

ASPEN INSURANCE HOLDINGS LTD
Form 10-Q
November 07, 2016

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

Form 10-Q

QUARTERLY REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934
For the Quarterly Period Ended September 30, 2016
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 (Address of principal executive offices)	HM 19 (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 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 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" and "smaller reporting company" in Rule 12b-2 of the Exchange Act. (Check one):

Large accelerated filer Accelerated filer Non-accelerated filer Smaller reporting company

Edgar Filing: ASPEN INSURANCE HOLDINGS LTD - Form 10-Q

Non-accelerated filer (Do not check if a smaller reporting company) Smaller reporting company

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

Indicate the number of shares outstanding of each of the issuer's classes of common stock, as of the latest practicable date.

As of November 1, 2016, there were 60,217,228 outstanding ordinary shares, with a par value of 0.15144558¢ per ordinary share, outstanding.

INDEX

	Page
<u>PART I. FINANCIAL INFORMATION</u>	
Item 1. <u>Unaudited Condensed Consolidated Financial Statements</u>	<u>3</u>
Unaudited Condensed Consolidated Balance Sheets as at September 30, 2016 and December 31, 2015	<u>3</u>
Unaudited Condensed Consolidated Statements of Operations and Other Comprehensive Income for the Three and Nine Months Ended September 30, 2016 and 2015	<u>5</u>
Unaudited Condensed Consolidated Statements of Changes in Shareholders' Equity for the Nine Months Ended September 30, 2016 and 2015	<u>6</u>
Unaudited Condensed Consolidated Statements of Cash Flows for the Nine Months Ended September 30, 2016 and 2015	<u>7</u>
<u>Notes to the Unaudited Condensed Consolidated Financial Statements</u>	<u>9</u>
Item 2. Management's Discussion and Analysis of Financial Condition and Results of Operations	<u>43</u>
Item 3. <u>Quantitative and Qualitative Disclosures About Market Risk</u>	<u>71</u>
Item 4. <u>Controls and Procedures</u>	<u>72</u>
<u>PART II. OTHER INFORMATION</u>	
Item 1. <u>Legal Proceedings</u>	<u>73</u>
Item 1A. <u>Risk Factors</u>	<u>73</u>
Item 2. <u>Unregistered Sales of Equity Securities and Use of Proceeds</u>	<u>73</u>
Item 3. <u>Defaults Upon Senior Securities</u>	<u>73</u>
Item 4. <u>Mine Safety Disclosures</u>	<u>73</u>
Item 5. <u>Other Information</u>	<u>73</u>
Item 6. <u>Exhibits</u>	<u>75</u>
<u>SIGNATURES</u>	<u>76</u>
CERTIFICATIONS	

PART I
FINANCIAL INFORMATION

Item 1. Unaudited Condensed Consolidated Financial Statements

ASPEN INSURANCE HOLDINGS LIMITED
UNAUDITED CONDENSED CONSOLIDATED BALANCE SHEETS

As at September 30, 2016 and December 31, 2015

(\$ in millions, except share and per share amounts)

	As at September 30, 2016	As at December 31, 2015
ASSETS		
Investments:		
Fixed income securities, available for sale at fair value (amortized cost — \$5,777.2 and \$5,867.5)	\$ 5,964.7	\$ 5,951.1
Fixed income securities, trading at fair value (amortized cost — \$960.6 and \$794.2)	996.9	788.0
Equity securities, trading at fair value (cost — \$737.1 and \$722.5)	797.7	736.4
Short-term investments, available for sale at fair value (amortized cost — \$169.1 and \$162.9)	169.1	162.9
Short-term investments, trading at fair value (amortized cost — \$169.6 and \$9.5)	169.6	9.5
Catastrophe bonds, trading at fair value (cost — \$17.5 and \$55.2)	17.8	55.4
Other investments, equity method	13.0	8.9
Total investments	8,128.8	7,712.2
Cash and cash equivalents (including \$160.9 and \$243.3 within consolidated variable interest entities)	1,183.3	1,099.5
Reinsurance recoverables		
Unpaid losses	419.8	354.8
Ceded unearned premiums	229.5	168.9
Receivables		
Underwriting premiums	1,437.7	1,115.6
Other	131.6	94.3
Funds withheld	51.6	36.0
Deferred policy acquisition costs	388.2	361.1
Derivatives at fair value	6.3	9.2
Receivables for securities sold	10.8	0.6
Office properties and equipment	84.0	70.6
Deferred taxation	—	3.7
Other assets	1.0	4.1
Intangible assets and goodwill	73.1	18.2
Total assets	\$ 12,145.7	\$ 11,048.8

See accompanying notes to unaudited condensed consolidated financial statements.

ASPEN INSURANCE HOLDINGS LIMITED
 UNAUDITED CONDENSED CONSOLIDATED BALANCE SHEETS

As at September 30, 2016 and December 31, 2015

(\$ in millions, except share and per share amounts)

	As at September 30, 2016	As at December 31, 2015
LIABILITIES		
Insurance reserves		
Losses and loss adjustment expenses	\$ 5,246.6	\$ 4,938.2
Unearned premiums	1,781.2	1,587.2
Total insurance reserves	7,027.8	6,525.4
Payables		
Reinsurance premiums	182.8	92.7
Current taxation	12.1	10.8
Deferred taxation	6.2	—
Accrued expenses and other payables	344.2	343.8
Liabilities under derivative contracts	6.5	4.0
Total payables	551.8	451.3
Loan notes issued by variable interest entities, at fair value	112.7	103.0
Long-term debt	549.3	549.2
Total liabilities	\$ 8,241.6	\$ 7,628.9
Commitments and contingent liabilities (see Note 16)	—	—
SHAREHOLDERS' EQUITY		
Ordinary shares:		
60,210,770 shares of par value 0.15144558¢ each (December 31, 2015 - 60,918,373)	\$ 0.1	\$ 0.1
Preference shares:		
11,000,000 5.95% shares of par value 0.15144558¢ each (December 31, 2015 — 11,000,000)	—	—
5,327,500 7.401% shares of par value 0.15144558¢ each (December 31, 2015 — 5,327,500)	—	—
6,400,000 7.250% shares of par value 0.15144558¢ each (December 31, 2015 — 6,400,000)	—	—
10,000,000 5.625% shares of par value 0.15144558¢ each (December 31, 2015 — Nil)	—	—
Non-controlling interest	1.3	1.3
Additional paid-in capital	1,280.2	1,075.3
Retained earnings	2,490.6	2,283.6
Accumulated other comprehensive income, net of taxes	131.9	59.6
Total shareholders' equity	3,904.1	3,419.9
Total liabilities and shareholders' equity	\$ 12,145.7	\$ 11,048.8

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 September 30,		Nine Months Ended September 30,	
	2016	2015	2016	2015
Revenues				
Net earned premium	\$681.0	\$ 640.6	\$2,024.9	\$ 1,843.6
Net investment income	46.4	45.0	143.9	139.1
Realized and unrealized investment gains	26.7	10.7	137.4	81.6
Other income	1.5	(2.3)	2.4	0.4
Total revenues	755.6	694.0	2,308.6	2,064.7
Expenses				
Losses and loss adjustment expenses	389.2	365.6	1,188.8	1,032.2
Amortization of deferred policy acquisition costs	130.9	132.0	387.8	365.4
General, administrative and corporate expenses	125.0	100.5	361.2	298.1
Interest on long-term debt	7.3	7.4	22.1	22.1
Change in fair value of derivatives	(0.6)	(10.1)	7.0	(4.3)
Change in fair value of loan notes issued by variable interest entities	9.8	8.3	13.7	14.5
Realized and unrealized investment losses	5.2	51.9	34.1	95.2
Net realized and unrealized foreign exchange (gains)/losses	(10.8)	8.4	10.2	26.4
Other expenses	(0.9)	—	0.1	0.8
Total expenses	655.1	664.0	2,025.0	1,850.4
Income from operations before income tax	100.5	30.0	283.6	214.3
Income tax expense	(4.9)	(1.8)	(8.7)	(9.1)
Net income	\$95.6	\$ 28.2	\$274.9	\$ 205.2
Amount attributable to non-controlling interest	0.2	(0.3)	—	(0.8)
Net income attributable to Aspen Insurance Holdings Limited's ordinary shareholders	\$95.8	\$ 27.9	\$274.9	\$ 204.4
Other Comprehensive Income:				
Available for sale investments:				
Reclassification adjustment for net realized gains on investments included in net income	\$(4.4)	\$(2.1)	\$(9.7)	\$(33.8)
Change in net unrealized gains on available for sale securities held	(18.8)	24.8	113.7	(21.0)
Net change from current period hedged transactions	3.1	(0.2)	(1.9)	2.5
Change in foreign currency translation adjustment	(10.2)	(29.0)	(26.8)	(72.4)
Other comprehensive income, gross of tax	(30.3)	(6.5)	75.3	(124.7)
Tax thereon:				
Reclassification adjustment for net realized gains on investments included in net income	—	0.3	0.6	0.7
Change in net unrealized gains on available for sale securities held	2.0	0.5	(11.7)	1.4
Net change from current period hedged transactions	(0.6)	(0.3)	0.6	(0.3)
Change in foreign currency translation adjustment	3.7	1.1	7.5	2.2
Total tax on other comprehensive income	5.1	1.6	(3.0)	4.0
Other comprehensive income/(loss) net of tax	(25.2)	(4.9)	72.3	(120.7)
Total comprehensive income attributable to Aspen Insurance Holdings Limited's ordinary shareholders	\$70.6	\$ 23.0	\$347.2	\$ 83.7

Edgar Filing: ASPEN INSURANCE HOLDINGS LTD - Form 10-Q

Per Share Data

Weighted average number of ordinary share and share equivalents

Basic	60,225,700	60,779,295	60,588,307	61,442,033
Diluted	61,577,012	62,155,125	62,043,440	62,878,436
Basic earnings per ordinary share adjusted for preference share dividends	\$1.43	\$0.30	\$4.07	\$2.86
Diluted earnings per ordinary share adjusted for preference share dividends	\$1.40	\$0.30	\$3.97	\$2.80

See accompanying notes to unaudited condensed consolidated financial statements.

