with the SEC.

	Insurance Incurred Claims, IBNR and Allocated Loss Adjustment Expenses, Net of Reinsurance For the Years Ended December 31, Unaudited Prior Years							As at March 31, 2018	
Accident Year	2012	2013	2014	2015	2016	2017	Q1 2018	Total of IBNR Plus Expected Development on Reported Claims	Cumulative Number of Reported Claims
	$ (in millions)								
2012	611.2	632.4	661.7	676.3	661.1	644.4	644.3	29.3	15,648
2013		696.7	674.4	685.3	667.0	657.0	654.1	45.1	14,597
2014			763.0	737.6	709.6	702.6	705.4	70.8	18,855
2015				927.6	918.0	867.2	871.2	162.7	21,321
2016					920.4	892.3	887.7	300.0	21,042
2017						907.0	870.6	232.7	19,494
2018							159.8	113.8	2,636
						Total	$4,793.1		

	Insurance Cumulative Paid Claims and Allocated Loss Adjustment Expenses, Net of Reinsurance For the Years Ended December 31, Unaudited Prior Years						
Accident Year	2012	2013	2014	2015	2016	2017	Q1 2018
	($ in millions)						
2012	118.5	310.6	382.2	457.5	508.0	530.2	532.0
2013		92.1	257.3	368.5	459.4	507.9	524.1
2014			100.2	249.8	393.1	470.4	479.1
2015				120.4	331.4	478.2	508.4
2016					118.7	349.9	399.9
2017						169.4	261.6
2018							5.0
					Total		$2,710.1
							$2,083.0

All outstanding liabilities for 2012 and subsequent years, net of reinsurance	
All outstanding liabilities before 2012, net of reinsurance	131.1
Liabilities for claims and claim adjustment expenses, net of reinsurance	$2,214.1

32

Reinsurance
Incurred Claims, IBNR and Allocated Loss Adjustment Expenses, Net of Reinsurance

Accident Year	For the Years Ended December 31, Unaudited Prior Years							As at March 31, 2018	
	2012	2013	2014	2015	2016	2017	Q1 2018	Total of IBNR Plus Expected Development on Reported Claims	Cumulative Number of Reported Claims
	$ (in millions)								
2012	699.0	743.7	727.2	698.0	696.9	695.1	692.2	79.7	3,791
2013		588.2	581.4	560.5	533.9	514.3	513.2	72.6	3,641
2014			557.6	539.1	523.1	495.7	486.4	94.9	3,614
2015				590.3	574.7	568.1	562.4	142.0	3,770
2016					761.4	775.5	775.0	234.8	3,492
2017						1,204.4	1,213.1	483.7	3,240
2018							176.5	148.0	1,010
				Total			$4,418.8		

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

Accident Year	For the Years Ended December 31, Unaudited Prior Years						
	2012	2013	2014	2015	2016	2017	Q1 2018
	($ in millions)						
2012	64.0	251.4	364.8	419.2	463.4	501.5	508.0
2013		64.2	190.9	284.0	326.3	366.6	373.3
2014			57.8	175.5	252.3	293.7	302.1
2015				58.1	174.6	276.9	297.9
2016					126.9	355.5	372.4
2017						229.3	415.8
2018							2.4
					Total		$2,271.9
	All outstanding liabilities for 2012 and subsequent years, net of reinsurance						2,146.9
	All outstanding liabilities before 2012, net of reinsurance						660.0
	Liabilities for claims and claim adjustment expenses, net of						$2,806.9

reinsurance

33

	Three Months Ended March 31, 2018 ($ in millions)
Net outstanding liabilities:	
Insurance lines	2,214.1
Reinsurance lines	2,806.9
Net loss and LAE	5,021.0
Reinsurance recoverable on unpaid losses:	
Insurance lines	1,304.3
Reinsurance lines	307.0
Total reinsurance recoverable on unpaid losses	1,611.3
Insurance lines other than short-duration	—
Unallocated claims incurred	48.8
Other	(1.7)
	47.1
Provision for losses and LAE at the end of the period	6,679.4

13. Capital Structure

The following table provides a summary of the Company's authorized and issued share capital as at March 31, 2018 and December 31, 2017:

	As at March 31, 2018		As at December 31, 2017	
	Number	$ in Thousands	Number	$ in Thousands
Authorized share capital:				
Ordinary Shares 0.15144558¢ per share	969,629,030	1,469	969,629,030	1,469
Non-Voting Shares 0.15144558¢ per share	6,787,880	10	6,787,880	10
Preference Shares 0.15144558¢ per share	100,000,000	152	100,000,000	152
Total authorized share capital		1,631		1,631
Issued share capital:				
Issued ordinary shares of 0.15144558¢ per share	59,652,826	90	59,474,085	90
Issued 5.95% preference shares of 0.15144558¢ each with a liquidation preference of $25 per share	11,000,000	17	11,000,000	17
Issued 5.625% preference shares of 0.15144558¢ each with a liquidation preference of $25 per share	10,000,000	15	10,000,000	15
Total issued share capital		122		122

Additional paid-in capital as at March 31, 2018 was $959.5 million (December 31, 2017 — $954.7 million). Additional paid-in capital includes the aggregate liquidation preferences of the Company's preference shares of $525.0 million (December 31, 2017 — $525.0 million) less issue costs of $13.1 million (December 31, 2017 — $13.1 million).

Ordinary Shares. The following table summarizes transactions in the Company's ordinary shares during the three months ended March 31, 2018:

	Number of Ordinary Shares
Ordinary shares in issue as at December 31, 2017	59,474,085
Ordinary share transactions in the three months ended March 31, 2018	
Ordinary shares issued to employees under the 2013 share incentive plan and/or 2008 share purchase plan	174,063
Ordinary shares issued to non-employee directors	4,678
Ordinary shares in issue as at March 31, 2018	59,652,826

Share Repurchase Authorization Program. On February 8, 2017, the Company's Board of Directors approved a share repurchase authorization program of $250.0 million. The share repurchase authorization program, which expires on February 8, 2019, permits the Company to effect the repurchases of its ordinary shares from time to time through a combination of transactions, including open market purchases, privately negotiated transactions and accelerated share repurchase transactions. The Company did not acquire or cancel any ordinary shares for the three months ended March 31, 2018.
Preference Share Issuance. The Company did not issue any preference shares for the three months ended March 31, 2018.

14. Share-Based Payments
The Company has issued options and other equity incentives under three arrangements: the employee share incentive plan, the employee share purchase plans and the non-employee director stock incentive plan. When options are exercised or other equity awards (excluding phantom shares) vest, new ordinary shares are issued as the Company does not hold treasury shares. Phantom shares are settled in cash in lieu of ordinary shares upon vesting.

(a) Employee Equity Incentives
The total number of ordinary shares that may be issued under the Company's 2013 Share Incentive Plan is 2,845,683 ordinary shares, which includes 595,683 ordinary shares available to grant under the 2003 Share Incentive Plan as of February 25, 2013. The number of ordinary shares that may be issued under the 2013 Share Incentive Plan is adjusted per the number of awards that may be forfeited under the 2003 Share Incentive Plan.
Restricted Share Units. Restricted share units ("RSUs") granted to employees typically vest over a three-year period subject to the employee's continued service. RSUs vest granted to employees vest on the anniversary of the date of grant or when the Compensation Committee of the Board of Directors agrees to deliver them. Holders of RSUs will be paid one ordinary share for each RSU that vests as soon as practicable following the vesting date. Holders of RSUs generally will not be entitled to any rights of a holder of ordinary shares, including the right to vote, unless and until their RSUs vest and ordinary shares are issued but they are entitled to receive dividend equivalents. Dividend equivalents are denominated in cash and paid in cash if and when the underlying RSUs vest.
The fair value of the RSUs is based on the closing price on the date of the grant less a deduction for illiquidity, and is expensed through the income statement evenly over the vesting period. In the three months ended March 31, 2018, the Company granted 221,943 RSUs (2017 — 174,711) to its employees. Compensation costs charged against income in respect of RSUs granted to employees for the three months ended March 31, 2018 were $2.1 million (2017 —$2.5 million). The total tax credit recognized by the Company in relation to RSUs in the three months ended March 31, 2018 was $0.2 million (2017 — $0.6 million).
Performance Shares. Performance share awards are subject to a three-year service vesting period with a separate annual growth in diluted BVPS test for each calendar year during the vesting period. Accordingly, one-third of the award may be earned in each calendar year. Performance share awards are not entitled to dividends before they vest and are subject to the employee's continued employment. If performance goals are achieved, the performance shares will vest up to a maximum of 200% of target.
Notwithstanding the vesting criteria for each given year, if in any given year the shares eligible for vesting are greater than 100% or the portion of such year's grant and the average diluted BVPS growth over such year and the preceding

year is less than the average of the minimum vesting thresholds for such year and the preceding year, then only 100% (and no more) of the shares that are eligible for vesting in such year shall vest. Notwithstanding the foregoing, if in the judgment of the Compensation Committee the main reason for the BVPS metric in the earlier year falling below the minimum threshold is due to the impact of rising interest rates and bond yields, then the Compensation Committee may, in its discretion, disapply the limitation on 100% vesting.

During the three months ended March 31, 2018, the Company granted 215,273 performance shares to its employees (2017 — 206,073).
The fair value of performance share awards is based on the value of the closing ordinary share price on the date of the grant less a deduction for illiquidity and expected dividends which would not accrue during the vesting period. Net compensation costs charged against income in the three months ended March 31, 2018 in respect of performance shares were $2.0 million (2017 — $2.7 million). The total tax recognized by the Company in relation to performance shares in the three months ended March 31, 2018 was a tax credit of $0.3 million (2017 — $0.5 million credit, excluding excess tax benefits.
Phantom Shares. Phantom share awards are subject to a three-year service vesting period with a separate annual growth in diluted BVPS test for each calendar year during the vesting period. One-third of the award may be earned in each calendar year with the vested amount being paid in cash in lieu of ordinary shares. As ordinary shares are not issued, phantom shares have no dilutive effect.
During the three months ended March 31, 2018, the Company granted 150,185 phantom shares to its employees (2017 — 174,284).
The fair value of the phantom shares is based on the closing share price on the date of the grant less a deduction for illiquidity. The fair value is expensed through the consolidated income statement evenly over the vesting period. As the payment to beneficiaries will ultimately be in cash rather than ordinary shares, an adjustment is required each quarter to revalue the accumulated liability to the balance sheet date fair value.
Compensation costs charged against income in the three months ended March 31, 2018 in respect of phantom shares were $1.1 million (2017 — $2.2 million). The total tax recognized by the Company in relation to phantom shares in the three months ended March 31, 2018 was $0.2 million (2017 — $0.4 million), excluding excess tax benefits.
Vesting Criteria Performance and Phantom Shares. Both performance share and phantom share awards are subject to a three- year vesting period with a separate BVPS growth test each year, adjusted to add back ordinary shares and movements in AOCI to shareholders' equity at the end of the relevant year. One-third of the grant will be eligible for vesting each year based on a formula and will only be issuable at the end of the three-year period.

(b) Employee Share Purchase Plans

Employee Share Purchase Plans. On April 30, 2008, the shareholders of the Company approved the Employee Share Purchase Plan, the 2008 Sharesave Scheme and the International Employee Share Purchase Plan (collectively, the "ESPP"), which are implemented by a series of consecutive offering periods as determined by the Board of Directors. In respect of the ESPP, employees can save up to $500 per month over a two-year period, at the end of which they are eligible to purchase the Company's ordinary shares at a discounted price. In respect of the 2008 Sharesave Scheme, employees can save up to £500 per month over a three-year period, at the end of which they are eligible to purchase the Company's ordinary shares at a discounted price. Employees can purchase the Company's ordinary shares at a discounted price equivalent to eighty-five percent (85%) of the fair market value of the ordinary shares on the offering date which may be adjusted upon changes in capitalization of the Company. Under the ESPP, 4,797 ordinary shares were exercised and issued during the three months ended March 31, 2018 (2017 — 2,310). Compensation costs charged against income in the three months ended March 31, 2018 in respect of the ESPP were $0.2 million (2017 — $0.2 million). The total tax credit recognized by the Company in relation to the ESPP in the three months ended March 31, 2018 was $Nil (2017 — $Nil).

(c) Non-Employee Director Plan

On April 21, 2016, the shareholders of the Company approved the 2016 Stock Incentive Plan for Non-Employee Directors which provides for the granting of options, restricted share units or other share-based awards. The total number of ordinary shares that may be issued under the 2016 Non-Employee Director Plan is 263,695.