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

	Nine Months Ended September 30,	
	2016	2015
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	1.3	0.5
Net change attributable to non-controlling interest for the period	—	0.8
End of the period	1.3	1.3
Additional paid-in capital		
Beginning of the period	1,075.3	1,134.3
New ordinary shares issued	2.0	4.4
Ordinary shares repurchased and cancelled	(50.0)	(83.7)
Preference shares issued	241.3	—
Share-based compensation	11.6	13.3
End of the period	1,280.2	1,068.3
Retained earnings		
Beginning of the period	2,283.6	2,050.1
Net income for the period	274.9	205.2
Dividends on ordinary shares	(39.5)	(38.1)
Dividends on preference shares	(28.4)	(28.4)
Net change attributable to non-controlling interest for the period	—	(0.8)
End of the period	2,490.6	2,188.0
Accumulated other comprehensive income:		
Cumulative foreign currency translation adjustments, net of taxes:		
Beginning of the period	0.6	72.7
Change for the period, net of income tax	(19.3)	(70.2)
End of the period	(18.7)	2.5
Loss on derivatives, net of taxes:		
Beginning of the period	(1.2)	(3.8)
Net change from current period hedged transactions	(1.3)	2.2
End of the period	(2.5)	(1.6)
Unrealized appreciation on investments, net of taxes:		
Beginning of the period	60.2	165.4
Change for the period, net of taxes	92.9	(52.7)
End of the period	153.1	112.7
Total accumulated other comprehensive income, net of taxes	131.9	113.6
Total shareholders' equity	\$3,904.1	\$3,371.3

See accompanying notes to unaudited condensed consolidated financial statements.

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

	Nine Months Ended September 30, 2016 2015	
Cash flows from operating activities:		
Net income	\$274.9	\$205.2
Proportion due to non-controlling interest	—	(0.8)
Adjustments to reconcile net income to net cash flows from operating activities:		
Depreciation and amortization	35.6	21.3
Share-based compensation	11.6	13.3
Realized and unrealized investment (gains)	(137.4)	(81.6)
Realized and unrealized investment losses	34.1	95.2
Change in fair value of loan notes issued by variable interest entities	13.7	14.5
Net realized and unrealized investment foreign exchange losses	(3.1)	2.3
Net change from current period hedged transactions	(1.3)	2.2
Changes in:		
Insurance reserves:		
Losses and loss adjustment expenses	349.7	202.2
Unearned premiums	181.4	219.1
Reinsurance recoverables:		
Unpaid losses	(73.1)	(1.0)
Ceded unearned premiums	(62.0)	(17.6)
Other receivables	(34.0)	(19.7)
Deferred policy acquisition costs	(26.4)	(47.4)
Reinsurance premiums payable	76.4	44.3
Funds withheld	(15.6)	7.9
Premiums receivable	(306.9)	(209.9)
Deferred taxes	9.5	2.8
Income tax payable	8.0	(7.0)
Accrued expenses and other payables	26.4	(78.2)
Fair value of derivatives and settlement of liabilities under derivatives	5.4	(13.6)
Long-term debt and loan notes issued by variable interest entities	9.8	0.1
Other assets	3.1	10.1
Net cash generated from operating activities	\$379.8	\$363.7

See accompanying notes to unaudited condensed consolidated financial statements.

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

	Nine Months Ended September 30,	
	2016	2015
Cash flows (used in) investing activities:		
(Purchases) of fixed income securities — Available for sale	\$(1,671.4)	\$(1,368.2)
(Purchases) of fixed income securities — Trading	(605.1)	(387.0)
Proceeds from sales and maturities of fixed income securities — Available for sale	1,668.7	1,211.9
Proceeds from sales and maturities of fixed income securities — Trading	481.0	354.4
(Purchases) of equity securities — Trading	(159.9)	(335.2)
Net proceeds of catastrophe bonds — Trading	37.6	(2.0)
Proceeds from sales of equity securities — Available for sale	—	108.6
Proceeds from sales of equity securities — Trading	146.4	214.7
(Purchases) of short-term investments — Available for sale	(202.7)	(118.6)
Proceeds from sales of short-term investments — Available for sale	199.9	205.7
(Purchases) of short-term investments — Trading	(166.3)	(38.2)
Proceeds from sales of short-term investments — Trading	6.3	31.5
Net change in (payable)/receivable for securities (purchased)/sold	14.5	14.7
Net (purchases) of equipment	(15.7)	(10.4)
Other investments	(3.3)	(0.8)
Payments for acquisitions and investments, net of cash acquired	(52.7)	—
Net cash (used in) investing activities	(322.7)	(118.9)
Cash flows from/(used in) financing activities:		
Proceeds from the issuance of ordinary shares, net of issuance costs	2.0	4.4
Ordinary shares repurchased	(50.0)	(83.7)
Proceeds from the issuance of preference shares, net of issuance costs	241.3	—
Repayment of long-term debt issued by Silverton	(89.3)	(67.8)
Dividends paid on ordinary shares	(39.5)	(38.1)
Dividends paid on preference shares	(28.4)	(28.4)
Net cash from/(used in) financing activities	36.1	(213.6)
Effect of exchange rate movements on cash and cash equivalents	(9.4)	(13.0)
Increase in cash and cash equivalents	83.8	18.2
Cash and cash equivalents at beginning of period	1,099.5	1,178.5
Cash and cash equivalents at end of period	\$1,183.3	\$1,196.7
Supplemental disclosure of cash flow information:		
Net cash paid during the period for income tax	\$0.2	\$2.4
Cash paid during the period for interest	\$14.5	\$14.5
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 and holds subsidiaries that provide insurance and reinsurance on a worldwide basis. Its principal operating subsidiaries are Aspen Insurance UK Limited (“Aspen U.K.”), Aspen Bermuda Limited (“Aspen Bermuda”), Aspen Specialty Insurance Company (“Aspen Specialty”), Aspen American Insurance Company (“AAIC”) and Aspen Underwriting Limited (corporate member of Lloyd’s Syndicate 4711, “AUL”) (collectively, the “Operating Subsidiaries”). We also 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. Silverton Re Ltd. (“Silverton”), a sidecar, was established in 2013 to attract third-party capital and to provide additional collateralized capacity to support Aspen Re’s global reinsurance business. References to the “Company,” “we,” “us” or “our” refer to Aspen Holdings or Aspen Holdings and its subsidiaries.

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 (consisting of normal recurring accruals) considered necessary for a fair presentation have been included. Results for the three and nine months ended September 30, 2016 are not necessarily indicative of the results that may be expected for the year ended December 31, 2016. 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, 2015 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, 2015 contained in the Company’s Annual Report on Form 10-K filed with the United States Securities and Exchange Commission (the “SEC”) on February 19, 2016 (File No. 001-31909). There have been no changes to significant accounting policies from those disclosed in the Company’s Annual Report on Form 10-K.

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 relate to losses and loss adjustment expenses, the value of investments, reinsurance recoverables and the fair value of derivatives. All material assumptions and estimates are regularly reviewed and adjustments made as necessary, but actual results could be significantly different from those expected when the assumptions or estimates were made.

Accounting Pronouncements Adopted in 2016

On May 21, 2015, the Financial Accounting Standards Board (the “FASB”) issued ASU 2015-09, “Financial Services - Insurance (Topic 944) Disclosures About Short-Duration Contracts” which requires insurance entities to disclose additional information about the liability for unpaid claims and claim adjustment expenses, disclose information about significant changes in methodologies and assumptions used to calculate the liability for unpaid claims and claim adjustment expenses and disclose a roll forward of the liability for unpaid claims and claims adjustment expenses. This ASU is effective for annual periods beginning after December 15, 2015 and interim periods within annual periods beginning after December 15, 2016. The Company does not expect this ASU to have a material impact on its consolidated financial results but it will have an impact on the disclosures in the Company’s 2016 Annual Report on Form 10-K and its Quarterly Reports on Form 10-Q throughout 2017.

On September 25, 2015, the FASB issued ASU 2015-16, “Business Combinations (Topic 805)” which requires an acquirer to adjust retrospectively to provisional amounts recognized in a business combination. This ASU is effective for annual periods beginning after December 15, 2015 and may impact the Company’s provisional amounts booked in

respect to the acquisition of AG Logic Holdings LLC (“AgriLogic”).

Accounting Pronouncements Not Yet Adopted

On June 16, 2016, the FASB issued ASU 2016-13, “Financial Instruments - Credit Losses (Topic 326)” which introduces a new impairment model, known as the current expected credit loss model, which is based on expected losses rather than incurred losses. Under the new credit loss model, the Company would recognize an allowance for its estimate of expected credit losses and this would apply to most debt instruments (other than those measured at fair value), trade receivables, lease receivables, reinsurance receivables, financial guarantee contracts and loan commitments. Available-for-sale debt securities are outside the model’s scope and the ASU made limited amendments to the impairment model for available-for-sale debt securities. There are other amendments required as a result of this ASU that are effective for fiscal years beginning after December 15, 2019. The Company is currently assessing the impact the adoption of this ASU will have on future financial statements and disclosures.

Other accounting pronouncements were issued during the three months ended September 30, 2016 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 and nine months ended September 30, 2016 and 2015:

Details about the AOCI Components	Amount Reclassified from AOCI		Affected Line Item in the Unaudited Condensed Consolidated Statement of Operations
	Three Months Ended September 30, 2016 (\$ in millions)	Three Months Ended September 30, 2015	
Available for sale securities:			
Realized gains on sale of securities	\$5.3	\$2.1	Realized and unrealized investment gains
Realized (losses) on sale of securities	(0.9)	—	Realized and unrealized investment losses
	4.4	2.1	Income from operations before income tax
Tax on net realized gains of securities	—	(0.3)	Income tax expense
	\$4.4	\$1.8	Net income
Foreign currency translation adjustments:			
Foreign currency translation adjustments, before income tax	—	\$1.1	Net realized and unrealized foreign exchange gains/(losses)
Tax on foreign currency translation adjustments	—	—	Income tax expense
	\$—	\$1.1	Net income
Realized derivatives:			
Net realized (losses) on settled derivatives	\$(3.1)	\$(0.8)	General, administrative and corporate expenses
Tax on settled derivatives	1.1	—	Income tax expense
	\$(2.0)	\$(0.8)	Net income
Total reclassifications from AOCI to the statement of operations, net of income tax	\$2.4	\$2.1	Net income

Details about the AOCI Components	Amount Reclassified from AOCI	Nine Months Ended September 30, 2016	Nine Months Ended September 30, 2015	Affected Line Item in the Unaudited Condensed Consolidated Statement of Operations
				(\$ in millions)
Available for sale securities:				
Realized gains on sale of securities	\$14.8	\$37.7		Realized and unrealized investment gains
Realized (losses) on sale of securities	(5.1)	(3.9)		Realized and unrealized investment losses
	9.7	33.8		Income from operations before income tax
Tax on net realized gains of securities	(0.6)	(0.7)		Income tax expense
	\$9.1	\$33.1		Net income
Foreign currency translation adjustments:				
Foreign currency translation adjustments, before income tax	—	\$2.2		Net realized and unrealized foreign exchange gains/(losses)
Tax on foreign currency translation adjustments	—	—		Income tax expense
	\$—	\$2.2		Net income
Realized derivatives:				
Net realized (losses) on settled derivatives	\$(5.6)	\$(3.5)		General, administrative and corporate expenses
Tax on settled derivatives	1.1	—		Income tax expense
	\$(4.5)	\$(3.5)		Net income
Total reclassifications from AOCI to the statement of operations, net of income tax	\$4.6	\$31.8		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. 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 and nine months ended September 30, 2016 and 2015, respectively:

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2016	2015	2016	2015
	(\$ in millions, except share and per share amounts)			
Net income	\$95.6	\$ 28.2	\$274.9	\$ 205.2
Preference share dividends	(9.5)	(9.5)	(28.4)	(28.4)
Net amount attributable to non-controlling interest	0.2	(0.3)	—	(0.8)
Basic and diluted net income available to ordinary shareholders	\$86.3	\$ 18.4	\$246.5	\$ 176.0
Ordinary shares:				
Basic weighted average ordinary shares	60,225,705	779,295	60,588,307	67,442,033
Weighted average effect of dilutive securities ⁽¹⁾	1,351,311	375,830	1,455,131	3,436,403
Total diluted weighted average ordinary shares	61,577,016	1,155,125	62,043,438	70,878,436
Earnings per ordinary share:				
Basic	\$ 1.43	\$ 0.30	\$ 4.07	\$ 2.86
Diluted	\$ 1.40	\$ 0.30	\$ 3.97	\$ 2.80

Dilutive securities comprise: employee options, restricted share units and performance shares associated with the Company's long-term incentive plan, employee share purchase plans and director restricted stock units and options as described in Note 14.