Restricted Share Units. RSUs granted to non-employee directors, including the Chairman, vest one-twelfth on each one month anniversary of the date of grant with 100% of the restricted share units becoming vested and issued on the first anniversary of the grant date or on the date of departure of a director for the amount vested through such date.

The shares that are eligible to vest following final vesting date in the calendar year of the date of grant is delivered as soon as practical thereafter and the remaining shares under the RSUs are delivered on the first anniversary of the grant date. If a director leaves the Board of Directors for any reason other than "cause" (as defined in the award agreement), then the director would receive shares under the restricted share units that had vested through the date the director leaves the Board.

RSUs entitle the holder to receive one ordinary share unit for each unit that vests. Holders of RSUs are not entitled to any of the rights of a holder of ordinary shares, including the right to vote, unless and until their units vest and ordinary shares are

issued but they are entitled to receive dividend equivalents with respect to their units. Dividend equivalents will be denominated in cash and paid in cash if and when the underlying units vest.

The following table summarizes information about RSUs issued to non-employee directors as at March 31, 2018

	Restricted Share Units	
	As at March 31, 2018	As at March 31, 2017
RSU Holder	Amount Granted	Amount Granted
Non-Employee Directors	29,025	24,456
Chairman	12,900	10,962

Compensation costs charged against income in respect of RSUs granted to non-employee directors for the three months ended March 31, 2018 were $0.3 million (2017 — $0.4 million. The total tax charge recognized by the Company in relation to non-employee RSUs in the three months ended March 31, 2018 was $Nil (2017 — $Nil).

15. Intangible Assets and Goodwill

The following table provides a summary of the Company’s intangible assets for the three months ended March 31, 2018 and 2017:

	Three Months Ended March 31, 2018				Three Months Ended March 31, 2017			
	Beginning of the Period	Additions	Amortization	End of the Period	Beginning of the Period	Additions	Amortization	End of the Period
	($ in millions)				($ in millions)			
Intangible Assets								
Trade Mark	$2.9	$ —	$ (0.1)	$ 2.8	$6.6	$ —	$ (0.2)	$ 6.4
Insurance Licenses	16.7	—	—	16.7	16.7	—	—	16.7
Agency Relationships	2.3	—	(0.1)	2.2	26.2	—	(0.4)	25.8
Non-compete Agreements	0.7	—	(0.1)	0.6	3.3	—	(0.2)	3.1
Consulting Relationships	—	—	—	—	0.9	—	—	0.9
Goodwill	3.9	—	—	3.9	24.2	1.8	—	26.0
Renewal Rights	1.4	—	(0.1)	1.3	1.7	—	(0.1)	1.6
Total	$27.9	$ —	$ (0.4)	$ 27.5	$79.6	$ 1.8	$ (0.9)	$ 80.5

Crop Re and AgriLogic

On January 19, 2016, Aspen U.S. Holdings acquired 100% of the equity voting interest of AgriLogic, a specialist U.S. crop managing general agency business with an integrated agricultural consultancy, for an initial purchase price of $53.0 million. In addition, the Company recognized $14.1 million of contingent consideration, with a total maximum payable of $22.8 million, subject to the future performance of the business and $2.0 million of ceding commission. The total consideration for the acquisition was $69.1 million.

A significant proportion of the acquired business was represented by intangible assets, specifically $25.0 million for agency relationships, $4.0 million for the right to use the AgriLogic trademark, $2.9 million for non-compete agreements, $1.8 million for the value of business acquired and $1.0 million for consultancy relationships. In addition, $12.0 million of software was acquired and was recognized in the balance sheet under office properties and equipment along with $0.3 million of residual net assets. The total net assets acquired of $47.0 million resulted in the Company recognizing a total of $22.1 million in goodwill for the acquisition of AgriLogic. In total, $34.0 million of intangible assets and $21.0 million of goodwill was eligible for tax deduction over the following 15 years.

License to use the “AgriLogic” Trademark. The Company acquired the right to use the AgriLogic trademark in the United States. The Company valued the trademark at $4.0 million with an estimated economic useful life of 10 years. The Company planned to amortize the estimated value of the trademark over its estimated useful life.
Agency Relationships. The Company valued the agency relationships at $25.0 million with an estimated economic useful life of 15 years. The Company planned to amortize the estimated value of the agency relationships over its estimated useful life.

Non-compete Agreements. The Company valued the non-compete agreements at $2.9 million with an estimated economic useful life of 5 years. The Company planned to amortize the estimated value of the non-compete agreements over its estimated useful life.
Value of Business Acquired. The Company recognized a $1.8 million asset for value of business acquired ("VOBA") consisting of the inforce unearned premium reserve and claims reserves at fair value. The Company amortized the VOBA in line with the unwinding of the acquired unearned premium balances and loss reserves. Given the short tail nature of AgriLogic's business, the VOBA was fully amortized in 2016.
Consulting Relationships. The Company valued the consulting relationships at $1.0 million with an estimated economic useful life of 10 years. The Company planned to amortize the estimated value of the consulting relationships over its estimated useful life.
Goodwill. The Company valued the goodwill at $22.1 million. The goodwill was deemed to have an indefinite useful life and was assessed for impairment annually.
On December 18, 2017, Aspen U.S. Holdings sold its interest in AgriLogic to CGB Diversified Service, Inc ("CGB DS") in exchange for a 23.2% equity interest in Crop Re Services LLC. Aspen U.S. Holdings retained the agricultural consulting business previously integrated within AgriLogic. Intangible assets disposed of as part of the AgriLogic sale included $21.8 million of agency relationships, $3.1 million for the right to use the AgriLogic trademark, $0.9 million of non-compete agreements and $20.6 million of goodwill.
Following the sale the Company performed its annual qualitative assessment on the residual intangible assets of the agricultural consulting business and determined that it was more likely than not that the intangible assets were impaired. The Company therefore recognized an impairment charge of $3.4 million in the year ending December 31, 2017.
Blue Waters
On October 31, 2016, Acorn acquired 100% of the equity voting interest of Blue Waters, a specialist marine insurance agency. The total consideration for the acquisition was $8.0 million.
A significant proportion of the acquired business was represented by intangible assets, specifically $3.1 million for agency relationships, $1.5 million for the right to use the Blue Waters trademark, $1.0 million for non-compete agreements and $0.05 million for the value of trading licenses. In addition, $0.3 million of residual net assets were acquired. The total net assets acquired of $5.75 million resulted in the Company recognizing a total of $2.1 million in goodwill for the acquisition of Blue Waters.
Agency Relationships. The Company valued the agency relationships at $3.1 million with an estimated economic useful life of 5 years. The Company will amortize the estimated value of the agency relationships over their estimated useful life.
License to use the "Blue Waters" Trademark. The Company acquired the right to use the Blue Waters trademark in the United States. The Company valued the trademark at $1.5 million with an estimated economic useful life of 5 years. The Company will amortize the estimated value of the trademark over its estimated useful life.
Non-compete Agreements. The Company valued the non-compete agreements at $1.0 million with an estimated economic useful life of 5 years. The Company will amortize the estimated value of the non-compete agreements over their estimated useful life.
Insurance Licenses. The Company valued the insurance licenses at $0.05 million. The insurance licenses are considered to have an indefinite useful life and are not amortized. The licenses are tested annually for impairment.
Goodwill. The Company valued the goodwill at $2.1 million. The goodwill is deemed to have an indefinite useful life and will be assessed for impairment annually.
Other Intangible Assets
Renewal Rights. On September 22, 2016, the Company entered into a renewal rights agreement with Liberty Specialty Markets Limited ("LSML"). The Company valued the renewal rights at $1.9 million with an estimated economic useful life of 5 years. The Company will amortize the estimated value of the renewal rights over the estimated useful life.
In addition to the intangible assets and goodwill associated with the AgriLogic and Blue Waters acquisitions and the renewal rights agreement with LSML, the Company has the following intangible assets from prior transactions:

License to use the "Aspen" Trademark. On April 5, 2005, the Company entered into an agreement with Aspen (Actuaries and Pension Consultants) Plc to acquire the right to use the Aspen trademark in the United Kingdom. The consideration paid was approximately $1.6 million. As at March 31, 2018, the value of the license to use the Aspen trademark was $1.6 million (December 31, 2017 — $1.6 million). The trademark has an indefinite useful life and is tested for impairment annually or when events or changes in circumstances indicate that the asset might be impaired.

Insurance Licenses. The total value of the Company's licenses as at March 31, 2018 was $16.6 million (December 31, 2017 — $16.6 million). This includes $10.0 million of acquired licenses held by AAIC, $4.5 million of acquired licenses held by Aspen Specialty and $2.1 million of acquired licenses held by Aspen U.K. The insurance licenses are considered to have an indefinite life and are not amortized. The licenses are tested for impairment annually or when events or changes in circumstances indicate that the asset might be impaired.

Goodwill. On January 1, 2017, the Company purchased through its wholly-owned subsidiary, Aspen U.S. Holdings, a 49% share of Digital Re. The Company valued the goodwill at $1.8 million. The goodwill is deemed to have an indefinite useful life and will be assessed for impairment annually under the provisions of ASC 323-10-35.

16. Commitments and Contingent Liabilities

(a) Restricted assets

The Company is obliged by the terms of its contractual obligations to specific policyholders and by obligations to certain regulatory authorities to facilitate issue of letters of credit or maintain certain balances in deposits and trust funds for the benefit of policyholders. The following table details the forms and value of the Company's restricted assets as at March 31, 2018 and December 31, 2017:

	As at March 31, 2018	As at December 31, 2017
	($ in millions, except percentages)	
Regulatory trusts and deposits:		
Affiliated transactions	$1,366.1	$1,455.0
Third party	2,416.1	2,425.3
Letters of credit / guarantees [(1)]	792.7	658.5
Investment commitment — real estate fund	100.0	100.0
Total restricted assets	$4,574.9	$4,638.8
Total as percent of investable assets[(2)]	55.6 %	53.4 %

(1) As at March 31, 2018, the Company had pledged funds in the amount of $792.7 million (December 31, 2017 — $658.5 million) as collateral for the secured letters of credit.

(2) Investable assets comprise total investments, cash and cash equivalents, accrued interest, receivables for securities sold and payables for securities purchased.

Investment Commitment - Real Estate Fund. On December 20, 2017, the Company committed $100.0 million as a limited partner to a real estate fund. As of March 31, 2018, the Company had not received a capital call. On May 1, 2018, we received a demand for an initial capital call of $86.2 million due for payment on May 10, 2018. The investment objective of the fund is to achieve attractive risk-adjusted returns through the acquisition of income producing, high quality assets in gateway cities located in the U.S. and Canada in the office, retail, industrial and multifamily sectors of the real estate market. Investments in this fund may be redeemed on a quarterly basis with 90 days' notice subject to available cash in the fund once the lock-up period ends two years after the capital call. If sufficient cash is not available then all requested redemptions will be made on a pro rata basis. If a redemption request has not been met in full, as of such calendar quarter, the remaining portion of the request will be redeemed in subsequent quarters. There are no assurances as to when the Company may be able to withdraw, in whole or in part, its redemption request from the fund.

Funds at Lloyd's. AUL operates at Lloyd's as the corporate member for Syndicate 4711. Lloyd's determines Syndicate 4711's required regulatory capital principally through the syndicate's annual business plan. Such capital, called Funds at Lloyd's, consists of investable assets as at March 31, 2018 in the amount of $452.8 million (December 31, 2017 — $458.7 million).

The amounts provided as Funds at Lloyd's are drawn upon and become a liability of the Company in the event Syndicate 4711 declares a loss at a level that cannot be funded from other resources, or if Syndicate 4711 requires funds to cover a short term liquidity gap. The amount which the Company provides as Funds at Lloyd's is not available for distribution to the Company for the payment of dividends. Aspen Managing Agency Limited, the managing agent to Syndicate 4711, is also required by Lloyd's to maintain a minimum level of capital which as at March 31, 2018 was £0.4 million (December 31, 2017 — £0.4 million). This is not available for distribution by the Company for the payment of dividends.

Credit Agreement. On March 27, 2017, Aspen Holdings and certain of its direct or indirect subsidiaries (collectively, the "Borrowers") entered into a Second Amended and Restated Credit Agreement (the "Credit Agreement") with various lenders and Barclays Bank plc, as administrative agent. The Credit Agreement will be used by the Borrowers to finance the working capital

needs of the Company and its subsidiaries, for letters of credit in connection with the insurance and reinsurance businesses of the Company and its subsidiaries and for other general corporate purposes. Initial availability under the Credit Agreement is $200,000,000 and the Company has the option (subject to obtaining commitments from acceptable lenders) to increase the Credit Agreement by up to $100,000,000. The Credit Agreement will expire on March 27, 2022.

As at March 31, 2018, no borrowings were outstanding under the Credit Agreement. The fees and interest rates on the loans and the fees on the letters of credit payable by the Borrowers under the Credit Agreement are based upon the credit ratings for the Company's long-term unsecured senior debt by S&P and Moody's. In addition, the fees for a letter of credit vary based upon whether the applicable Borrower has provided collateral (in the form of cash or qualifying debt securities) to secure its reimbursement obligations with respect to such letter of credit.

Under the Credit Agreement, the Company must not permit (a) consolidated tangible net worth to be less than approximately $2,323,100,000 plus 25% of consolidated net income plus 25% of aggregate net cash proceeds from the issuance by the Company of its capital stock, in each case after January 1, 2017, (b) the ratio of its total consolidated debt to the sum of such debt plus its consolidated tangible net worth to exceed 35% or (c) any material insurance subsidiary to have a financial strength rating of less than B++ from A.M. Best. The Credit Agreement contains other customary affirmative and negative covenants, including (subject to various exceptions) restrictions on the ability of the Company and its subsidiaries to incur indebtedness, create or permit liens on their assets, engage in mergers or consolidations, dispose of assets, pay dividends or other distributions, purchase or redeem the Company's equity securities, make investments and enter into transactions with affiliates. In addition, the Credit Agreement has customary events of default, including (subject to certain materiality thresholds and grace periods) payment default, failure to comply with covenants, material inaccuracy of representation or warranty, bankruptcy or insolvency proceedings, change of control and cross-default to other debt agreements.

Other Credit Facilities. On June 30, 2016, Aspen Bermuda and Citibank Europe plc ("Citi Europe") amended the committed letter of credit facility, dated June 30, 2012, as amended on June 30, 2014 (the "LOC Facility"). The amendment to the LOC facility extends the term of the LOC Facility to June 30, 2018 and provides a maximum aggregate amount of up to $550.0 million. Under the LOC Facility, Aspen Bermuda will pay to Citi Europe (a) a letter of credit fee based on the available amounts of each letter of credit and (b) a commitment fee, which varies based upon usage, on the unutilized portion of the LOC Facility. Aspen Bermuda will also pay interest on the amount drawn by any beneficiary under the LOC Facility at a rate per annum of LIBOR plus 1% (plus reserve asset costs, if any) from the date of drawing until the date of reimbursement by Aspen Bermuda. In addition, Aspen Bermuda and Citi Europe entered into an uncommitted letter of credit facility whereby Aspen Bermuda has the ability to request letters of credit under this facility subject to the prior approval of Citi Europe. The fee associated with the uncommitted facility is a letter of credit fee based on the available amounts of each letter of credit issued under the uncommitted facility. Both the LOC Facility and the uncommitted facility are used to secure obligations of Aspen Bermuda to its policyholders. In addition to these facilities, we also use regulatory trusts to secure our obligations to policyholders. The terms of a pledge agreement between Aspen Bermuda and Citi Europe (pursuant to an assignment agreement dated October 11, 2006) dated January 17, 2006, as amended, were also amended on June 30, 2014 to change the types of securities or other assets that are acceptable as collateral under the New LOC Facility. All other agreements relating to Aspen Bermuda's LOC Facility, which now apply to the LOC Facility with Citi Europe, as previously filed with the SEC, remain in full force and effect. As at March 31, 2018, we had $444.2 million of outstanding collateralized letters of credit under the LOC Facility (December 31, 2017 — $449.4 million under the LOC Facility).

(b) Operating leases

Amounts outstanding under operating leases net of subleases as at March 31, 2018 were:

	2018	2019	2020	2021	2022	Later Years	Total
	($ in millions)						
Operating Lease Obligations	$15.9	$15.9	$15.4	$10.9	$8.9	$73.6	$140.6

(c) Contingent liabilities

In common with the rest of the insurance and reinsurance industry, the Company is subject to litigation and arbitration in the ordinary course of business. The Company’s Operating Subsidiaries are regularly engaged in the investigation, conduct and defense of disputes, or potential disputes, resulting from questions of insurance or reinsurance coverage or claims activities. Pursuant to insurance and reinsurance arrangements, many of these disputes are resolved by arbitration or other forms of alternative dispute resolution. Such legal proceedings are considered in connection with estimating the Company’s Insurance Reserves — Loss and Loss Adjustment Expenses, as provided on the Company’s consolidated balance sheet.

In some jurisdictions, noticeably the U.S., a failure to deal with such disputes or potential disputes in an appropriate manner could result in an award of “bad faith” punitive damages against the Company’s Operating Subsidiaries. In accordance with ASC 450-20-50-4b, for (a) reasonably possible losses for which no accrual is made because any of the conditions for accrual in ASC 450-20-25-2 are not met and (b) reasonably possible losses in excess of the amounts accrued pursuant to ASC 450-20-30-1, the Company will provide an estimate of the possible loss or range of possible loss or state that such an estimate cannot be made.

As at March 31, 2018 and December 31, 2017, based on available information, it was the opinion of the Company’s management that the probability of the ultimate resolution of pending or threatened litigation or arbitrations having a material effect on the Company’s financial condition, results of operations or liquidity would be remote.

17. Subsequent Events

On April 16, 2018, Kendall Re Ltd. (“Kendall Re”), a Bermuda exempted company was licensed and registered as a special purpose insurer under the Bermuda Insurance Act 1978 and related regulations, each as amended. On April 25, 2018, Kendall Re issued $225.0 million Series 2018-1 Class A Principal At-Risk Variable Rate Notes due May 6, 2021 under a variable rate note program from which the proceeds will be used to provide Aspen Bermuda Limited with fully-collateralized retrocessional reinsurance protections against losses from a range of international perils, including U.S. named storms, U.S. and Canada earthquakes, U.S. severe thunderstorms, U.S. wildfires, U.S. winter storms and European windstorms. The results and balance sheet of Kendall Re will not be included within the condensed consolidated financial statements of the Company because the Company holds no variable or voting interest in Kendall Re.

On April 20, 2018, Aspen Insurance UK Services Limited, Aspen Insurance U.S. Services, Inc. and Aspen Bermuda Limited entered into an Outsourcing Agreement (the “Agreement”) with Genpact International, Inc., a company incorporated in Delaware, United States (“Genpact”). Pursuant to the Agreement, Genpact will provide the Company a range of operational business processes, primarily from their offshore service center in Gurgaon, India, to enable Aspen to deliver greater operating effectiveness and efficiencies. The Agreement has minimum service levels that Genpact must meet or exceed. Genpact will progressively assume responsibility for these services during a phased transition period that will extend over 12-15 months in line with a transition plan. The Agreement is effective April 1, 2018 and has an initial term period of five years. Aspen has the right to extend the Agreement for three additional one year terms. None of Aspen’s employees will become employees of Genpact.

On December 20, 2017, the Company committed $100.0 million as a limited partner to a real estate fund. On May 1, 2018, we received a demand for an initial capital call of $86.2 million due for payment on May 10, 2018. For more information, please refer to Note 16 “Commitments and Contingencies” in this report.

Item 2. Management's Discussion and Analysis of Financial Condition and Results of Operations

The following is a discussion and analysis of our financial condition and results of operations for the three months ended March 31, 2018 and 2017. This discussion and analysis should be read in conjunction with the unaudited condensed consolidated financial statements and related notes contained in this report and the audited consolidated financial statements and related notes for the fiscal year ended December 31, 2017, as well as the discussions of critical accounting policies, contained in our Audited Consolidated Financial Statements in our 2017 Annual Report on Form 10-K filed with the SEC.

Some of the information contained in this discussion and analysis or set forth elsewhere in this report, including information with respect to our plans and strategy for our business and in "Outlook and Trends" below, includes forward-looking statements that involve risks and uncertainties. Please see the section captioned "Cautionary Statement Regarding Forward-Looking Statements" in this report and the "Risk Factors" in this report and in Item 1A of our Annual Report on Form 10-K for the year ended December 31, 2017 for more information on factors that could cause actual results to differ materially from the results described in, or implied by, any forward-looking statements contained in this discussion and analysis.

Overview

Key results for the three months ended March 31, 2018 include:

- Gross written premiums of $1,116.8 million for the first quarter of 2018, an increase of 11.9% from the first quarter of 2017. Gross written premiums in reinsurance increased by 10.3% mainly due to an increase in specialty reinsurance and property catastrophe reinsurance. Gross written premiums in insurance increased by 14.0% mainly due to growth in financial and professional lines and property and casualty insurance lines;
- There were $24.2 million, or 4.5 combined ratio points, of pre-tax catastrophe losses net of reinsurance recoveries in the first quarter of 2018 compared with $29.1 million, or 5.0 combined ratio points, of pre-tax catastrophe losses net of reinsurance recoveries in the first quarter of 2017;
- Net favorable development on prior year loss reserves of $37.7 million for the first quarter of 2018 had a favorable impact of 7.1 percentage points on the combined ratio, compared with a net favorable development on prior year loss reserves of $26.2 million in the first quarter of 2017, which had a favorable impact of 4.5 percentage points on the combined ratio;
- Combined ratio of 97.8% for the first quarter of 2018 compared with a combined ratio of 97.0% for the first quarter of 2017. The increase was mainly due to a $138.9 million increase in ceded earned reinsurance which reduced net earned premiums and increased the general, administrative and corporate expense ratio by 3.5 percentage points, partially offset by a $4.9 million decrease in catastrophe losses and an $11.5 million increase in net favorable reserve development;
- Realized and unrealized foreign exchange losses of $4.7 million for the first quarter of 2018 compared with losses of $8.9 million in the first quarter of 2017 predominantly due to changes in exchange rates between the U.S. Dollar and the Euro and British Pound;
- A gain of $23.5 million (2017 — gain of $3.1 million) in respect of foreign exchange contracts not designated as hedging instruments;
- Realized and unrealized investment losses of $37.7 million for the first quarter of 2018 compared with gains of $46.2 million in the first quarter of 2017 due to mark to market changes in the valuation of our fixed income trading portfolios;
- Diluted net income per ordinary share of $0.38 for the quarter ended March 31, 2018 compared with diluted net income per ordinary share of $1.36 for the first quarter of 2017;
- Annualized net income return on average ordinary shareholders' equity of 4.0% for the first quarter of 2018 compared with 11.6% for the first quarter of 2017; and
- Diluted book value per ordinary share[(1)] of $38.70 as at March 31, 2018, a 3.5% reduction from December 31, 2017. The decrease was mainly due to a $69.5 million reduction in shareholders' equity.

[(1)] Diluted book value per ordinary share is based on total shareholders' equity less preference shares (liquidation preference less issue expenses) and non-controlling interest, divided by the total number of issued and potentially

dilutive ordinary shares at the end of the period.

Total shareholders’ equity decreased by $69.5 million to $2,859.0 million during the three months ended March 31, 2018.

The most significant movements were:

- a $83.2 million reduction in accumulated other comprehensive income which included a $6.5 million net loss in foreign currency translation and a $77.4 million net unrealized loss on investments; and
- an $8.7 million increase in retained earnings for the period.

Ordinary shareholders’ equity as at March 31, 2018 and December 31, 2017 were:

	As at March 31, 2018	As at December 31, 2017
	($ in millions, except for share amounts)	
Total shareholders’ equity	$ 2,859.0	$ 2,928.5
Preference shares less issue expenses	(511.9)	(511.9)
Non-controlling interests	(2.9)	(2.7)
Net assets attributable to ordinary shareholders	$ 2,344.2	$ 2,413.9
Issued ordinary shares	59,652,826	59,474,085
Issued and potentially dilutive ordinary shares	60,573,522	60,202,409

Outlook and Trends

Gross written premiums in reinsurance increased by approximately 10% compared to the first quarter of 2017 primarily as a result of our crop business in specialty reinsurance and the improved rating environment. Overall rates increased by approximately 5% in the first quarter, with the largest rate increase of approximately 8% in property catastrophe reinsurance. Rates in property reinsurance increased by approximately 6%, with rate increases of approximately 4% in casualty reinsurance and specialty reinsurance. Rates at the April 1 renewals increased by approximately 4%, excluding Japanese renewals which were flat. We continue to leverage third party capital through Aspen Capital Markets.