Dividends. On October 26, 2016, the Company's Board of Directors ("the Board of Directors") declared the following quarterly dividends:

	Dividend	Payable on:	Record Date:
Ordinary shares	\$0.22	November 29, 2016	November 11, 2016
7.401% preference shares	\$0.462563	January 1, 2017	December 15, 2016
7.250% preference shares	\$0.4531	January 1, 2017	December 15, 2016
5.95% preference shares	\$0.3719	January 1, 2017	December 15, 2016
5.625% preference shares	\$0.3945	January 1, 2017	December 15, 2016

5. Segment Reporting

The Company has two reporting business segments: Insurance and Reinsurance. In addition to the way the Company manages its business, the Company has considered similarities in economic characteristics, products, customers, distribution, the regulatory environment of the Company's business segments and quantitative thresholds to determine the Company's reportable segments. Segment 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 (risk excess, pro rata and facultative), casualty reinsurance (U.S. treaty, international treaty and global facultative) and specialty reinsurance (credit and surety, agriculture insurance and reinsurance, marine, aviation, terrorism, engineering and other specialty lines). ACM forms part of our property catastrophe reinsurance line of

business as it currently focuses 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 2015 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 2015 Annual Report on Form 10-K filed with the SEC.

Non-underwriting Disclosures. The Company has provided additional disclosures for corporate and other (non-underwriting) 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 September 30, 2016 and 2015:

	Three Months Ended September 30, 2016			
	Reinsurance	Insurance	Total	
	(\$ in millions)			
Underwriting Revenues				
Gross written premiums	\$365.9	\$397.6	\$763.5	
Net written premiums	314.5	323.9	638.4	
Gross earned premiums	364.3	445.5	809.8	
Net earned premiums	316.3	364.7	681.0	
Underwriting Expenses				
Losses and loss adjustment expenses	178.7	210.5	389.2	
Amortization of deferred policy acquisition costs	53.0	77.9	130.9	
General and administrative expenses	47.4	57.9	105.3	
Underwriting income	\$37.2	\$18.4	55.6	
Corporate expenses			(13.4)	
Non-operating expenses			(6.3)	
Net investment income			46.4	
Realized and unrealized investment gains			26.7	
Realized and unrealized investment losses			(5.2)	
Change in fair value of loan notes issued by variable interest entities			(9.8)	
Change in fair value of derivatives			0.6	
Interest expense on long term debt			(7.3)	
Net realized and unrealized foreign exchange gains			10.8	
Net other income			2.4	
Income before tax			\$100.5	
Net reserves for loss and loss adjustment expenses	\$2,495.4	\$2,331.4	\$4,826.8	
Ratios				
Loss ratio	56.5	% 57.7	% 57.2	%
Policy acquisition expense ratio	16.8	21.4	19.2	
General and administrative expense ratio	15.0	15.9	17.4	(1)
Expense ratio	31.8	37.3	36.6	
Combined ratio	88.3	% 95.0	% 93.8	%

- (1) The general and administrative expense ratio in the total column includes corporate expenses.

13

	Three Months Ended September 30, 2015			
	Reinsurance	Insurance	Total	
	(\$ in millions)			
Underwriting Revenues				
Gross written premiums	\$316.6	\$403.9	\$720.5	
Net written premiums	294.7	357.1	651.8	
Gross earned premiums	304.6	429.0	733.6	
Net earned premiums	284.6	356.0	640.6	
Underwriting Expenses				
Losses and loss adjustment expenses	169.9	195.7	365.6	
Amortization of deferred policy acquisition costs	64.8	67.2	132.0	
General and administrative expenses	34.7	51.3	86.0	
Underwriting income	\$15.2	\$41.8	57.0	
Corporate expenses			(14.5)	
Net investment income			45.0	
Realized and unrealized investment gains			10.7	
Realized and unrealized investment losses			(51.9)	
Change in fair value of loan notes issued by variable interest entities			(8.3)	
Change in fair value of derivatives			10.1	
Interest expense on long term debt			(7.4)	
Net realized and unrealized foreign exchange (losses)			(8.4)	
Net other income			(2.3)	
Other expenses			—	
Income before tax			\$30.0	
Net reserves for loss and loss adjustment expenses	\$2,469.6	\$2,095.6	\$4,565.2	
Ratios				
Loss ratio	59.7	% 55.0	% 57.1	%
Policy acquisition expense ratio	22.8	18.9	20.6	
General and administrative expense ratio	12.2	14.4	15.7	(1)
Expense ratio	35.0	33.3	36.3	
Combined ratio	94.7	% 88.3	% 93.4	%

(1) The general and administrative expense ratio in the total column includes corporate expenses.

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 nine months ended September 30, 2016 and 2015:

	Nine Months Ended September 30, 2016			
	Reinsurance	Insurance	Total	
	(\$ in millions)			
Underwriting Revenues				
Gross written premiums	\$ 1,216.1	\$ 1,324.8	\$ 2,540.9	
Net written premiums	1,070.8	1,092.1	2,162.9	
Gross earned premiums	1,000.9	1,345.8	2,346.7	
Net earned premiums	896.0	1,128.9	2,024.9	
Underwriting Expenses				
Losses and loss adjustment expenses	494.3	694.5	1,188.8	
Amortization of deferred policy acquisition costs	163.1	224.7	387.8	
General and administrative expenses	130.6	173.7	304.3	
Underwriting income	\$ 108.0	\$ 36.0	144.0	
Corporate expenses			(50.6)	
Non-operating expenses			(6.3)	
Net investment income			143.9	
Realized and unrealized investment gains			137.4	
Realized and unrealized investment losses			(34.1)	
Change in fair value of loan notes issued by variable interest entities			(13.7)	
Change in fair value of derivatives			(7.0)	
Interest expense on long term debt			(22.1)	
Net realized and unrealized foreign exchange (losses)			(10.2)	
Other income			2.4	
Other expenses			(0.1)	
Income before tax			\$ 283.6	
Net reserves for loss and loss adjustment expenses	\$ 2,495.4	\$ 2,331.4	\$ 4,826.8	
Ratios				
Loss ratio	55.2	% 61.5	% 58.7	%
Policy acquisition expense ratio	18.2	19.9	19.2	
General and administrative expense ratio	14.6	15.4	17.5	(1)
Expense ratio	32.8	35.3	36.7	
Combined ratio	88.0	% 96.8	% 95.4	%

(1) The general and administrative expense ratio in the total column includes corporate expenses.

	Nine Months Ended September 30, 2015			
	Reinsurance	Insurance	Total	
	(\$ in millions)			
Underwriting Revenues				
Gross written premiums	\$ 1,062.1	\$ 1,300.4	\$ 2,362.5	
Net written premiums	975.0	1,084.4	2,059.4	
Gross earned premiums	857.6	1,267.3	2,124.9	
Net earned premiums	802.3	1,041.3	1,843.6	
Underwriting Expenses				
Losses and loss adjustment expenses	391.7	640.5	1,032.2	
Amortization of deferred policy acquisition costs	168.6	196.8	365.4	
General and administrative expenses	102.5	151.8	254.3	
Underwriting income	\$ 139.5	\$ 52.2	191.7	
Corporate expenses			(43.8)	
Net investment income			139.1	
Realized and unrealized investment gains			81.6	
Realized and unrealized investment losses			(95.2)	
Change in fair value of loan notes issued by variable interest entities			(14.5)	
Change in fair value of derivatives			4.3	
Interest expense on long term debt			(22.1)	
Net realized and unrealized foreign exchange (losses)			(26.4)	
Other income			0.4	
Other expenses			(0.8)	
Income before tax			\$ 214.3	
Net reserves for loss and loss adjustment expenses	\$ 2,469.6	\$ 2,095.6	\$ 4,565.2	
Ratios				
Loss ratio	48.8	% 61.5	% 56.0	%
Policy acquisition expense ratio	21.0	18.9	19.8	
General and administrative expense ratio	12.8	14.6	16.2 (1)	
Expense ratio	33.8	33.5	36.0	
Combined ratio	82.6	% 95.0	% 92.0	%

(1) The general and administrative expense ratio in the total column includes corporate expenses.

The Company uses underwriting ratios as measures of performance. The loss ratio is the ratio of losses and loss adjustment expenses to net premiums earned. The policy acquisition expense ratio is the ratio of amortization of deferred policy acquisition costs to net premiums earned. The general and administrative expense ratio is the ratio of general, administrative and corporate expenses to net premiums earned. 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 and nine months ended September 30, 2016 and 2015:

	For the Three Months Ended		For the Nine Months Ended	
	September 30, 2016	September 30, 2015	September 30, 2016	September 30, 2015
	(\$ in millions)		(\$ in millions)	
Fixed income securities — Available for sale	\$34.8	\$ 36.1	\$107.9	\$ 106.8
Fixed income securities — Trading	7.6	7.2	22.9	21.1
Short-term investments — Available for sale	0.2	0.3	0.5	0.9
Cash and cash equivalents	0.8	0.5	2.2	2.5
Equity securities — Available for sale	—	—	—	0.1
Equity securities — Trading	5.5	4.6	17.9	16.5
Catastrophe bonds — Trading	0.2	0.4	1.3	1.3
Total	\$49.1	\$ 49.1	\$152.7	\$ 149.2
Investment expenses	(2.7)	(4.1)	(8.8)	(10.1)
Net investment income	\$46.4	\$ 45.0	\$143.9	\$ 139.1

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 and nine months ended September 30, 2016 and 2015:

	For the Three Months Ended September 30, 2016		For the Nine Months Ended September 30, 2015	
	September 30, 2016	September 30, 2015	September 30, 2016	September 30, 2015
	(\$ in millions)		(\$ in millions)	
Available for sale:				
Fixed income securities — gross realized gains	\$5.5	\$ 2.4	\$14.7	\$ 9.7
Fixed income securities — gross realized (losses)	(0.9)	(0.3)	(4.6)	(1.4)
Equity securities — gross realized gains	—	—	—	31.9
Equity securities — gross realized (losses)	—	—	—	(3.0)
Short-term investments — gross realized gains	0.1	—	—	—
Short-term investments — gross realized (losses)	(0.2)	—	—	—
Cash and cash equivalents — gross realized gains	—	—	0.1	—
Cash and cash equivalents — gross realized (losses)	—	—	(0.5)	—
Trading:				
Fixed income securities — gross realized gains	4.3	0.5	9.5	3.8
Fixed income securities — gross realized (losses)	(0.5)	(1.2)	(6.9)	(3.8)
Equity securities — gross realized gains	8.1	7.8	23.3	36.2
Equity securities — gross realized (losses)	(4.2)	(12.3)	(22.2)	(25.4)
Catastrophe bonds	0.3	0.7	0.1	(0.1)
Net change in gross unrealized gains	9.0	(38.8)	89.8	(61.5)
Total net realized and unrealized investment gains/(losses) recorded in the statement of operations	\$21.5	\$ (41.2)	\$103.3	\$ (13.6)
Change in available for sale net unrealized gains:				
Fixed income securities	(23.2)	22.7	104.0	(27.4)
Equity securities	—	—	—	(27.4)
Total change in pre-tax available for sale unrealized gains	(23.2)	22.7	104.0	(54.8)
Change in taxes	2.0	0.8	(11.1)	2.1
Total change in net unrealized gains/(losses), net of taxes, recorded in other comprehensive income	\$(21.2)	\$ 23.5	\$92.9	\$(52.7)

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 and equity 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. For a more detailed description of OTTI, please refer to Note 2(c) of the “Notes to the Audited Consolidated Financial Statements” in the Company’s 2015 Annual Report on Form 10-K filed with the SEC. There was no OTTI charge recognized for the three and nine months ended September 30, 2016 (2015 — \$Nil and \$Nil, respectively).

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 September 30, 2016 and December 31, 2015:

As at September 30, 2016

	Cost or Amortized Cost	Gross Unrealized Gains	Gross Unrealized Losses	Fair Market Value
	(\$ in millions)			
U.S. government	\$1,061.9	\$ 24.7	\$ (0.2)	\$ 1,086.4
U.S. agency	124.1	3.2	—	127.3
Municipal	23.1	3.2	(0.1)	26.2
Corporate	2,695.5	97.1	(1.8)	2,790.8
Non-U.S. government-backed corporate	81.2	1.2	—	82.4
Foreign government	566.0	17.2	(0.1)	583.1
Asset-backed	68.1	1.0	—	69.1
Non-agency commercial mortgage-backed	14.9	0.6	—	15.5
Agency mortgage-backed	1,142.4	41.8	(0.3)	1,183.9
Total fixed income securities — Available for sale	5,777.2	190.0	(2.5)	5,964.7
Total short-term investments — Available for sale	69.1	—	—	169.1
Total	\$5,946.3	\$ 190.0	\$ (2.5)	\$ 6,133.8

There were non-cash transfers of securities from available for sale to trading of \$41.7 million during the nine months ended September 30, 2016. The transfers were made following the decision by the North Dakota regulator to reduce the held capital requirement for the recognition of ceded reinsurance recoveries from Aspen Bermuda Limited from 100% to 20%. This decision resulted in a new reduced collateral Regulation 114 trust being established and funded by non-cash transfers of securities from available for sale portfolios.

As at December 31, 2015

	Cost or Amortized Cost	Gross Unrealized Gains	Gross Unrealized Losses	Fair Market Value
	(\$ in millions)			
U.S. government	\$1,113.9	\$ 13.0	\$ (3.8)	\$ 1,123.1
U.S. agency	154.5	4.3	(0.1)	158.7
Municipal	25.0	1.6	—	26.6
Corporate	2,626.2	49.5	(15.1)	2,660.6
Non-U.S. government-backed corporate	81.6	0.6	(0.1)	82.1
Foreign government	634.6	10.5	(0.9)	644.2
Asset-backed	75.4	0.9	(0.3)	76.0
Non-agency commercial mortgage-backed	25.5	1.2	—	26.7
Agency mortgage-backed	1,130.8	27.6	(5.3)	1,153.1
Total fixed income securities — Available for sale	5,867.5	109.2	(25.6)	5,951.1
Total short-term investments — Available for sale	62.9	—	—	162.9
Total	\$6,030.4	\$ 109.2	\$ (25.6)	\$ 6,114.0

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 September 30, 2016 and December 31, 2015:

	As at September 30, 2016			
	Cost or Amortized Cost	Gross Unrealized Gains	Gross Unrealized Losses	Fair Market Value
	(\$ in millions)			
U.S. government	\$43.5	\$ 0.9	\$ —	\$ 44.4
Municipal	4.7	0.2	—	4.9
Corporate	655.0	22.3	(0.3)	677.0
Foreign government	200.8	12.6	(0.3)	213.1
Asset-backed	15.5	0.1	(0.1)	15.5
Agency mortgage-backed	41.1	0.9	—	42.0
Total fixed income securities — Trading	960.6	37.0	(0.7)	996.9
Total short-term investments — Trading	169.6	—	—	169.6
Total equity securities — Trading	737.1	91.6	(31.0)	797.7
Total catastrophe bonds — Trading	17.5	0.3	—	17.8
Total	\$1,884.8	\$ 128.9	\$ (31.7)	\$ 1,982.0

	As at December 31, 2015			
	Cost or Amortized Cost	Gross Unrealized Gains	Gross Unrealized Losses	Fair Market Value
	(\$ in millions)			
U.S. government	\$27.4	\$ —	\$ (0.1)	\$ 27.3
Municipal	0.5	—	—	0.5
Corporate	561.9	5.9	(9.6)	558.2
Foreign government	181.5	1.7	(3.7)	179.5
Asset-backed	20.7	—	(0.2)	20.5
Bank loans	2.2	—	(0.2)	2.0
Total fixed income securities — Trading	794.2	7.6	(13.8)	788.0
Total short-term investments — Trading	9.5	—	—	9.5
Total equity securities — Trading	722.5	57.3	(43.4)	736.4
Total catastrophe bonds — Trading	55.2	0.3	(0.1)	55.4
Total	\$1,581.4	\$ 65.2	\$ (57.3)	\$ 1,589.3

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 \$17.8 million as at September 30, 2016. The bonds receive quarterly interest payments based on variable interest rates with scheduled maturities ranging from 2016 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.

On October 2, 2012, the Company established a subsidiary, Aspen Recoveries Limited, to take ownership of a 58.5% shareholding in Chaspark Maritime Holdings Ltd., a Singaporean registered company (“Chaspark”), with the remaining shareholding owned by other insurers. The shareholding in Chaspark was received as a settlement for subrogation rights associated with a contract frustration claim settlement. The Company has determined that Chaspark has the characteristics of a variable interest entity as addressed by the guidance in ASC 810-10, Consolidation. However, having considered the provisions of ASC 810-10, the Company’s investment in Chaspark does not permit the Company to direct the activities which most significantly impact Chaspark’s economic performance and the Company is not acting as principal or agent for a related party group of investors. Under these circumstances, the Company is not required to consolidate Chaspark. The investment is therefore 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, which is provided in the quarterly management accounts. The adjusted carrying value of Chaspark approximates fair value.

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.

The tables below show the Company’s investments in the MVI, Chaspark and Bene for the three and nine months ended September 30, 2016 and September 30, 2015:

	For the Three Months Ended September 30, 2016			
	MVI	Chaspark	Bene	Total
	(\$ in millions)			
Opening undistributed value of investment	\$0.6	\$ 8.1	—	\$8.7
Initial investment	—	—	3.3	3.3
Unrealized gain for the three months to September 30, 2016	—	1.0	—	1.0
Closing undistributed value of investment	\$0.6	\$ 9.1	\$ 3.3	\$13.0

	For the Nine Months Ended September 30, 2016			
	MVI	Chaspark	Bene	Total
	(\$ in millions)			
Opening undistributed value of investment	\$0.8	\$ 8.1	—	\$8.9
Initial investment	—	—	3.3	3.3
Unrealized gain/(loss) for the nine months to September 30, 2016	(0.2)	1.0	—	0.8
Closing undistributed value of investment	\$0.6	\$ 9.1	\$ 3.3	\$13.0

	For the Three Months Ended September 30, 2015		
	MVI	Chaspark	Total
	(\$ in millions)		
Opening and closing undistributed value of investment	\$0.8	\$ 8.7	\$ 9.5

	For the Nine Months Ended September 30, 2015		
	MVI	Chaspark	Total
	(\$ in millions)		
Opening undistributed value of investment	\$—	\$ 8.7	\$ 8.7

Initial investment	0.8	—	\$0.8
Closing value of investment	\$0.8	\$ 8.7	\$9.5

Fixed Income Securities. The scheduled maturity distribution of available for sale fixed income securities as at September 30, 2016 and December 31, 2015 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 September 30, 2016		
	Amortized Cost or Carrying	Fair Market Value	Average S&P Ratings by Maturity
	(\$ in millions)		
Due one year or less	\$528.7	\$ 531.8	AA
Due after one year through five years	2,743.4	2,816.0	AA-
Due after five years through ten years	1,174.8	1,228.5	A+
Due after ten years	104.9	119.9	A+
Subtotal	4,551.8	4,696.2	
Non-agency commercial mortgage-backed	14.9	15.5	AA+
Agency mortgage-backed	1,142.4	1,183.9	AA+
Asset-backed	68.1	69.1	AAA
Total fixed income securities — Available for sale	\$5,777.2	\$ 5,964.7	

	As at December 31, 2015		
	Amortized Cost or Carrying	Fair Market Value	Average S&P Ratings by Maturity
	(\$ in millions)		
Due one year or less	\$661.8	\$ 664.4	AA
Due after one year through five years	2,765.2	2,806.6	AA-
Due after five years through ten years	1,122.5	1,132.0	A+
Due after ten years	86.3	92.3	A+
Subtotal	4,635.8	4,695.3	
Non-agency commercial mortgage-backed	25.5	26.7	AA+
Agency mortgage-backed	1,130.8	1,153.1	AA+
Asset-backed	75.4	76.0	AAA
Total fixed income securities — Available for sale	\$5,867.5	\$ 5,951.1	