Gross written premiums in insurance increased by approximately 14% compared to the first quarter of 2017 primarily from areas that we believe provide the best opportunities for long-term profitable growth, such as accident and health, excess casualty, crisis management and professional lines. We continue to take actions with the aim to improve the profitability of our insurance business by increasing the use of quota share reinsurance and re-positioning parts of our U.S. property and downstream energy books.

We remain on track to achieve our targeted savings of $30 million in 2018 from the operating effectiveness and efficiency program. We recently selected Genpact as our outsourcing provider and have begun a due diligence phase to assess the feasibility of outsourcing certain middle and back office support processes. For more information, please refer to Note 17 “Subsequent Events” in this report.

See “Risk Factors” and “Cautionary Statement Regarding Forward-Looking Statements” included in this report.

Application of Critical Accounting Policies
Our unaudited condensed consolidated financial statements are based on the selection of accounting policies and require management to make significant estimates and assumptions. Some of the more critical judgments in the areas of accounting estimates and assumptions that affect our financial condition and results of operations are related to insurance reserves, premiums receivable in respect of assumed reinsurance, the fair value of derivatives and the value of investments, including the extent of any other-than-temporary impairment. There have been no changes to significant accounting policies from those disclosed in the Company's 2017 Annual Report on Form 10-K filed with the SEC. For a detailed discussion of our critical accounting policies, please refer to Item 7, "Management's Discussion and Analysis of Financial Condition and Results of Operations — Critical Accounting Policies" in our 2017 Annual Report on Form 10-K filed with the SEC and the notes to the unaudited condensed consolidated financial statements contained in this report.
Results of Operations for the Three Months Ended March 31, 2018 Compared to the Three Months Ended March 31, 2017
The following is a discussion and analysis of our consolidated results of operations for the three months ended March 31, 2018 and 2017, starting with a summary of our consolidated results and followed by a segmental analysis.
Total Income Statement
Our statements of operations consolidate the underwriting results of our two business segments and include certain other revenue and expense items that are not allocated to business segments.
Gross written premiums. Gross written premiums increased by $118.8 million, or 11.9%, in the first quarter of 2018 compared to the first quarter of 2017. Gross written premiums from our reinsurance segment increased by $58.2 million, or 10.3%, in the first quarter of 2018 compared to the first quarter of 2017 largely due to growth in property catastrophe reinsurance and agriculture business written within specialty reinsurance. Gross written premiums from our insurance segment increased by $60.6 million, or 14.0%, in the first quarter of 2018 compared to the first quarter of 2017 largely due to growth in financial and professional lines and property and casualty insurance, offsetting reductions in marine, aviation and energy insurance lines.
The table below shows our gross written premiums and the percentage change in gross written premiums for each business segment for the three months ended March 31, 2018 and 2017:

Business Segment	Three Months Ended March 31, 2018 ($ in millions)	Three Months Ended March 31, 2017 ($ in millions)	% increase/(decrease)
Reinsurance	$ 623.5	$ 565.3	10.3 %
Insurance	493.3	432.7	14.0 %
Total	$ 1,116.8	$ 998.0	11.9 %

Ceded reinsurance. Total reinsurance ceded in the first quarter of 2018 was $481.3 million, an increase of $169.5 million from the first quarter of 2017. Ceded reinsurance costs increased by $88.1 million in our insurance segment primarily due to an increase in the proportion of business ceded to our casualty, financial institutions and property quota share programs. Ceded reinsurance costs increased by $81.4 million in our reinsurance segment due to increased ceded reinsurance for our property catastrophe business lines where business previously ceded to Silverton, a consolidated entity, is now ceded to Peregrine a non-consolidated entity and an increase in ceded reinsurance premiums following the sale of AgriLogic in December 2017. The changes in our reinsurance program reduced our retention ratio (defined as net written premium as a percentage of gross written premium) by 11.9 percentage points to 56.9% in the first quarter of 2018 compared to 68.8% in the first quarter of 2017.
Net premiums earned. Net premiums earned in the first quarter of 2018 decreased by 8.2% from the first quarter of 2017 primarily due to changes to the ceded reinsurance program listed above. The reduction in net premiums earned represents a $138.9 million increase in ceded earned reinsurance premiums partially offset by a $91.3 million increase

in gross earned premiums.

Losses and loss adjustment expenses. The loss ratio for the quarter increased 1.6 percentage points from 56.5% in the first quarter of 2017 to 58.1% in the first quarter of 2018. The increase in the loss ratio was largely due to a $47.6 million reduction in net earned premiums and a $7.6 million increase in large losses partially offset by a $4.9 million decrease in catastrophe losses and a $11.5 million increase in net favorable development on prior year loss reserves.

In the reinsurance segment, the loss ratio for the three months ended March 31, 2018 was 59.1% compared to 51.6% in the equivalent period in 2017. The increase in the loss ratio for the quarter was largely due to a $42.4 million increase in ceded earned premiums and an $11.0 million increase in large losses partially offset by a $13.7 million decrease in prior year reserve releases and a $9.8 million decrease in catastrophe losses. In the first quarter of 2018, we experienced $14.8 million of catastrophe losses,

net of reinsurance recoveries, consisting of $3.9 million from Storm Friederike and $10.9 million from other weather-related events. The equivalent quarter of 2017 experienced $24.6 million of natural catastrophe losses, consisting of $7.5 million from a tornado in Mississippi, $3.9 million from Cyclone Debbie in Australia and $13.2 million from other weather-related events. In the first quarter of 2018, we experienced an $8.1 million fire loss and a $2.9 million credit loss compared with no significant losses in the comparative period. Reserve releases for the current quarter were predominantly from our property reinsurance lines, while reserve releases in the comparative quarter were a result of favorable development across all of reinsurance business lines despite $12.8 million of adverse development in our casualty reinsurance lines due to the U.K. Ministry of Justice decision to increase the discount rate used to calculate lump sum awards in U.K. bodily injury cases (the "Ogden rate").

In the insurance segment, the loss ratio decreased to 57.1% in the first quarter of 2018 from 61.0% in the first quarter of 2017 largely due to a $25.2 million increase in prior year reserve releases and a $3.4 million decrease in large losses partially offset by a $4.9 million increase in catastrophe losses. The $96.5 million increase in ceded earned premiums was primarily due to an increase in the proportion of business ceded to our quota share programs which produced a proportionate increase in ceded reinsurance recoveries. In the first quarter of 2018, we experienced $9.4 million of natural catastrophe losses, net of reinsurance recoveries, from weather-related events in the U.S. and the U.K. We experienced $4.5 million of natural catastrophe losses due to U.S. weather-related events in the equivalent quarter of 2017. In the first quarter of 2018, we experienced a $6.6 million trade credit loss and a $4.8 million fire related loss, while in the comparative period we experienced a $4.8 million loss from a refinery explosion and $10.0 million of losses from several fires. Prior year reserve releases increased from $5.0 million in the first quarter of 2017 to $30.2 million in the current period. Reserve releases in the current quarter were from all business lines while releases in the comparative quarter were principally from our marine, aviation and energy and financial and professional business lines which offset $17.7 million of adverse development in our casualty lines due to a change in the Ogden rate. Further information relating to the movement of prior year reserves is found below under "Reserves for Losses and Loss Adjustment Expenses."

We monitor the ratio of losses and LAE to net earned premium (the "loss ratio") as a measure of relative underwriting performance where a lower ratio represents a better result than a higher ratio.

The tables below show our loss ratios including and excluding the impact from natural catastrophe losses to aid in the analysis of the underlying performance of our business segments. For this purpose, we have defined first quarter 2018 catastrophe losses as losses associated with Storm Friederike and other weather-related events. We defined catastrophe losses in the first quarter of 2017 as losses associated with a tornado in Mississippi, Cyclone Debbie in Australia and other weather-related events. The total loss ratio represents the calendar year U.S. GAAP loss ratio. The current year adjustments represent the effect on the loss ratio of net losses and reinstatement premiums, if any, from catastrophe loss events.

For the Three Months Ended March 31, 2018	Total Loss Ratio	Current Year Adjustments	Loss Ratio Excluding Current Year Adjustments
Reinsurance	59.1 %	(5.2)%	53.9 %
Insurance	57.1 %	(3.7)%	53.4 %
Total	58.1 %	(4.5)%	53.6 %

For the Three Months Ended March 31, 2017	Total Loss Ratio	Current Year Adjustments	Loss Ratio Excluding Current Year Adjustments
Reinsurance	51.6 %	(8.9)%	42.7 %
Insurance	61.0 %	(1.5)%	59.5 %
Total	56.5 %	(5.0)%	51.5 %

Expense ratio. We monitor the ratio of expenses to net earned premium (the "expense ratio") as a measure of the cost effectiveness of our amortization of deferred policy acquisition costs, general, administrative and corporate expenses. The table below splits the net expense ratio between the amortized deferred policy acquisition costs, general, administrative and corporate expenses and the effect of reinsurance for the three months ended March 31, 2018 and 2017:

	Three Months Ended March 31, 2018			Three Months Ended March 31, 2017		
Ratios Based on Gross Earned Premium	Reinsurance	Insurance	Total	Reinsurance	Insurance	Total
Gross policy acquisition expense ratio	18.0%	18.3 %	18.2 %	20.6%	19.0 %	19.7 %
Effect of ceded reinsurance	1.8	(4.4)	(1.2)	0.8	(1.1)	(0.1)
Net policy acquisition expense ratio	19.8%	13.9 %	17.0 %	21.4%	17.9 %	19.6 %
Gross general, administrative and corporate expense ratio [1]	8.4	13.6	14.4	13.4	14.6	16.1
Effect of ceded reinsurance premiums	2.8	11.7	8.3	2.4	5.8	4.8
Net general and administrative expense ratio	11.2%	25.3 %	22.7 %	15.8%	20.4 %	20.9 %
Total net expense ratio	31.0%	39.2 %	39.7 %	37.2%	38.3 %	40.5 %

(1) The total group general and administrative expense ratio includes corporate and non-operating expenses. Comparative ratios have been re-presented to include corporate and non-operating expenses.

The total policy acquisition expense ratio for the first quarter of 2018 decreased compared to the first quarter of 2017 as a result of an increase in over-rider commissions associated with increased ceded reinsurance and a reduction in the gross policy acquisition ratio due to a change in business mix in the reinsurance segment.

General, administrative and corporate expenses decreased by $0.3 million from $121.3 million in the first quarter of 2017 to $121.0 million in the first quarter of 2018. The total general, administrative and corporate expense ratio, before the effect of reinsurance, for the first quarter of 2018 decreased by 1.7 percentage points from the first quarter 2017 predominantly due to a reduction in administration costs in the reinsurance segment following the sale of AgriLogic and also due to premium growth in our insurance segment being greater than the growth in the operating expenses in the insurance segment.

Net investment income. Net investment income for the first quarter of 2018 was $47.3 million, a 0.8% decrease compared to $47.7 million in the first quarter of 2017, due to a reduction in dividend income following the sale of our equity portfolio, partially offset by increased income from our fixed income portfolios.

Change in fair value of derivatives. In the three months ended March 31, 2018, we experienced a gain of $23.5 million (2017 — gain of $3.1 million) in respect of foreign exchange contracts not designated as hedging instruments and a gain of $1.7 million (2017 — gain of $0.3 million) in respect of foreign exchange contracts designated as hedging instruments.

Income before tax. In the first quarter of 2018, income before tax was $34.4 million (2017 — income of $99.3 million) consisting of the amounts set out in the table below:

	Three Months Ended March 31, 2018	Three Months Ended March 31, 2017
	($ in millions)	
Underwriting income	$37.3	$33.5
Corporate expenses	(13.7)	(13.4)
Amortization and non-recurring expenses	(12.1)	(2.2)
Net other income	0.9	3.6
Net investment income	47.3	47.7
Change in fair value of derivatives	23.5	3.1
Change in fair value of loan notes issued by variable interest entities	1.0	(2.9)
Realized and unrealized investment gains	100.6	51.2
Realized and unrealized investment (losses)	(138.3)	(5.0)
Net realized and unrealized foreign exchange gains	(4.7)	(8.9)
Interest expense	(7.4)	(7.4)
Income before tax	$34.4	$99.3

Taxes. Income tax expense for the three months ended March 31, 2018 was $3.6 million (2017 — $2.8 million expense) equating to an estimated effective tax rate of 10.5% (2017 — 2.8%). The increase in the tax rate for the three months ended March 31, 2018 was due to the introduction of the U.S. Base Erosion Anti-avoidance Tax (“BEAT”) on premium ceded from U.S. subsidiaries to non-U.S. related parties. In addition, the tax rate for the three months ended March 31, 2017 benefited from a tax credit associated with the adoption of ASU 2016-09, "Compensation - Stock Compensation."