Guaranteed Investments. As at September 30, 2016, the Company's holding of guaranteed investments was limited to one municipal security, rated CC or higher (December 31, 2015 — one municipal security, rated CC or higher). The standalone rating (rating without guarantee) is determined as the senior unsecured debt rating of the issuer. Where the credit ratings were split between the two main rating agencies, Standard & Poor's Financial Services LLC ("S&P") and Moody's Investors Service, Inc. ("Moody's"), the lowest rating was used. 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 as at September 30, 2016 and December 31, 2015 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 September 30, 2016							
	0-12 months		Over 12 months		Total		Number of Securities	
	Fair Market Value	Gross Unrealized Loss	Fair Market Value	Gross Unrealized Loss	Fair Market Value	Gross Unrealized Loss		
(\$ in millions)								
U.S. government	\$137.5	\$ (0.2)	\$—	\$ —	\$137.5	\$ (0.2)	17	
U.S. agency	—	—	—	—	—	—	0	
Municipal	0.8	(0.1)	—	—	0.8	(0.1)	3	
Corporate	240.3	(1.2)	25.9	(0.6)	266.2	(1.8)	87	
Non-U.S. government-backed corporate	0.4	—	—	—	0.4	—	1	
Foreign government	73.2	(0.1)	33.0	—	106.2	(0.1)	12	
Asset-backed	—	—	2.2	—	2.2	—	5	
Agency mortgage-backed	27.9	—	32.1	(0.3)	60.0	(0.3)	25	
Total fixed income securities — Available for sale	480.1	(1.6)	93.2	(0.9)	573.3	(2.5)	150	
Total short-term investments — Available for sale	8.9	—	—	—	8.9	—	5	
Total	\$489.0	\$ (1.6)	\$93.2	\$ (0.9)	\$582.2	\$ (2.5)	155	

	As at December 31, 2015							
	0-12 months		Over 12 months		Total		Number of Securities	
	Fair Market Value	Gross Unrealized Loss	Fair Market Value	Gross Unrealized Loss	Fair Market Value	Gross Unrealized Loss		
(\$ in millions)								
U.S. government	\$583.2	\$ (3.7)	\$4.6	\$ (0.1)	\$587.8	\$ (3.8)	72	
U.S. agency	17.6	(0.1)	—	—	17.6	(0.1)	12	
Municipal	1.7	—	—	—	1.7	—	3	
Corporate	1,179.7	(13.3)	81.1	(1.8)	1,260.8	(15.1)	510	
Non-U.S. government-backed corporate	40.9	(0.1)	—	—	40.9	(0.1)	9	
Foreign government	174.6	(0.8)	2.8	(0.1)	177.4	(0.9)	43	
Asset-backed	51.4	(0.3)	4.2	—	55.6	(0.3)	39	
Agency mortgage-backed	348.1	(3.6)	72.2	(1.7)	420.3	(5.3)	105	
Total fixed income securities — Available for sale	2,397.2	(21.9)	164.9	(3.7)	2,562.1	(25.6)	793	
Total short-term investments — Available for sale	56.7	—	—	—	56.7	—	12	
Total	\$2,453.9	\$ (21.9)	\$164.9	\$ (3.7)	\$2,618.8	\$ (25.6)	805	

7. Variable Interest Entities

As at September 30, 2016, the Company had investments in two variable interest entities (“VIE”), Chaspark and Silverton.

Chaspark. The Company has determined that Chaspark has the characteristics of a VIE as addressed by the guidance in ASC 810, Consolidation. As discussed in Note 6 of these unaudited condensed consolidated financial statements, the investment in Chaspark is accounted for under the equity method. In the three and nine months ended September 30, 2016,

there was \$1.0 million and \$1.0 million unrealized gain, respectively, in the value of the Company's investment in Chaspark (September 30, 2015 — \$Nil and \$Nil). The adjusted carrying value approximates fair value. For more information on Chaspark, refer to Note 6 of these unaudited condensed consolidated financial statements.

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 nine months ended September 30, 2016 and 2015:

	For the Nine Months Ended September 30, 2016		
	Third Party	Aspen Holdings	Total
	(\$ in millions)		
Opening balance	\$190.6	\$ 44.4	\$235.0
Total change in fair value for the period	13.7	3.4	17.1
Total distributed in the period	(89.3)	(19.4)	(108.7)
Closing balance as at September 30, 2016	\$115.0	\$ 28.4	\$143.4

Liability

Loan notes (long-term liabilities)	\$112.7	\$ 27.9	\$140.6
Accrued expenses (current liabilities)	2.3	0.5	2.8
Total aggregate unpaid balance as at September 30, 2016	\$115.0	\$ 28.4	\$143.4

	For the Nine Months Ended September 30, 2015		
	Third Party	Aspen Holdings	Total
	(\$ in millions)		
Opening balance	\$138.6	\$ 35.6	\$174.2
Total change in fair value for the period	14.5	3.4	17.9
Total distributed in the period	(67.8)	(20.3)	(88.1)
Closing balance as at September 30, 2015	\$85.3	\$ 18.7	\$104.0

Liability

Loan notes (long-term liabilities)	\$84.5	\$ 18.5	\$103.0
Accrued expenses (current liabilities)	0.8	0.2	1.0
Total aggregate unpaid balance as at September 30, 2015	\$85.3	\$ 18.7	\$104.0

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:

24

- Silverton has collateralized the aggregate limit provided to Aspen Bermuda and Aspen U.K. by way of a trust in
- i. 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 September 30, 2016 and December 31, 2015, respectively:

	As at September 30, 2016			Total
	Level 1	Level 2	Level 3	
	(\$ in millions)			
Available for sale financial assets, at fair value				
U.S. government	\$1,086.4	\$—	\$—	\$1,086.4
U.S. agency	—	127.3	—	127.3
Municipal	—	26.2	—	26.2
Corporate	—	2,790.8	—	2,790.8
Non-U.S. government-backed corporate	—	82.4	—	82.4
Foreign government	404.1	179.0	—	583.1
Asset-backed	—	69.1	—	69.1
Non-agency commercial mortgage-backed	—	15.5	—	15.5
Agency mortgage-backed	—	1,183.9	—	1,183.9
Total fixed income securities available for sale, at fair value	1,490.5	4,474.2	—	5,964.7
Short-term investments available for sale, at fair value	141.7	27.4	—	169.1
Held for trading financial assets, at fair value				
U.S. government	44.4	—	—	44.4
Municipal	—	4.9	—	4.9
Corporate	—	677.0	—	677.0
Foreign government	93.9	119.2	—	213.1
Asset-backed	—	15.5	—	15.5
Agency mortgage-backed	—	42.0	—	42.0
Total fixed income securities trading, at fair value	138.3	858.6	—	996.9
Short-term investments trading, at fair value	169.6	—	—	169.6
Equity investments trading, at fair value	797.7	—	—	797.7
Catastrophe bonds trading, at fair value	—	17.8	—	17.8
Other financial assets and liabilities, at fair value				
Derivatives at fair value — foreign exchange contracts	—	6.3	—	6.3
Liabilities under derivative contracts — interest rate swaps	—	—	—	—
Liabilities under derivative contracts — foreign exchange contracts	—	(6.5)	—	(6.5)
Loan notes issued by variable interest entities, at fair value	—	—	(112.7)	(112.7)
Loan notes issued by variable interest entities, at fair value (included within accrued expenses and other payables)	—	—	(2.3)	(2.3)
Total	\$2,737.8	\$5,377.8	\$(115.0)	\$8,000.6

There were no maturities or transfers between Level 1, Level 2 and Level 3 during the three and nine months ended September 30, 2016. The Company settled \$0.3 million and \$89.3 million of Level 3 liabilities in respect of the Loan Notes issued by Silverton for the three and nine months respectively, ended September 30, 2016. As at September 30, 2016, 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, 2015			Total
	Level 1	Level 2	Level 3	
	(\$ in millions)			
Available for sale financial assets, at fair value				
U.S. government	\$1,123.1	\$—	\$—	\$1,123.1
U.S. agency	—	158.7	—	158.7
Municipal	—	26.6	—	26.6
Corporate	—	2,660.6	—	2,660.6
Non-U.S. government-backed corporate	—	82.1	—	82.1
Foreign government	449.5	194.7	—	644.2
Asset-backed	—	76.0	—	76.0
Non-agency commercial mortgage-backed	—	26.7	—	26.7
Agency mortgage-backed	—	1,153.1	—	1,153.1
Total fixed income securities available for sale, at fair value	1,572.6	4,378.5	—	5,951.1
Short-term investments available for sale, at fair value	130.5	32.4	—	162.9
Held for trading financial assets, at fair value				
U.S. government	27.3	—	—	27.3
Municipal	—	0.5	—	0.5
Corporate	—	558.2	—	558.2
Foreign government	73.8	105.7	—	179.5
Asset-backed	—	20.5	—	20.5
Bank loans	—	2.0	—	2.0
Total fixed income securities trading, at fair value	101.1	686.9	—	788.0
Short-term investments trading, at fair value	7.4	2.1	—	9.5
Equity investments trading, at fair value	736.4	—	—	736.4
Catastrophe bonds trading, at fair value	—	55.4	—	55.4
Other financial assets and liabilities, at fair value				
Derivatives at fair value – foreign exchange contracts	—	8.8	—	8.8
Derivatives at fair value – interest rate swaps	—	0.4	—	0.4
Liabilities under derivative contracts – foreign exchange contracts	—	(4.0)	—	(4.0)
Loan notes issued by variable interest entities, at fair value	—	—	(103.0)	(103.0)
Loan notes issued by variable interest entities, at fair value (included within accrued expenses and other payables)	—	—	(87.6)	(87.6)
Total	\$2,548.0	\$5,160.5	\$(190.6)	\$7,517.9

There were no maturities, settlements or transfers between Level 1, Level 2 and Level 3 during the twelve months ended December 31, 2015. The Company settled \$67.8 million of Level 3 liabilities in respect of the Loan Notes issued by Silverton for the twelve months ended December 31, 2015. As at December 31, 2015, there were no assets classified as Level 3 and the Company's Level 3 liabilities consisted solely of the Loan Notes issued by Silverton.

The following tables present 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 and nine months ended September 30, 2016 and 2015:

Reconciliation of Liabilities Using Level 3 Inputs	Three Months Ended September 30, 2016	Three Months Ended September 30, 2015
	(\$ in millions)	
Balance at the beginning of the period ⁽¹⁾	\$105.5	\$ 77.8
Distributed to third party	(0.3)	(0.8)
Total change in fair value included in the statement of operations	9.8	8.3
Balance at the end of the period ⁽¹⁾	\$115.0	\$ 85.3
Reconciliation of Liabilities Using Level 3 Inputs	Nine Months Ended September 30, 2016	Nine Months Ended September 30, 2015
	(\$ in millions)	
Balance at the beginning of the period ⁽¹⁾	\$190.6	\$ 138.6
Distributed to third party	(89.3)	(67.8)
Total change in fair value included in the statement of operations	13.7	14.5
Balance at the end of the period ⁽¹⁾	\$115.0	\$ 85.3

⁽¹⁾ The amount classified within accrued expenses and other payables was \$2.3 million and \$87.6 million as at September 30, 2016 and December 31, 2015, 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 September 30, 2016 and December 31, 2015, 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. Quotes from broker-dealers are non-binding.

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 September 30, 2016, the Company obtained an average of 2.3 quotes per fixed income investment, consistent with 2.0 quotes as at December 31, 2015. Pricing sources used in pricing fixed income investments as at September 30, 2016 and December 31, 2015 were as follows:

	As at September 30, 2016	%	As at December 31, 2015	%
Index providers	86	%	85	%
Pricing services	8		10	
Broker-dealers	6		5	
Total	100	%	100	%

A summary of securities priced using pricing information from index providers as at September 30, 2016 and December 31, 2015 is provided below:

	As at September 30, 2016			As at December 31, 2015		
	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	\$1,130.8	100.0	%	\$1,095.4	95.0	%
U.S. agency	117.7	92.5	%	148.5	94.0	%
Municipal	20.4	65.6	%	10.5	39.0	%
Corporate	3,327.7	96.0	%	3,083.5	96.0	%
Non-U.S. government-backed corporate	38.5	46.8	%	41.7	51.0	%
Foreign government	511.9	66.0	%	517.6	63.0	%
Asset-backed	35.2	41.5	%	55.3	57.0	%
Non-agency commercial mortgage-backed	13.7	88.4	%	22.7	85.0	%
Agency mortgage-backed	763.6	62.3	%	742.9	64.0	%
Total fixed income securities	\$5,959.5	85.9	%	\$5,718.1	85.0	%
Equities	796.2	99.8	%	736.4	100.0	%
Total fixed income securities and equity investments	\$6,755.7	87.0	%	\$6,454.5	86.0	%

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 provider 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 market or information available from 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, Foreign 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 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 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.

Bank Loans. These are variable rate, senior secured debt instruments issued by non-investment grade companies that are not publicly registered but are the most senior debt in a capital structure and are generally secured by company assets. Although these assets are not as liquid a market as traditional fixed income instruments, they are valued in similar fashion to other fixed maturities, using similar inputs such as yield curves, interest rates and credit spreads. These securities are primarily priced by a third-party pricing vendor. Bank loans are therefore classified within Level 2.

30

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 maturity investments and are classified within Levels 1 and 2.

Equity Securities. Equity securities include U.S. and foreign common stocks and are classified either as trading or available for sale and carried at fair value. These securities are classified within Level 1 as their fair values are based on quoted market prices in active markets from independent pricing sources. As at September 30, 2016, the Company obtained an average of 3.9 quotes per equity investment, compared to 4.0 quotes as at December 31, 2015. Pricing sources used in pricing equities as at September 30, 2016 and December 31, 2015 were all provided by index providers.

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.

Interest Rate Swaps. The interest rate swaps which the Company previously used to mitigate interest rate risk are also characterized as OTC and are valued by the counterparty using quantitative models with multiple market inputs. The market inputs, such as interest rates and yield curves, are observable and the valuation can be compared for reasonableness with third-party pricing services. Consequently, these instruments are classified as Level 2.

Loan Notes Issued by Variable Interest Entities. Silverton, a licensed special purpose insurer, is consolidated into the Company's group accounts as a VIE. In the fourth quarter of 2013, Silverton issued \$65.0 million (\$50.0 million third-party funded) of Loan Notes with a maturity date of September 16, 2016. 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. 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 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 initial assumptions of premiums and claims are then reviewed quarterly and updated based on actual premiums written and the latest estimate of claims experience. 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 September 30, 2016 and December 31, 2015 are presented in the tables below:

As at September 30, 2016	Fair Value Level 3 (\$ in millions)	Valuation Method	Observable (O) and Unobservable (U) inputs	Low	High
				(\$ in millions)	

Edgar Filing: ASPEN INSURANCE HOLDINGS LTD - Form 10-Q

Loan Notes	\$115.0 ⁽¹⁾ Internal Valuation Model	Gross premiums written (O)	\$43.4	\$57.2
		Reserve for losses (U)	\$2.8	\$8.2
		Contract period (O)	N/A	365 days
		Initial value of issuance (O)	\$220.0	\$220.0

31

As at December 31, 2015	Fair Value Level 3 (\$ in millions)	Valuation Method	Observable (O) and Unobservable (U) inputs	Low	High
Loan Notes	\$ 190.6 ⁽¹⁾	Internal Valuation Model	Gross premiums written (O) Reserve for losses (U) Contract period (O) Initial value of issuance (O)	\$— \$— N/A \$ 220.0	\$ 38.9 \$ 4.2 365 days \$ 220.0

⁽¹⁾ The amount classified within accrued expenses and other payables was \$2.3 million and \$87.6 million as at September 30, 2016 and December 31, 2015, 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.

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 largest concentrations of reinsurance recoverables as at September 30, 2016 were 19.1% (December 31, 2015 — 20.4%) with Munich Re which is rated AA- by S&P, 18.1% (December 31, 2015 — 20.0%) with Lloyd's syndicates which are rated A+ by S&P and 7.8% (December 31, 2015 — 9.2%) with Arch Re which is rated A+ by S&P.

10. Derivative Contracts

The following tables summarize information on the location and amounts of derivative fair values on the consolidated balance sheet as at September 30, 2016 and December 31, 2015:

Derivatives Not Designated as Hedging Instruments Under ASC 815	Balance Sheet Location	As at September 30, 2016		As at December 31, 2015	
		Notional Amount	Fair Value	Notional Amount	Fair Value
Interest Rate Swaps	Derivatives at Fair Value	\$—	\$—	\$756.3	\$0.4 ⁽¹⁾
Foreign Exchange Contracts	Derivatives at Fair Value	\$309.1	\$5.9	\$217.7	\$8.8
Foreign Exchange Contracts	Liabilities under Derivative Contracts	\$286.5	\$(6.5)	\$162.2	\$(2.8)

Net of \$10.1 million of cash collateral provided to the counterparty, Goldman Sachs International (\$256.3 million ⁽¹⁾ notional) under an International Swap Dealers Association agreement, which was terminated on May 9, 2016, as security for the Company's net liability position.

Balance Sheet Location	As at September 30, 2016		As at December 31, 2015	
	Notional	Fair	Notional	Fair

Edgar Filing: ASPEN INSURANCE HOLDINGS LTD - Form 10-Q

Derivatives Designated as Hedging Instruments Under ASC 815		Amount	Value	Amount	Value
		(\$ in millions)		(\$ in millions)	
Foreign Exchange Contracts	Liabilities under Derivative Contracts	\$—	\$—	\$113.6	\$(1.2) ⁽¹⁾
Foreign Exchange Contracts	Derivatives at Fair Value	\$28.6	\$0.4 ⁽¹⁾	\$—	\$—

⁽¹⁾ Net of \$3.5 million cash collateral (December 31, 2015 — \$Nil).

The following tables provide the unrealized and realized gains/(losses) recorded in the statement of operations for the three and nine months ended September 30, 2016 and 2015:

Derivatives Not Designated as Hedging Instruments Under ASC 815	Location of Income/(Loss) Recognized in the Statement of Operations and Other Comprehensive Income	Amount of Income/(Loss) Recognized in the Statement of Operations and Other Comprehensive Income for the Three Months Ended	
		September 30, 2016	September 30, 2015
		(\$ in millions)	
Foreign Exchange Contracts	Change in Fair Value of Derivatives	\$ 0.6	\$ 12.9
Interest Rate Swaps	Change in Fair Value of Derivatives	\$ —	\$ (2.8)

Derivatives Not Designated as Hedging Instruments Under ASC 815	Location of Income/(Loss) Recognized in the Statement of Operations and Other Comprehensive Income	Amount of Income/(Loss) Recognized in the Statement of Operations and Other Comprehensive Income for the Nine Months Ended	
		September 30, 2016	September 30, 2015
		(\$ in millions)	
Foreign Exchange Contracts	Change in Fair Value of Derivatives	\$ (3.7)	\$ 10.5
Interest Rate Swaps	Change in Fair Value of Derivatives	\$ (3.3)	\$ (6.2)

Derivatives Designated as Hedging Instruments Under ASC 815	Location of Income/(Loss) Recognized in the Statement of Operations and Other Comprehensive Income	Amount of Income/(Loss) Recognized in the Statement of Operations and Other Comprehensive Income for the Three Months Ended	
		September 30, 2016	September 30, 2015
		(\$ in millions)	
Foreign Exchange Contracts	General, administrative and corporate expenses	\$ (3.1)	\$ (0.8)
Foreign Exchange Contracts	Net change from current period hedged transactions	\$ 3.1	\$ (0.2)

Derivatives Designated as Hedging Instruments Under ASC 815	Location of Income/(Loss) Recognized in the Statement of Operations and Other Comprehensive Income	Amount of Income/(Loss) Recognized in the Statement of Operations and Other Comprehensive Income for the Nine Months Ended	
		September 30, 2016	September 30, 2015
		(\$ in millions)	

		(\$ in millions)	
Foreign Exchange Contracts	General, administrative and corporate expenses	\$ (5.6)	\$ (3.5)
Foreign Exchange Contracts	Net change from current period hedged transactions	\$ (1.9)	\$ 2.5

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 September 30, 2016, the Company held foreign exchange contracts that were not designated as hedging under ASC 815 with an aggregate notional value of \$595.6 million (December 31, 2015 — \$379.9 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 and nine months ended September 30, 2016, the impact of foreign exchange contracts on net income was a gain of \$0.6 million (September 30, 2015 — gain of \$12.9 million) and a loss of \$3.7 million (September 30, 2015 — gain of \$10.5 million), respectively.

The Company previously held foreign exchange contracts that were designated as hedging under ASC 815. The foreign exchange contracts were 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. On July 1, 2016 the Company removed the designation of the hedge and crystallized in other comprehensive income the foreign exchange loss recognized as at June 30, 2016. As the foreign exchange contracts settle, this unrealized loss is reclassified from other comprehensive income into general, administrative and corporate expenses of the statement of operations and other comprehensive income.

For the three months ended September 30, 2016, the amount recognized within general, administrative and corporate expenses for settled foreign exchange contracts was a realized loss of \$3.1 million (September 30, 2015 — loss of \$0.8 million) For the nine months ended September 30, 2016, the amount recognized within general, administrative and corporate expenses for settled foreign exchange contracts was a realized loss of \$5.6 million (September 30, 2015 — loss of \$3.5 million).