The effective tax rate for the year is subject to revision in future periods if circumstances change and depends on the relative profitability of those parts of business underwritten in Bermuda (where the rate of tax on corporate profits is zero), the United Kingdom (where the corporation tax rate is 19% and will be reduced to 17% effective April 1, 2020) and the United States (where the federal income tax rate is 21% effective January 1, 2018).

Net income after tax. Net profit after tax for the three months ended March 31, 2018 was $30.8 million, equivalent to basic income per ordinary share of $0.39 adjusted for the $7.6 million preference share dividends and $0.2 million non-controlling interest. Fully diluted income per ordinary share was $0.39 for the three months ended March 31, 2018. Net income after tax for the three months ended March 31, 2017 was $96.5 million, equivalent to basic earnings per ordinary share of $1.39 after deducting $10.5 million preference share dividends and $0.1 million non-controlling interest. Fully diluted earnings per ordinary share were $1.36 for the three months ended March 31, 2017.

Realized and unrealized investment gains. Total realized and unrealized investment losses for the three months ended March 31, 2018 were $37.7 million (2017 — $46.2 million gain). For more detail, please refer to Note 6 of the unaudited condensed consolidated financial statements contained in this report.

Other comprehensive income. We recorded an $83.2 million reduction in our total other comprehensive income for the three months ended March 31, 2018 (2017 — reduction of $9.6 million), net of taxes. The reduction was mainly due to a $77.4 million net realized/unrealized loss in the available for sale investment portfolio (2017 — $2.1 million net unrealized gain), a $6.5 million net unrealized loss in foreign currency translation (2017 — $12.9 million net unrealized loss), and a $0.7 million net increase in the value of hedged foreign exchange contracts (2017 — $1.2 million net increase).

Non-controlling interest. In the three months ended March 31, 2018, we recorded an increase of $0.2 million (2017 — $0.1 million increase) in the amount owed to the non-controlling interest in respect of Aspen Risk Management Limited.

Dividends. Dividends paid on our ordinary shares and preference shares in the three months ended March 31, 2018 were $21.9 million (2017 — $23.7 million) due to a reduction in the number of preference shares in issue.

Underwriting Results by Business Segments — First Quarter

We are organized into two business segments: Reinsurance and Insurance. The reinsurance segment consists of property catastrophe reinsurance, other property reinsurance, casualty reinsurance and specialty reinsurance. The insurance segment consists of property and casualty insurance, marine, aviation and energy insurance and financial and professional lines insurance.

We have provided additional disclosures for corporate and other (non-operating) income and expenses in Note 5 of our unaudited condensed consolidated financial statements included in this report. Corporate and other income and expenses include net investment income, net realized and unrealized investment gains or losses, expenses associated with managing the group, certain strategic and non-recurring costs, changes in fair value of derivatives and changes in fair value of the loan notes issued by variable interest entities, interest expenses, net realized and unrealized foreign exchange gains or losses and income taxes, none of which are allocated to the business segments.

Please refer to the tables in Note 5 in our unaudited condensed consolidated financial statements of this report for a summary of gross and net written and earned premiums, underwriting results and combined ratios and reserves for our two business segments for the three months ended March 31, 2018 and 2017. The contributions of each business segment to gross written premiums in the three months ended March 31, 2018 and 2017 were as follows:

Business Segment	Gross Written Premiums			
	Three Months Ended March 31, 2018		Three Months Ended March 31, 2017	
	($ in millions)	(% of total)	($ in millions)	(% of total)
Reinsurance	$623.5	55.8 %	$565.3	56.6 %
Insurance	493.3	44.2	432.7	43.4
Total	$1,116.8	100.0%	$998.0	100.0%

Reinsurance

The reinsurance segment consists of property catastrophe reinsurance, other property reinsurance, casualty reinsurance and specialty reinsurance. For a more detailed description of this segment, see Part I, Item 1, "Business — Business Segments — Reinsurance" in the Company's 2017 Annual Report on Form 10-K filed with the SEC.

Gross written premiums. Gross written premiums in our reinsurance segment increased by 10.3% in the three months ended March 31, 2018 compared to the three months ended March 31, 2017. The table below shows the gross written premiums and the percentage change in gross written premiums for each line of business for the three months ended March 31, 2018 and 2017:

Lines of Business	Three Months Ended March 31, 2018 ($ in millions)	Three Months Ended March 31, 2017 ($ in millions)	% increase/(decrease)	
Property catastrophe reinsurance	$ 151.2	$ 130.7	15.7	%
Other property reinsurance	104.8	118.9	(11.9	)%
Casualty reinsurance	143.3	143.7	(0.3	)%
Specialty reinsurance	224.2	172.0	30.3	%
Total	$ 623.5	$ 565.3	10.3	%

The increase in property catastrophe reinsurance gross written premiums was primarily due to a strong rate environment following the catastrophe events which occurred in the second half of 2017 and a decision to write more European business. The decrease in other property reinsurance gross written premiums was largely due to a reduction in pro rata premiums. The increase in gross written premiums in specialty reinsurance was largely due to growth in agriculture business which included a fronting arrangement written as part of the sale of AgriLogic.

Losses and loss adjustment expenses. The loss ratio for the three months ended March 31, 2018 was 59.1% compared to 51.6% in the equivalent period in 2017. The increase in the loss ratio was mainly attributable to a $42.4 million increase in ceded earned premiums (which is predominantly excess of loss cover), a $13.7 million decrease in prior year reserve releases and an $11.0 million increase in large losses, partially offset by a $9.8 million decrease in catastrophe losses in the quarter. In the first quarter of 2018, we experienced an $8.1 million fire loss and a $2.9 million credit loss compared with no significant losses in the comparative period.

In the first quarter of 2018, we experienced $14.8 million of catastrophe losses, net of reinsurance recoveries, consisting of $3.9 million from Storm Friederike and $10.9 million from other weather-related events. The equivalent quarter of 2017 experienced $24.6 million of catastrophe losses, consisting of $7.5 million from a tornado in Mississippi, $3.9 million from Cyclone Debbie in Australia and $13.2 million from other weather-related events.

Prior year reserve releases for the current quarter were predominantly from our property reinsurance lines, while in the comparative period in 2017 releases were a result of favorable development across all of reinsurance business lines despite a $12.8 million of adverse development in our casualty reinsurance lines due to the change in the Ogden rate. Further information relating to the movement of prior year reserves is found below under "Reserves for Losses and Loss Adjustment Expenses."

Policy acquisition, general and administrative expenses. Amortization of deferred policy acquisition costs was $55.9 million for the three months ended March 31, 2018, equivalent to 19.8% of net earned premiums, compared to $59.5 million, or 21.4% of net earned premiums, for the equivalent period in 2017. The reduction in the acquisition expense ratio was largely due to an increase in the proportion of agriculture business written, which has a lower average commission rate, and a decrease in property, casualty and specialty business written on a pro rata basis which have higher average commission rates. General and administrative expenses reduced to $31.6 million compared with $43.9 million in the equivalent period in 2017 primarily due to a reduction in headcount and associated administration costs following the sale of AgriLogic. The general and administrative expense ratio decreased to 11.2% from 15.8% in the equivalent period in 2017 due to the reduction in expenses partially offset by the impact on net earned premiums from

ceding a greater proportion of written premiums to third parties.

Insurance

The insurance segment consists of property and casualty insurance, marine, aviation and energy insurance and financial and professional lines insurance. For a more detailed description of this segment, see Part I, Item 1 “Business — Business Segments — Insurance” in our 2017 Annual Report on Form 10-K filed with the SEC.

Gross written premiums. Gross written premiums in our insurance segment increased by 14.0% in the first quarter of 2018 compared to the three months ended March 31, 2017. The table below shows our gross written premiums and the percentage change in gross written premiums for each line of business for the three months ended March 31, 2018 and 2017:

Lines of Business	Three Months Ended March 31, 2018 ($ in millions)	Three Months Ended March 31, 2017 ($ in millions)	% increase/(decrease)
Property and casualty insurance	$ 231.3	$ 211.1	9.6 %
Marine, aviation and energy insurance	101.5	105.8	(4.1)%
Financial and professional lines insurance	160.5	115.8	38.6 %
Total	$ 493.3	$ 432.7	14.0 %

The increase in property and casualty insurance gross written premiums was largely attributable to an increase in U.S. and U.K. regional business lines. The decrease in gross written premiums in marine, aviation and energy insurance was largely attributable to reductions in energy and construction business. The increase in gross written premiums in financial and professional lines was largely attributable to growth in U.S. professional lines, credit and political risks, accident and health, surety and cyber business lines.

Losses and loss adjustment expenses. The loss ratio decreased to 57.1% in the first quarter of 2018 from 61.0% in the first quarter of 2017 largely due to a $25.2 million increase in prior year reserve releases and a $3.4 million decrease in large losses partially offset by the impact from a $4.9 million increase in catastrophe losses.

In the first quarter of 2018, we experienced $9.4 million of catastrophe losses, net of reinsurance recoveries, from weather-related events in the U.S. and the U.K. compared to $4.5 million of catastrophe losses due to U.S. weather-related events in the equivalent quarter of 2017. In the first quarter of 2018, we experienced $11.4 million of large losses, consisting of a $6.6 million trade credit loss and a $4.8 million fire-related loss while in the comparative period we experienced a $4.8 million loss from a refinery explosion and $10.0 million of losses from several fires.

Prior year reserve releases increased from $5.0 million in the first quarter of 2017 to $30.2 million in the current period. Reserve releases in the current quarter were from all business lines while releases in the comparative quarter were principally from our marine, aviation and energy and financial and professional business lines which offset $17.7 million of adverse development in our casualty lines due to a change in the Ogden rate. Further information relating to the movement of prior year reserves is found below under “Reserves for Losses and Loss Adjustment Expenses.”

Policy acquisition, general and administrative expenses. Amortization of deferred policy acquisition costs was $34.9 million for the three months ended March 31, 2018 equivalent to 13.9% of net earned premiums compared to $54.2 million, or 17.9% of net earned premiums in the first quarter of 2017. The reduction in acquisition ratio was largely due to an increase in over-rider commissions associated with an increase in ceded reinsurance. Our general and administrative expenses increased by $1.8 million from $61.8 million in the first quarter of 2017 to $63.6 million in the current quarter due to costs associated with growth in our insurance business.

Cash and Investments

As at March 31, 2018 and December 31, 2017, total cash and investments were $8.5 billion and $8.7 billion, respectively. The composition of our investment portfolio is summarized below:

	As at March 31, 2018			As at December 31, 2017		
	Estimated Fair Value	Percentage of Total Cash and Investments		Estimated Fair Value	Percentage of Total Cash and Investments	
	($ in millions except for percentages)					
Fixed income securities — available for sale						
U.S. government	$1,292.2	15.2	%	$1,159.4	13.3	%
U.S. agency	52.7	0.6		52.1	0.6	
Municipal	47.6	0.6		54.9	0.6	
Corporate	2,446.2	28.8		2,415.7	27.8	
Non-U.S. government-backed corporate	97.8	1.2		91.3	1.1	
Non-U.S. government	483.4	5.7		484.9	5.6	
Asset-backed	18.5	0.2		26.2	0.3	
Agency mortgage-backed	973.8	11.5		946.5	10.9	
Total fixed income securities — available for sale	$5,412.2	63.8	%	$5,231.0	60.2	%
Fixed income securities — trading						
U.S. government	141.7	1.7		161.9	1.9	
Municipal	74.3	0.9		32.2	0.4	
Corporate	1,003.6	11.7		1,046.3	12.0	
Non-U.S. government-back corporate	1.0	—		1.0	—	
Non-U.S. government	216.6	2.6		202.5	2.3	
Asset-backed	8.3	0.1		9.9	0.1	
Agency mortgage-backed	192.1	2.3		195.5	2.3	
Total fixed income securities — trading	$1,637.6	19.3	%	$1,649.3	19.0	%
Total other investments	66.1	0.8		66.4	0.8	
Total catastrophe bonds — trading	34.8	0.4		32.4	0.4	
Total equity securities — trading	—	—		491.0	5.7	
Total short-term investments — available for sale	54.6	0.7		89.9	1.0	
Total short-term investments — trading	27.0	0.3		73.0	0.8	
Total cash and cash equivalents	1,246.9	14.7		1,054.8	12.1	
Total cash and investments	$8,479.2	100.0	%	$8,687.8	100.0	%

Fixed Income Securities. As at March 31, 2018, the average credit quality of our fixed income portfolio was “AA-,” with 89.1% of the portfolio rated “A” or higher. As at December 31, 2017, the average credit quality of our fixed income portfolio was “AA-,” with 88.9% of the portfolio rated “A” or higher. Where the credit ratings were split between the two main rating agencies, S&P and Moody’s, the lower rating was used. Our fixed income portfolio duration was 3.98 years as at March 31, 2018 compared to 3.90 years as at December 31, 2017.