As at September 30, 2016, the aggregate notional value of the contracts was \$28.6 million (December 31, 2015 — \$113.6 million). For the three months ended September 30, 2016, the movement in other comprehensive income representing the effective portion was a net unrealized gain of \$3.1 million (September 30, 2015 — loss of \$0.2 million). For the nine months ended September 30, 2016, the movement in other comprehensive income representing the effective portion was a net unrealized loss of \$1.9 million (September 30, 2015 — gain of \$2.5 million).

Interest Rate Swaps. In 2014, the Company decided to let its interest rate program roll-off and not renew maturing positions. This decision was made after an extensive reassessment of the costs of maintaining an interest rate swap program in a steep yield curve environment. In addition, the continued uncertainty in the global economy, weak oil prices and low inflation make it difficult to gauge the timing and speed of interest rate rises by the Federal Reserve. On May 9, 2016, the Company terminated all remaining outstanding interest rate swaps (notional value of \$256.3 million) under its International Swap Dealers Association agreement.

As at September 30, 2016, the total notional amount of the swaps was \$Nil (December 31, 2015 — \$756.3 million). For the three months ended September 30, 2016, there was no charge in respect of the interest rate swaps (September 30, 2015 — charge of \$2.8 million) and for the nine months ended September 30, 2016 a charge of \$3.3 million (September 30, 2015 — charge of \$6.2 million).

As at September 30, 2016, no cash collateral was held by the Company's counterparty (December 31, 2015 — \$10.1 million). As at September 30, 2016, no non-cash collateral was transferred to the Company by its counterparty (December 31, 2015 — \$Nil). Transfers of cash collateral are recorded on the consolidated balance sheet within Derivatives at Fair Value, while transfers in respect of non-cash collateral are disclosed but not recorded. As at September 30, 2016, no amount was recorded in the consolidated balance sheet for the pledged assets.

11. Deferred Policy Acquisition Costs

The following table represents a reconciliation of beginning and ending deferred policy acquisition costs for the three and nine months ended September 30, 2016 and 2015:

	Three Months Ended September 30, 2016		Nine Months Ended September 30, 2015	
	2016	2015	2016	2015
	(\$ in millions)		(\$ in millions)	
Balance at the beginning of the period	\$409.1	\$349.0	\$361.1	\$299.0
Acquisition costs deferred	110.0	129.8	414.9	413.2
Amortization of deferred policy acquisition costs	(130.9)	(132.0)	(387.8)	(365.4)
Balance at the end of the period	\$388.2	\$346.8	\$388.2	\$346.8

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 nine months ended September 30, 2016 and 2015 and the twelve months ended December 31, 2015:

	Nine Months Ended September 30, 2016	Nine Months Ended September 30, 2015	Twelve Months Ended December 31, 2015
	(\$ in millions)		
Provision for losses and LAE at the start of the year	\$4,938.2	\$4,750.8	\$4,750.8
Less reinsurance recoverable	(354.8)	(350.0)	(350.0)
Net loss and LAE at the start of the year	4,583.4	4,400.8	4,400.8
Net loss and LAE expenses assumed	5.7	—	—
Provision for losses and LAE for claims incurred:			
Current year	1,267.0	1,129.8	1,522.7
Prior years	(78.2)	(97.6)	(156.5)
Total incurred	1,188.8	1,032.2	1,366.2
Losses and LAE payments for claims incurred:			
Current year	(62.1)	(93.4)	(141.9)
Prior years	(853.1)	(718.7)	(966.6)
Total paid	(915.2)	(812.1)	(1,108.5)
Foreign exchange (gains)	(35.9)	(55.7)	(75.1)
Net losses and LAE reserves at period end	4,826.8	4,565.2	4,583.4
Plus reinsurance recoverable on unpaid losses at period end	419.8	348.7	354.8
Provision for losses and LAE at the end of the relevant period	\$5,246.6	\$4,913.9	\$4,938.2

For the nine months ended September 30, 2016, there was a reduction of \$78.2 million in the Company’s estimate of the ultimate claims to be paid in respect of prior accident years compared to a reduction of \$97.6 million for the nine months ended September 30, 2015. The Company assumed \$5.7 million of additional loss reserves as a result of its recent acquisition of AgriLogic. 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.

13. Capital Structure

The following table provides a summary of the Company's authorized and issued share capital as at September 30, 2016 and December 31, 2015:

	As at September 30, 2016		As at December 31, 2015	
	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	60,210,770	91	60,918,373	92
Issued 7.401% preference shares of 0.15144558¢ each with a liquidation preference of \$25 per share	5,327,500	8	5,327,500	8
Issued 7.250% preference shares of 0.15144558¢ each with a liquidation preference of \$25 per share	6,400,000	10	6,400,000	10
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	—	—
Total issued share capital		141		127

Additional paid-in capital as at September 30, 2016 was \$1,280.2 million (December 31, 2015 — \$1,075.3 million). Additional paid-in capital includes the aggregate liquidation preferences of the Company's preference shares of \$818.2 million (December 31, 2015 — \$568.2 million) less issue costs of \$21.1 million (December 31, 2015 — \$12.4 million). Ordinary Shares. The following table summarizes transactions in the Company's ordinary shares during the nine months ended September 30, 2016:

	Number of Ordinary Shares
Ordinary shares in issue as at December 31, 2015	60,918,373
Ordinary share transactions in the nine months ended September 30, 2016	
Ordinary shares issued to employees under the 2013 share incentive plan and/or 2008 share purchase plan	405,290
Ordinary shares issued to non-employee directors	9,435
Ordinary shares repurchased	(1,122,328)
Ordinary shares in issue as at September 30, 2016	60,210,770

Ordinary Share Repurchases. On February 5, 2015, the Company and the Board of Directors agreed a new share repurchase authorization program of \$500.0 million. The total share repurchase authorization, which was effective immediately through February 6, 2017, permits the Company to effect the repurchases from time to time through a combination of transactions, including open market repurchases, privately negotiated transactions and accelerated share repurchase transactions.

Under open market repurchases and pursuant to a 10b5-1 plan, the Company acquired and cancelled for the three and nine months ended September 30, 2016 144,289 and 1,122,328 ordinary shares, respectively. The total consideration paid for the three and nine months ended September 30, 2016 was \$6.5 million and \$50.0 million, respectively, with an average price per ordinary share for the three and nine months ended September 30, 2016 of \$45.17 and \$44.55, respectively. Under open market repurchases, the Company acquired and cancelled \$Nil and 1,790,333 ordinary shares, respectively, for the three and nine months ended September 30, 2015. The total consideration paid for the

three and nine months ended September 30, 2015 was \$Nil and \$83.7 million, respectively, and the average price per ordinary share was \$Nil and \$46.74, respectively.

Preference Share Issuance. On September 20, 2016, the Company issued 10,000,000 shares of 5.625% Perpetual Non-Cumulative Preference Shares (the “5.625% Preference Shares”). The 5.625% Preference Shares have a liquidation preference of \$25 per share. Net proceeds were \$241.3 million, comprising \$250.0 million of total liquidation preference less \$8.7 million

of issuance expenses. The Company intends to use the net proceeds from the offering to redeem, in whole or in part, the Company's outstanding 7.401% Perpetual Non-Cumulative Preference Shares and 7.250% Perpetual Non-Cumulative Preference Shares on January 1, 2017 and July 1, 2017, respectively. The 5.625% Preference Shares rank equally with preference shares previously issued by the Company and have no fixed maturity date. The Company may redeem all or a portion of the 5.625% Preference Shares at a redemption price of \$25 per share on or after January 1, 2027. The 5.625% Preference Shares are listed on the NYSE under the symbol "AHLPRD".

14. Share-Based Payments

The Company has issued options and other equity incentives under three arrangements: employee incentive plans, a non-employee director plan and employee share purchase plans. When options are exercised or other equity awards have vested, new ordinary shares are issued as the Company does not currently hold treasury shares.

Employee and Non-Employee Director Awards. Employee options and other stock awards were granted under the Aspen 2003 Share Incentive Plan, as amended (the "2003 Share Incentive Plan"), prior to April 24, 2013 and thereafter under the 2013 Share Incentive Plan (the "2013 Share Incentive Plan"). The total number of ordinary shares that may be issued under the 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. The non-employee director awards were granted under the 2006 Stock Option Plan for Non-Employee Directors prior to April 21, 2016 and thereafter under the 2016 Stock Option Plan for Non-Employee Directors (the "2016 Non-Employee Director Plan"). The total number of ordinary shares that may be issued under the 2016 Non-Employee Director Plan is 263,695.

Employee stock options are granted with an exercise price equivalent to the fair value of the ordinary share on the grant date. The weighted average value at grant date is determined using the Black-Scholes option pricing model. Stock options typically vest over a three-year period with a ten-year exercise period with vesting dependent on time and performance conditions established at the time of grant. No stock options were granted during the three and nine months ended September 30, 2016 (2015 — Nil and Nil) and Nil and 29,222 options, respectively, were exercised and ordinary shares issued in the three and nine months ended September 30, 2016 (2015 — 2,000 and 85,938 stock options). No charges against income were made in respect of stock options for the three and nine months ended September 30, 2016 (2015 — \$Nil and \$Nil).

Restricted share units ("RSUs") granted to employees typically vest over a three-year period based on continued service. Some of the RSUs vest at year-end, while others vest on the anniversary of the date of grant or when the Compensation Committee of the Board of Directors agrees to deliver the RSUs. The fair value of the RSUs is based on the closing price on the date of the grant, adjusted for illiquidity, and is expensed through the income statement evenly over the vesting period. In the three and nine months ended September 30, 2016, the Company granted to its employees 35,852 and 328,551 RSUs, respectively (2015 — 11,614 and 253,766). Compensation costs charged against income in respect of employee RSUs for the three and nine months ended September 30, 2016 were \$2.6 million and \$7.2 million, respectively (2015 — \$2.1 million and \$6.8 million).

In the case of non-employee directors, generally one-twelfth of the RSUs vest on each one month anniversary of the date of grant, with 100% of the RSUs vesting on the first anniversary of the date of grant. On February 4, 2016 (with a grant date of February 8, 2016), the Board of Directors approved a total of 24,456 RSUs for non-employee directors (February 9, 2015 — 27,620 RSUs) and 10,952 RSUs to the Chairman (February 9, 2015 — 12,154 RSUs). Compensation costs charged against income in respect of non-employee director RSUs for the three and nine months ended September 30, 2016 were \$0.4 million and \$1.1 million, respectively (2015 — \$0.4 million and \$1.3 million).

The total fair value adjustment for all RSUs for the three and nine months ended September 30, 2016 was \$0.3 million and \$0.6 million, respectively (2015 — \$Nil and \$0.3 million). The total tax credit recognized by the Company in relation to RSUs in the three and nine months ended September 30, 2016 was \$0.6 million and \$1.7 million, respectively (2015 — \$0.7 million and \$1.4 million).