Mortgage-Backed Securities. As at March 31, 2018, our mortgage-backed portfolio only contains agency mortgage-backed securities rated “AA+” with a fair value of $1.2 billion.

Equity Securities. Equity securities comprised U.S. and foreign equity securities and were held in the trading portfolio. In the first quarter of 2018 we took advantage of rising equity markets and sold our equity portfolio. The total investment return from the trading equity portfolios for the three months ended March 31, 2018 and 2017 was as follows:

Trading Equity Portfolio	For the Three Months Ended March 31, 2018	March 31, 2017
	($ in millions)	
Dividend income	$1.2	$5.2
Net realized investment gains	69.4	3.7
Net unrealized (losses) gains, gross of tax	(75.7)	23.7
Net realized foreign exchange gains (losses)	4.8	(0.6)
Net unrealized foreign exchange (losses) gains	(0.5)	6.5
Total investment return from the trading equity portfolio	$(0.8)	$38.5

Reserves for Losses and Loss Adjustment Expenses

As at March 31, 2018, we had total net loss and loss adjustment expense reserves of $5,068.1 million (December 31, 2017 — $5,234.3 million). This amount represented our selected reserves for the ultimate liability for payment of losses and loss adjustment expenses. The following tables analyze gross and net loss and loss adjustment expense reserves by business segment as at March 31, 2018 and December 31, 2017, respectively:

	As at March 31, 2018		
Business Segment	Gross	Reinsurance Recoverable	Net
	($ in millions)		
Reinsurance	$3,130.6	$(307.0)	$2,823.6
Insurance	3,548.8	(1,304.3)	2,244.5
Total losses and loss expense reserves	$6,679.4	$(1,611.3)	$5,068.1

	As at December 31, 2017		
Business Segment	Gross	Reinsurance Recoverable	Net
	($ in millions)		
Reinsurance	$3,186.4	$(269.3)	$2,917.1
Insurance	3,563.1	(1,245.9)	2,317.2
Total losses and loss expense reserves	$6,749.5	$(1,515.2)	$5,234.3

For the three months ended March 31, 2018, there was a $37.7 million reduction of our estimate of the ultimate net claims to be paid in respect of prior accident years. Below is an analysis of this reduction by business segment for the three months ended March 31, 2018 and 2017:

Business Segment	For the Three Months Ended March 31, 2018	March 31, 2017
	($ in millions)	

Reinsurance	$7.5	$21.2
Insurance	30.2	5.0
Total losses and loss expense reserves reductions	$37.7	$26.2

53

The key elements which gave rise to the net favorable development during the three months ended March 31, 2018 were as follows:
Reinsurance. Net reserve releases were $7.5 million in the current quarter as a result of favorable development in property reinsurance and specialty reinsurance lines.
Insurance. Net reserve releases were $30.2 million in the current quarter mainly as a result of favorable development across all business lines with the most material releases from property and financial and professional lines.
For a more detailed description see Item 7, "Management's Discussion and Analysis of Financial Condition and Results of Operations — Critical Accounting Policies" and "Management's Discussion and Analysis of Financial Condition and Results of Operations — Reserves for Losses and Loss Adjustment Expenses" included in our 2017 Annual Report on Form 10-K filed with the SEC.

Capital Management
The following table shows our capital structure as at March 31, 2018 compared to December 31, 2017:

	As at March 31, 2018	As at December 31, 2017
	($ in millions)	
Share capital, additional paid-in capital, retained income and accumulated other comprehensive income attributable to ordinary shareholders	$2,347.1	$ 2,416.6
Preference shares (liquidation preferences net of issue costs)	511.9	511.9
Long-term debt	549.5	549.5
Loan Notes issued by Silverton[(1)]	39.8	86.6
Total capital	$3,448.3	$ 3,564.6

[(1)] We do not consider the Loan Notes issued by Silverton to be part of our permanent capital as the noteholders have no recourse to the other assets of the Company.
As at March 31, 2018, total shareholders' equity was $2,859.0 million compared to $2,928.5 million as at December 31, 2017. Our total shareholders' equity as at March 31, 2018 included two classes of preference shares with a total value as measured by their respective liquidation preferences of $511.9 million net of share issuance costs (December 31, 2017 — $511.9 million, two classes of preference shares).
On January 3, 2017, we elected to redeem all of the outstanding 7.401% Perpetual Non-Cumulative Preference Shares (the "7.401% Preference Shares"). Each holder of a 7.401% Preference Share received $25 per 7.401% Preference Share, plus any declared and unpaid dividends.
On February 8, 2017, we replaced our existing share repurchase authorization with a new authorization of $250 million. The share repurchase authorization, which is effective through February 8, 2019, permits us to effect repurchases from time to time through a combination of transactions, including open market repurchases, privately negotiated transactions and accelerated share repurchase transactions.
Our preference shares are classified in our balance sheet as equity but may receive a different treatment in some cases under the capital adequacy assessments made by certain rating agencies. Preference shares are often referred to as "hybrids" because they have certain attributes of both debt and equity. We monitor the ratio of the total of debt and hybrids to total capital, with total capital being defined as shareholders' equity plus outstanding debt and excluding Loan Notes issued by Silverton. As at March 31, 2018, this ratio was 31.1% (December 31, 2017 — 30.5%).
Our senior notes are the only material debt issued by Aspen Holdings currently outstanding. As at March 31, 2018 and December 31, 2017, the value of the debt less amortization expenses was $549.5 million and $549.5 million, respectively. Management monitors the ratio of debt to total capital which was 16.1% as at March 31, 2018 (December 31, 2017 — 15.8%).
In addition, we have also reported Loan Notes issued by Silverton. The fair value of the Loan Notes issued by Silverton as at March 31, 2018 was $39.8 million (December 31, 2017 — $86.6 million). For further information relating to Silverton, refer to Note 7 of the "Notes to the Audited Consolidated Financial Statements" in the Company's 2017 Annual Report on Form 10-K filed with the SEC and Note 7 of the unaudited condensed consolidated financial

statements contained in this report.
Access to Capital. Our business operations are in part dependent on our financial strength and the market's perception thereof, as measured by total shareholders' equity, which was $2,859.0 million as at March 31, 2018 (December 31, 2017 — $2,928.5 million). We believe our financial strength provides us with the flexibility and capacity to obtain funds through debt or equity financing. Our continuing ability to access the capital markets is dependent on, among other things, our operating results, market conditions and our perceived financial strength. We regularly monitor our capital and financial position, as well as investment and

securities market conditions, both in general and with respect to Aspen Holdings' securities. Our ordinary shares and preference shares are listed on the New York Stock Exchange.

Liquidity
Liquidity is a measure of a company's ability to generate cash flows sufficient to meet short-term and long-term cash requirements of its business operations. Management monitors the liquidity of Aspen Holdings and of each of its Operating Subsidiaries and arranges credit facilities to enhance short-term liquidity resources on a stand-by basis.
Holding Company. We monitor the ability of Aspen Holdings to service debt, finance dividend payments to ordinary and preference shareholders and provide financial support to the Operating Subsidiaries. As at March 31, 2018, Aspen Holdings held $115.2 million of cash, cash equivalents and investments (December 31, 2017 — $111.4 million). Management considers the current cash, cash equivalents and investments taken together with dividends declared or expected to be declared by subsidiary companies and our credit facilities to be sufficient to appropriately satisfy the liquidity requirements of Aspen Holdings. Aspen Holdings' liquidity depends on dividends, capital distributions and interest payments from our Operating Subsidiaries. Aspen Holdings also has recourse to the credit facility described under "Letter of Credit Facilities" below.
The ability of our Operating Subsidiaries to pay us dividends or other distributions is subject to the laws and regulations applicable to each jurisdiction, as well as the Operating Subsidiaries' need to maintain adequate capital requirements to maintain their insurance and reinsurance operations and their financial strength ratings issued by independent rating agencies. In line with usual market practice for regulated institutions, the Prudential Regulation Authority (the "PRA"), the regulatory agency which oversees the prudential regulation of insurance companies in the U.K. such as Aspen U.K., previously requested that it be afforded the opportunity to provide a prior "non-objection" to all future dividend payments made by Aspen U.K. In 2017, the PRA stated that they no longer routinely require Aspen U.K. to apply for a non-objection to dividends provided such dividend payment and Aspen U.K.'s resulting capital position are within Aspen U.K.'s board-approved solvency capital risk appetite.
For a further discussion of the various restrictions on our ability and our Operating Subsidiaries' ability to pay dividends, see Part I, Item 1 "Business — Regulatory Matters" in our 2017 Annual Report on Form 10-K filed with the SEC. For a more detailed discussion of our Operating Subsidiaries' ability to pay dividends, see Note 15 of the "Notes to the Audited Consolidated Financial Statements" in our 2017 Annual Report on Form 10-K filed with the SEC.
Operating Subsidiaries. As at March 31, 2018, the Operating Subsidiaries held $1,059.5 million (December 31, 2017 — $821.7 million) in cash and short-term investments that are readily realizable securities. Management monitors the value, currency and duration of cash and investments held by the Operating Subsidiaries to ensure that they are able to meet their insurance and other liabilities as they become due and was satisfied that there was a comfortable margin of liquidity as at March 31, 2018 and for the foreseeable future.
On an ongoing basis, our Operating Subsidiaries' sources of funds primarily consist of premiums written, investment income and proceeds from sales and redemptions of investments. Cash is used primarily to pay reinsurance premiums, losses and loss adjustment expenses, brokerage commissions, general and administrative expenses, taxes, interest and dividends and to purchase new investments. The potential for individual large claims and for accumulations of claims from single events means that substantial and unpredictable payments may need to be made within relatively short periods of time.
We manage these risks by making regular forecasts of the timing and amount of expected cash outflows and ensuring that we maintain sufficient balances in cash and short-term investments to meet these estimates. Notwithstanding this policy, if our cash flow forecast is incorrect, we could be forced to liquidate investments prior to maturity, potentially at a significant loss. Historically, we have not had to liquidate investments at a significant loss to maintain sufficient levels of liquidity.
The liquidity of our Operating Subsidiaries is also affected by the terms of our contractual obligations to policyholders and by undertakings to certain regulatory authorities to facilitate the issue of letters of credit or maintain certain balances in trust funds for the benefit of policyholders. For more information on these arrangements, including a table showing the forms of collateral or other security provided in respect of these obligations and undertakings, see Note 19(a) of the "Notes to the Audited Consolidated Financial Statements" in our 2017 Annual Report on Form 10-K filed with the SEC.
Consolidated Cash Flows for the Three Months Ended March 31, 2018. Total net cash flow used in operations for the three months ended March 31, 2018 was $122.8 million, a $38.5 million increase from the cash flow used in the

comparative period in 2017. The reduction in cash flow is mainly attributable to increases in ceded reinsurance activities and an increase in paid claims. For the three months ended March 31, 2018, the cash flow used in operations required funds to be realised from the investment portfolio to provide a sufficiency of liquidity to meet our operating requirements.

Letter of Credit Facilities. For information relating to our credit facilities, refer to Note 16 of the unaudited condensed consolidated contained in this report.

Contractual Obligations and Commitments

The following table summarizes our contractual obligations under long-term debt, operating leases (net of subleases) and reserves relating to insurance and reinsurance contracts as at March 31, 2018:

	2018	2019	2020	2021	2022	Later Years	Total
	($ in millions)						
Operating Lease Obligations	$15.9	$15.9	$15.4	$10.9	$8.9	$73.6	$140.6
Long-Term Debt Obligations[1]	—	—	250.0	—	—	300.0	550.0
Reserves for losses and LAE[2]	1,448.9	1,691.4	982.4	623.3	438.3	1,495.1	6,679.4
Total	$1,464.8	$1,707.3	$1,247.8	$634.2	$447.2	$1,868.7	$7,370.0

(1) The long-term debt obligations disclosed above do not include $29.0 million of annual interest payments on our outstanding senior notes or dividends payable to holders of our preference shares or the Loan Notes issued by Silverton in the amount of $39.8 million.

(2) In estimating the time intervals into which payments of our reserves for losses and loss adjustment expenses fall, as set out above, we utilized actuarially assessed payment patterns. By the nature of the insurance and reinsurance contracts under which these liabilities are assumed, there can be no certainty that actual payments will fall in the periods shown above and there could be a material acceleration or deceleration of claims payments depending on factors outside our control. The total amount of payments in respect of our reserves, as well as the timing of such payments, may differ materially from our current estimates for the reasons set out in our 2017 Annual Report on Form 10-K under Item 7, “Management’s Discussion and Analysis of Financial Condition and Results of Operations — Critical Accounting Policies — Reserves for Losses and Loss Expenses” filed with the SEC and due to the factors set out in this report under “Cautionary Statement Regarding Forward-Looking Statements” below.

Further information on operating leases is given in Item 2, “Properties” in our 2017 Annual Report on Form 10-K filed with the SEC.

For a discussion of our derivative instruments, refer to Note 10 to our unaudited condensed consolidated financial statements included in this report.

Effects of Inflation

Inflation may have a material effect on our consolidated results of operations by its effect on interest rates and on the cost of settling claims. The potential exists, after a catastrophe or other large property loss, for the development of inflationary pressures in a local economy as the demand for services such as construction typically surges. The cost of settling claims may also be increased by global commodity price inflation. We seek to take both these factors into account when setting reserves for any events where we think they may be material.

Our calculation of reserves for losses and loss expenses in respect of casualty business includes assumptions about future payments for settlement of claims and claims-handling expenses, such as medical treatments and litigation costs. We write casualty business in the United States, the United Kingdom and Australia and certain other territories, where claims inflation has in many years run at higher rates than general inflation. To the extent inflation causes these costs to increase above reserves established for these claims, we will be required to increase our loss reserves with a corresponding reduction in earnings. The actual effects of inflation on our results cannot be accurately known until claims are ultimately settled.

In addition to general price inflation we are exposed to a persisting long-term upwards trend in the cost of judicial awards for damages. We seek to take this into account in our pricing and reserving of casualty business.

We also seek to take into account the projected impact of inflation on the likely actions of central banks in the setting of short-term interest rates and consequent effects on the yields and prices of fixed income securities. As at March 31, 2018, we consider that although inflation is currently low, in the medium-term there is a risk that inflation, interest rates and bond yields may rise, resulting in a decrease in the market value of certain of our fixed interest investments.

Cautionary Statement Regarding Forward-Looking Statements

This report contains forward-looking statements within the meaning of Section 27A of the Securities Act of 1933, as amended (the “Securities Act”), and Section 21E of the Securities Exchange Act of 1934, as amended (the “Exchange Act”), that reflect our current views with respect to future events. Statements that use the terms “believe,” “do not believe,” “anticipate,” “expect,” “assume,” “objective,” “target,” “plan,” “estimate,” “project,” “seek,” “will,” “may,” “aim,” “likely,” “c “guidance,”“outlook,” “trends,” “future,” “could,” “would,” “should,” “on track,” and similar expressions of a future or foward nature are intended to identify forward-looking statements. We intend these forward-looking statements to be covered by the safe harbor provisions of the Private Securities Litigation Reform Act of 1995.

All forward-looking statements rely on a number of assumptions, estimates and data concerning future results and events and are subject to a number of risks, uncertainties, assumptions and other factors, many of which are outside Aspen's control, that could cause actual results to differ materially from such statements. Accordingly, there are or will be important factors that could cause actual results to differ materially from those anticipated in the forward-looking statements. We believe that these factors include, but are not limited to, those set forth under “Risk Factors” in Item 1A of our Annual Report on Form 10-K for the year ended December 31, 2017 as filed with the Securities and Exchange Commission, including, but not limited to, the following:

- the actual development of losses and expenses impacting estimates for Hurricanes Harvey, Irma and Maria, wildfires in California and the earthquakes in Mexico that occurred in 2017;
- the impact of complex and unique causation and coverage issues associated with the attribution of losses to wind or flood damage or other perils such as fire or business interruption relating to such events;
- potential uncertainties relating to reinsurance recoveries, reinstatement premiums and other factors inherent in loss estimation;
- the reliability of, and changes in assumptions to, natural and man-made catastrophe pricing, accumulation and estimated loss models;
- our ability to implement successfully our efficiency initiative to optimize processes and support future growth;
- a decline in our Operating Subsidiaries’ ratings with S&P, A.M. Best or Moody’s;
- our ability to successfully implement steps to further optimize the business portfolio, ensure capital efficiency and enhance investment returns;
- the possibility of greater frequency or severity of claims and loss activity, including as a result of natural or man-made (including economic and political risks) catastrophic or material loss events, than our underwriting, reserving, reinsurance purchasing or investment practices have anticipated;
- the assumptions and uncertainties underlying reserve levels that may be impacted by future payments for settlements of claims and expenses or by other factors causing adverse or favorable development, including our assumptions on inflation costs associated with long-tail casualty business which could differ materially from actual experience;
- the United Kingdom's decision to withdraw from the European Union;
- decreased demand for our insurance or reinsurance products;
- cyclical changes in the insurance and reinsurance industry;
- the models we use to assess our exposure to losses from future natural catastrophes ("catastrophes") contain inherent uncertainties and our actual losses may differ significantly from expectations;
- our capital models may provide materially different indications than actual results;
- increased competition from existing (re)insurers and from alternative capital providers and insurance-linked funds and collateralized special purpose insurers on the basis of pricing, capacity, coverage terms, new capital, binding authorities to brokers or other factors and the related demand and supply dynamics as contracts come up for renewal;
- our ability to execute our business plan to enter new markets, introduce new products and teams and develop new distribution channels, including their integration into our existing operations;
- our acquisition strategy;
- changes in market conditions in the agriculture industry, which may vary depending upon demand for agricultural products, weather, commodity prices, natural disasters, and changes in legislation and policies related to agricultural products and producers;

- termination of, or changes in, the terms of the U.S. Federal Multiple Peril Crop Insurance Program or the U.S. Farm Bill, including modifications to the Standard Reinsurance Agreement put in place by the Risk Management Agency of the U.S. Department of Agriculture;
- the recent consolidation in the insurance and reinsurance industry;
- loss of one or more of our senior underwriters or key personnel;
- our ability to exercise capital management initiatives, including capital available to pursue our share repurchase program at various levels or to declare dividends, or to arrange banking facilities as a result of prevailing market conditions, the level of catastrophes or other losses or changes in our financial results;
- changes in general economic conditions, including inflation, deflation, foreign currency exchange rates, interest rates and other factors that could affect our financial results;
- the risk of a material decline in the value or liquidity of all or parts of our investment portfolio;
- the risks associated with the management of capital on behalf of investors;
- a failure in our operational systems or infrastructure or those of third parties, including those caused by security breaches or cyber attacks, or data protection failures;
- evolving issues with respect to interpretation of coverage after major loss events;
- our ability to adequately model and price the effects of climate cycles and climate change;
- any intervening legislative or governmental action and changing judicial interpretation and judgments on insurers' liability to various risks;
- the risks related to litigation;
- the effectiveness of our risk management loss limitation methods, including our reinsurance purchasing;
- changes in the availability, cost or quality of reinsurance or retrocessional coverage;
- changes in the total industry losses or our share of total industry losses resulting from events, such as catastrophes, that have occurred in prior years or may occur and, with respect to such events, our reliance on loss reports received from cedants and loss adjustors, our reliance on industry loss estimates and those generated by modeling techniques, changes in rulings on flood damage or other exclusions as a result of prevailing lawsuits and case law;
- the impact of one or more large losses from events other than natural catastrophes or by an unexpected accumulation of attritional losses and deterioration in loss estimates;
- the impact of acts of terrorism, acts of war and related legislation;
- any changes in our reinsurers' credit quality and the amount and timing of reinsurance recoverables;
- our reliance on information and technology and third-party service providers for our operations and systems;
- the level of inflation in repair costs due to limited availability of labor and materials after catastrophes;
- the failure of our reinsurers, policyholders, brokers or other intermediaries to honor their payment obligations;
- our reliance on the assessment and pricing of individual risks by third parties;
- our dependence on a few brokers for a large portion of our revenues;
- the persistence of heightened financial risks, including excess sovereign debt and risks in the banking system;
- changes in government regulations or tax laws in jurisdictions where we conduct business;
- changes in accounting principles or policies or in the application of such accounting principles or policies;
- increased counterparty risk due to the credit impairment of financial institutions; and
- Aspen Holdings or Aspen Bermuda becoming subject to income taxes in the United States or the United Kingdom.

In addition, any estimates relating to loss events involve the exercise of considerable judgment in the setting of reserves and reflect a combination of ground-up evaluations, information available to date from brokers and cedants, market intelligence, initial tentative loss reports and other sources. The actuarial range of reserves provided, if any, is based on our then current state of knowledge and explicit and implicit assumptions relating to the incurred pattern of claims, the expected ultimate settlement amount, inflation, and dependencies between lines of business. Due to the complexity of factors contributing to losses and the preliminary nature of the information used to prepare estimates, there can be no assurance that our ultimate losses will remain within stated amounts.

The foregoing review of important factors should not be construed as exhaustive and should be read in conjunction with the other cautionary statements that are included in this report. We undertake no obligation to publicly update or review any forward-looking statement, whether as a result of new information, future developments or otherwise, or to disclose any difference between our actual results and those reflected in such statements.

Reconciliation of Non-U.S. GAAP Financial Measures

Average equity, a non-U.S. GAAP financial measure, is used in calculating ordinary shareholders return on average equity. Average equity is calculated by taking the arithmetic average of total shareholders' equity on a monthly basis for the stated periods excluding (i) the average share of equity due to non-controlling interests and (ii) the average value of preference shares less issue expenses.

	As at March 31, 2018	As at December 31, 2017
	($ in millions)	
Total shareholders' equity	$2,859.0	$2,928.5
Total non-controlling interest	(2.9)	(2.7)
Total preference shares	(511.9)	(511.9)
Average adjustment	34.9	386.0
Average equity	$2,379.1	$2,799.9

Operating income, a non-U.S. GAAP financial measure, is an internal performance measure used by us in the management of our operations. It represents after-tax operational results excluding, as applicable, after-tax: net realized and unrealized gains or losses on investments, net realized and unrealized foreign exchange gains or losses, changes to the fair value of derivatives and amortization of intangible assets and other non-recurring income or expenses. We exclude these amounts from our calculation of operating income because the amount of these gains or losses is heavily influenced by, and fluctuates in part, according to the availability of market opportunities. We believe these amounts are largely independent of our business and underwriting process and including them distorts the analysis of trends in its operations. In addition to presenting net income determined in accordance with U.S. GAAP, we believe that showing operating income enables investors, analysts, rating agencies and other users of our financial information to more easily analyze our results of operations in a manner similar to how management analyzes our underlying business performance. Operating income should not be viewed as a substitute for U.S. GAAP net income.

	Three Months Ended March 31, 2018	Three Months Ended March 31, 2017
	($ in millions)	
Net income	$30.8	$96.5
Add (deduct) after tax income:		
Net realized and unrealized investment losses/(gains)	37.8	(46.4)
Net realized and unrealized exchange losses	4.1	5.1
Changes to the fair value of derivatives	(19.5)	2.6
Amortization and other non-recurring expenses	9.8	2.0
Proportion due to non-controlling interest	(0.2)	(0.1)
Operating income after tax and non-controlling interest	62.8	59.7
Preference Shares dividends	(7.6)	(10.5)
Net income available to ordinary shareholders	$55.2	$49.2

61

Item 3. Quantitative and Qualitative Disclosures about Market Risk

We believe we are principally exposed to three types of market risk: interest rate risk, foreign currency risk and credit risk.

Interest rates risk. Our investment portfolio consists primarily of fixed income securities. Accordingly, our primary market risk exposure is to changes in interest rates. Fluctuations in interest rates have a direct impact on the market valuation of these securities. As interest rates rise, the market value of our fixed income portfolio falls, and the converse is also true. We manage interest rate risk by maintaining a short to medium duration to reduce the effect of interest rate changes on book value. On May 9, 2016, we terminated our interest rate swap program which aimed to partially mitigate our exposure to interest rate.

As at March 31, 2018, our fixed income portfolio (including cash and accrued interest within the managed portfolios) had an approximate duration of 3.98 years. The table below depicts interest rates change scenarios and the effects on our interest rate sensitive invested assets:

Effect of Changes in Interest Rates on Portfolio Given a Parallel Shift in the Yield Curve

Movement in Rates in Basis Points	-100	-50	—	50	100
	($ in millions, except percentages)				
Market value	7,609.2	7,463.5	7,317.9	7,172.3	7,026.7
Gain/(loss)	291.3	145.6	—	(145.6)	(291.2)
Percentage of portfolio	4.0 %	2.0 %	— %	(2.0)%	(4.0)%

Foreign currency risk. Our reporting currency is the U.S. Dollar. The functional currencies of our operations include U.S. Dollars, British Pounds, Euros, Canadian Dollars, Swiss Francs, Australian Dollars and Singaporean Dollars. As at March 31, 2018, 88.5% (December 31, 2017 — 88.5%) of our cash, cash equivalents and investments were held in U.S. Dollars, 5.4% (December 31, 2017 — 5.7%) were in British Pounds and 6.1% (December 31, 2017 — 5.9%) were in other currencies. For the three months ended March 31, 2018, 19.3% (December 31, 2017 — 17.3%) of our gross premiums were written in currencies other than the U.S. Dollar and the British Pound and we expect that a similar proportion will be written in currencies other than the U.S. Dollar and the British Pound in the remainder of 2018.

Other foreign currency amounts are re-measured to the appropriate functional currency and the resulting foreign exchange gains or losses are reflected in the statement of operations. Functional currency amounts of assets and liabilities are then translated into U.S. Dollars. The unrealized gain or loss from this translation, net of tax, is recorded as part of shareholders' equity. The change in unrealized foreign currency translation gain or loss during the period, net of tax, is a component of comprehensive income. Both the re-measurement and translation are calculated using current exchange rates for the balance sheets and average exchange rates for the statement of operations. We may experience exchange losses to the extent our foreign currency exposure is not properly managed or otherwise hedged, which in turn would adversely affect our results of operations and financial condition. Management estimates that a 10% change in the exchange rate between British Pounds and U.S. Dollars as at March 31, 2018 would have impacted our net reportable British Pound net assets by approximately $3.7 million for the three months ended March 31, 2018 (December 31, 2017 — approximately $3.6 million).

We manage our foreign currency risk by seeking to match our liabilities under insurance and reinsurance policies that are payable in foreign currencies with investments that are denominated in these currencies. This may involve the use of foreign exchange contracts from time to time. A foreign exchange contract involves an obligation to purchase or sell a specified currency at a future date at a price set at the time of the contract. Foreign exchange contracts will not eliminate fluctuations in the value of our assets and liabilities denominated in foreign currencies, but rather allow us to establish a rate of exchange for a future point in time. For a discussion of our derivative instruments including foreign exchange contracts, refer to Note 10 to our unaudited condensed consolidated financial statements included in this report.

Credit risk. We have exposure to credit risk primarily as a holder of fixed income securities. Our risk management strategy and investment policy is to invest in debt instruments of high credit quality issuers and to limit the amount of credit exposure with respect to particular ratings categories, business sectors and any one issuer. As at March 31, 2018, the average rating of fixed income securities in our investment portfolio was "AA-" (December 31, 2017 — "AA-").

In addition, we are exposed to the credit risk of our insurance and reinsurance brokers to whom we make claims payments for our policyholders, as well as to the credit risk of our reinsurers and retrocessionaires who assume business from us. Other than fully collateralized reinsurance, the substantial majority of our reinsurers have a rating of “A” (Excellent), the third highest of fifteen rating levels, or better by A.M. Best and the minimum rating of any of our material reinsurers is “A-” (Excellent), the fourth highest of fifteen rating levels, by A.M. Best.

Item 4. Controls and Procedures

Evaluation of Disclosure Controls and Procedures

The Company, under the supervision and with the participation of the Company's management, including the Company's Chief Executive Officer and Chief Financial Officer, has evaluated the design and operation of the Company's disclosure controls and procedures as of the end of the period of this report. Our management does not expect that our disclosure controls or our internal controls will prevent all errors and all fraud. A control system, no matter how well conceived and operated, can provide only reasonable, not absolute, assurance that the objectives of the control system are met. Further, the design of a control system must reflect the fact that there are resource constraints, and the benefits of controls must be considered relative to their costs. As a result of the inherent limitations in all control systems, no evaluation of controls can provide absolute assurance that all control issues and instances of fraud, if any, within the Company have been detected. These inherent limitations include the realities that judgments in decision-making can be faulty, and that breakdowns can occur because of simple error or mistake. Additionally, controls can be circumvented by the individual acts of some persons or by collusion of two or more people. The design of any system of controls also is based in part upon certain assumptions about the likelihood of future events, and there can be no assurance that any design will succeed in achieving its stated goals under all potential future conditions; over time, controls may become inadequate because of changes in conditions, or the degree of compliance with the policies or procedures may deteriorate. As a result of the inherent limitations in a cost-effective control system, misstatement due to error or fraud may occur and not be detected. Accordingly, our disclosure controls and procedures are designed to provide reasonable, not absolute, assurance that the disclosure requirements are met. Based on the evaluation of the disclosure controls and procedures, the Chief Executive Officer and Chief Financial Officer have concluded that the Company's disclosure controls and procedures were effective in ensuring that information required to be disclosed in the reports filed or submitted to the SEC under the Exchange Act by the Company is recorded, processed, summarized and reported in a timely fashion, and is accumulated and communicated to management, including the Company's Chief Executive Officer and Chief Financial Officer, to allow timely decisions regarding required disclosure.

Changes in Internal Control over Financial Reporting

The Company's management has performed an evaluation, with the participation of the Company's Chief Executive Officer and the Company's Chief Financial Officer, of changes in the Company's internal control over financial reporting that occurred during the three months ended March 31, 2018. Based upon that evaluation, the Company's management is not aware of any change in its internal control over financial reporting that occurred during the three months ended March 31, 2018 that has materially affected, or is reasonably likely to materially affect, the effectiveness of the Company's internal control over financial reporting.

PART II
OTHER INFORMATION
Item 1. Legal Proceedings
Similar to the rest of the insurance and reinsurance industry, we are subject to litigation and arbitration in the ordinary course of our business. Our Operating Subsidiaries are regularly engaged in the investigation, conduct and defense of disputes, or potential disputes, resulting from questions of insurance or reinsurance coverage or claims activities. Pursuant to our insurance and reinsurance arrangements, many of these disputes are resolved by arbitration or other forms of alternative dispute resolution. In some jurisdictions, noticeably the U.S., a failure to deal with such disputes or potential disputes in an appropriate manner could result in an award of "bad faith" punitive damages against our Operating Subsidiaries. In addition, we may be subject to lawsuits and regulatory actions in the normal course of business that do not arise from, or directly relate to, insurance and reinsurance coverage or claims. This category of litigation typically involves, among other things, allegations of underwriting errors or omissions, employment claims or regulatory activity.
While any legal or arbitration proceedings contain an element of uncertainty, we do not believe that the eventual outcome of any specific litigation, arbitration or alternative dispute resolution proceedings to which we are currently a party will have a material adverse effect on the financial condition of our business as a whole.

Item 1A. Risk Factors
There have been no significant changes to our risk factors as set forth in our Annual Report on Form 10-K for the year ended December 31, 2017 filed with the SEC. Please refer to the "Cautionary Statement Regarding Forward-Looking Statements" provided above in this report.
Item 2. Unregistered Sales of Equity Securities and Use of Proceeds
During the quarter ended March 31, 2018, the Company did not repurchase any of its ordinary shares.

Item 3. Defaults Upon Senior Securities
None.
Item 4. Mine Safety Disclosures
None.
Item 5. Other Information
Disclosure of Certain Activities Relating to Iran
Section 13(r) of the Securities Exchange Act of 1934, as amended ("Section 13(r)"), requires all issuers that file annual or quarterly reports with the SEC to disclose certain activities, transactions or dealings with Iran. Many of the activities, transactions and dealings that Section 13(r) requires to be reported were previously subject to U.S. sanctions or prohibited by applicable local law. On January 16, 2016, the United States and the E.U. eased sanctions against Iran pursuant to the Joint Comprehensive Plan of Action, and many of the reportable activities, transactions and dealings under Section 13(r) are no longer subject to U.S. sanctions and no longer prohibited by applicable local law.
Certain of our operations located outside the United States underwrite marine and energy treaties on a worldwide basis and, as a result, the underlying insurance and reinsurance portfolios may have exposure to the Iranian petroleum resources, refined petroleum, and petrochemical industries. For example, certain of our operations underwrite global marine hull and cargo policies that provide coverage for vessels navigating into and out of ports worldwide, including Iran. We do not believe that any coverage we have provided has directly or significantly facilitated or contributed to the Iranian petroleum resources, refined petroleum, or petrochemical industry.
For the quarter ended March 31, 2018, we are not aware of any premium apportionment with respect to underwriting insurance or reinsurance activities reportable under Section 13(r). Should any such risks have entered into the stream of commerce covered by the insurance and reinsurance portfolios underlying our treaties, we believe that the premiums associated with such business would be immaterial.

Item 6. Exhibits

(a) The following sets forth those exhibits filed pursuant to Item 601 of Regulation S-K:

Exhibit Number	Description
10.1	Outsourcing Agreement, dated April 20, 2018, between Aspen Insurance UK Services Limited, Aspen Insurance U.S. Services, Inc., Aspen Bermuda Limited and Genpact International, Inc. (incorporated herein by reference to exhibit 10-1 of the Current Report on Form 8-K filed with the SEC on April 26, 2018)
31.1	Officer Certification of Christopher O'Kane, Chief Executive Officer of Aspen Insurance Holdings Limited, as adopted pursuant to Section 302 of the Sarbanes-Oxley Act of 2002, filed with this report.
31.2	Officer Certification of Scott Kirk, Chief Financial Officer of Aspen Insurance Holdings Limited, as adopted pursuant to Section 302 of the Sarbanes-Oxley Act of 2002, filed with this report.
32.1	Officer Certification of Christopher O'Kane, Chief Executive Officer of Aspen Insurance Holdings Limited, and Scott Kirk, Chief Financial Officer of Aspen Insurance Holdings Limited, pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, submitted with this report.
101	The following financial information from Aspen Insurance Holdings Limited's quarterly report on Form 10-Q for the quarter ended March 31, 2018 formatted in XBRL: (i) Unaudited Condensed Consolidated Balance Sheets at March 31, 2018 and December 31, 2017; (ii) Unaudited Condensed Consolidated Statements of Operations and Other Comprehensive Income for the three ended March 31, 2018 and 2017; (iii) Unaudited Condensed Consolidated Statements of Shareholders' Equity for the three months ended March 31, 2018 and 2017; (iv) Unaudited Condensed Consolidated Statements of Cash Flows for the three months ended March 31, 2018 and 2017; and (v) Notes to Unaudited Condensed Consolidated Financial Statements, tagged as blocks of text and in detail.*

* As provided in Rule 406T of Regulation S-T, this information is "furnished" herewith and not "filed" for purposes of Sections 11 and 12 of the Securities Act and Section 18 of the Exchange Act. Such exhibit will not be deemed to be incorporated by reference into any filing under the Securities Act or the Exchange Act unless Aspen Holdings specifically incorporates it by reference.

SIGNATURES

Pursuant to the requirements of Section 13 or 15(d) of the Securities Exchange Act of 1934, the Registrant has duly caused this report to be signed on its behalf by the undersigned, thereunto duly authorized.

ASPEN INSURANCE HOLDINGS LIMITED
(Registrant)

Date: May 9, 2018 By: /s/ Christopher O'Kane
Christopher O'Kane
Chief Executive Officer

Date: May 9, 2018 By: /s/ Grahame Dawe
Grahame Dawe
Chief Accounting Officer