Performance Shares. During the three and nine months ended September 30, 2016, the Company granted Nil and 278,477 performance shares, respectively, to its employees (2015 — Nil and 277,585). The performance shares are

subject to a three-year vesting period with a separate annual diluted book value per share (“BVPS”) growth test for each year, adjusted to add back ordinary dividends. One-third of the grant is eligible for vesting each year based on a formula and the performance shares are only issuable at the end of the three-year period.

If the diluted BVPS growth achieved in 2016 is:

less than 4.65%, then the portion of the performance shares subject to the vesting conditions in such year will be forfeited (i.e., one-third of the initial grant);

between 4.65% and 9.30%, then the percentage of the performance shares eligible for vesting in such year will be between 10% and 100% on a straight-line basis; or
between 9.30% and 18.60%, then the percentage of the performance shares eligible for vesting in such year will be between 100% and 200% on a straight-line basis.

In calculating BVPS for 2016, the entire movement in AOCI will be excluded. Interest rate movements and credit spread movements in AOCI can be fairly significant and impact growth in BVPS which management does not have any control over. The Compensation Committee will review the impact of any capital management actions undertaken during 2016, including share repurchases and special dividends, and consider whether any further adjustments to growth in BVPS should be made in the context of such actions. The calculation of BVPS for 2016 will likewise exclude all transactional expenses incurred in connection with any transaction which, if consummated, would result in a change in control, including without limitation the cost of defending against any such transaction and any third-party legal and advisory costs. The Compensation Committee believes that it would not be appropriate for employees' performance-related compensation to be impacted by these costs.

The Compensation Committee will determine the vesting conditions for the 2017 and 2018 portions of the grant in such years taking into consideration the market conditions and the Company's business plans at the commencement of the years concerned. Notwithstanding the vesting criteria for each given year, if the shares eligible for vesting in 2017 and 2018 are greater than 100% for 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 ordinary 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 this limitation on 100% vesting.

The fair value of performance share awards is based on the value of the closing ordinary share price on the date of the grant adjusted for illiquidity less a deduction for expected dividends which would not accrue during the vesting period. Compensation costs charged against income in the three and nine months ended September 30, 2016 in respect of performance shares were \$0.3 million and \$2.5 million, respectively (2015 — \$2.6 million and \$4.8 million). The total tax recognized by the Company in relation to performance shares in the three and nine months ended September 30, 2016 was a tax credit of \$0.1 million and \$0.5 million, respectively (2015 — \$0.6 million and \$1.1 million).

Phantom Shares. During the three and nine months ended September 30, 2016, the Compensation Committee approved the grant of 1,156 and 147,513 phantom shares, respectively, to its employees (2015 — Nil and 135,651). The phantom shares are subject to a three-year vesting period with a separate annual diluted BVPS growth test for each year, in accordance with the test described above for the 2016 performance shares, with the difference being that any vested amount is paid in cash in lieu of ordinary shares. As ordinary shares are not issued, the phantom shares have no dilutive effect.

The fair value of the phantom shares is based on the closing ordinary share price on the date of the grant adjusted for illiquidity, less estimated dividends payable over the vesting period. The fair value is expensed through the consolidated income statement evenly over the vesting period, but 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 and nine months ended September 30, 2016 in respect of phantom shares were \$0.2 million and \$0.8 million, respectively (2015 — \$1.4 million and \$3.4 million) with a fair value adjustment for the three and nine months ended September 30, 2016 of \$2.5 million and \$3.8 million, respectively (2015 — \$0.2 million and \$1.8 million). The total tax credit recognized by the Company in relation to phantom shares in the three and nine months ended September 30, 2016 was \$0.3 million and \$0.6 million, respectively (2015 — \$0.1 million and \$0.8 million).

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 Employee Share Purchase Plan and the International Employee Share Purchase Plan, 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, subject to a further one year holding period. 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, 189 and 13,342 ordinary shares, respectively, were exercised and issued during the three and nine months ended September 30, 2016 (2015 — 264 and 54,940 shares). Compensation costs charged against income in the three and nine months ended September 30, 2016 in respect of the ESPP were \$0.1 million and \$0.3 million, respectively (2015 — \$0.1 million and \$0.3 million).

15. Intangible Assets and Goodwill

The following table provides a summary of the Company's intangible assets for the three and nine months ended September 30, 2016 and 2015:

	Three Months Ended September 30, 2016				Three Months Ended September 30, 2015			
	Beginning of the Period	Additions	Amortization	End of the Period	Beginning of the Period	Amortization	End of the Period	
	(\$ in millions)				(\$ in millions)			
Intangible Assets								
Trade Mark	\$5.4	—	\$ (0.1)	\$ 5.3	\$1.6	\$	—	\$ 1.6
Insurance Licenses	16.6	—	—	16.6	16.6	—	—	16.6
Agency Relationships	24.2	—	(0.4)	23.8	—	—	—	—
Non-compete Agreements	2.6	—	(0.1)	2.5	—	—	—	—
Value of Business Acquired	0.2	—	(0.2)	—	—	—	—	—
Consulting Relationships	0.9	—	—	0.9	—	—	—	—
Goodwill	22.1	—	—	22.1	—	—	—	—
Renewal Rights	—	1.9	—	1.9	—	—	—	—
Total	\$72.0	\$ 1.9	\$ (0.8)	\$ 73.1	\$18.2	\$	—	\$ 18.2

	Nine Months Ended September 30, 2016				Nine Months Ended September 30, 2015			
	Beginning of the Period	Additions	Amortization	End of the Period	Beginning of the Period	Amortization	End of the Period	
	(\$ in millions)				(\$ in millions)			
Intangible Assets								
Trade Mark	\$1.6	4.0	\$ (0.3)	\$ 5.3	\$1.6	\$	—	\$ 1.6
Insurance Licenses	16.6	—	—	16.6	16.6	—	—	16.6
Agency Relationships	—	25.0	(1.2)	23.8	—	—	—	—
Non-compete Agreements	—	2.9	(0.4)	2.5	—	—	—	—
Value of Business Acquired	—	1.8	(1.8)	—	—	—	—	—
Consulting Relationships	—	1.0	(0.1)	0.9	—	—	—	—
Goodwill	—	22.1	—	22.1	—	—	—	—
Renewal Rights	—	1.9	—	1.9	—	—	—	—
Total	\$18.2	\$ 58.7	\$ (3.8)	\$ 73.1	\$18.2	\$	—	\$ 18.2

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 is 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.

License to use the “AgriLogic” Trademark. As part of the acquisition of AgriLogic, 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 will amortize the estimated value of the trademark over its estimated useful life.

Agency Relationships. As part of the acquisition of AgriLogic, the Company valued the agency relationships at \$25.0 million with an estimated economic useful life of 15 years. The Company will amortize the estimated value of the agency relationships over their estimated useful life.

Non-compete Agreements. As part of the acquisition of AgriLogic, the Company valued the non-compete agreements at \$2.9 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.

Value of Business Acquired. As part of the acquisition of AgriLogic, 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 will amortize 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 has been fully amortized in 2016.

Consulting Relationships. As part of the acquisition of AgriLogic, the Company valued the consulting relationships at \$1.0 million with an estimated economic useful life of 10 years. The Company will amortize the estimated value of the consulting relationships over their estimated useful life.

Goodwill. As part of the acquisition of AgriLogic, the Company valued the goodwill at \$22.1 million. The goodwill is deemed to have an indefinite useful life and will be assessed for impairment annually.

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 acquisition 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 September 30, 2016, the value of the license to use the Aspen trademark was \$1.6 million (December 31, 2015 — \$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 September 30, 2016 was \$16.6 million (December 31, 2015 — \$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.

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 September 30, 2016 and December 31, 2015:

As at	As at
September	December
30, 2016	31, 2015
(\$ in millions, except percentages)	

Regulatory trusts and deposits:

Edgar Filing: ASPEN INSURANCE HOLDINGS LTD - Form 10-Q

Affiliated transactions	\$1,432.2	\$1,421.0	
Third party	2,449.6	2,265.6	
Letters of credit / guarantees ⁽¹⁾	698.2	708.5	
Total restricted assets	\$4,580.0	\$4,395.1	
Total as percent of investable assets ⁽²⁾	49.0	% 49.6	%

40

- (1) As at September 30, 2016, the Company pledged funds of \$698.2 million and £0.0 million (December 31, 2015 — \$697.6 million and £7.1 million) as collateral for its secured letters of credit.

The comparative balance has been re-presented to reflect total restricted investable assets as a percent of investable assets. Investable assets comprise total investments, cash and cash equivalents, accrued interest, receivables for securities sold and payables for securities purchased.

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, comprises cash and investments as at September 30, 2016 in the amount of \$456.1 million (December 31, 2015 — \$436.8 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 September 30, 2016 was £0.4 million (December 31, 2015 — £0.4 million). This is not available for distribution by the Company for the payment of dividends.

Credit Facility. On June 12, 2013, Aspen Holdings and certain of its direct and indirect subsidiaries (collectively, the "Borrowers") entered into an amended and restated credit agreement (the "Credit Agreement") with various lenders and Barclays Bank PLC, as administrative agent ("Barclays"), which amends and restates the credit agreement dated as of July 30, 2010 among Aspen Holdings, the Borrowers, various lenders and Barclays. The credit facility may be used primarily for letters of credit in connection with the Company's insurance and reinsurance businesses to finance its working capital needs and those of our subsidiaries and for other general corporate purposes. Initial availability under the credit facility is \$200.0 million and the Company has the option (subject to obtaining commitments from acceptable lenders) to increase the facility by up to \$100.0 million. The facility will expire on June 12, 2017.

As at September 30, 2016, no borrowings were outstanding under the credit facility. 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 facility, the Company must not permit (a) consolidated tangible net worth to be less than approximately \$2,428.6 million plus 50% of consolidated net income and 50% of aggregate net cash proceeds from the issuance by the Company of its capital stock, in each case after January 1, 2013, (b) the ratio of our total consolidated debt to the sum of such debt plus our 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. In addition, the credit facility contains other customary affirmative and negative covenants as well as certain customary events of default, including with respect to a change in control. The various affirmative and negative covenants include, among others, covenants that, subject to various exceptions, restrict the ability of the Company and its subsidiaries to: incur indebtedness; create or permit liens on assets; engage in mergers or consolidations; dispose of assets; pay dividends or other distributions; purchase or redeem the Company's equity securities or those of its subsidiaries and make other restricted payments; make certain investments; agree with others to limit the ability of the Company's subsidiaries to pay dividends or other restricted payments or to make loans or transfer assets to the Company or another of its subsidiaries. In addition, the credit facility 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. The credit facility also contains customary provisions in respect of successor companies resulting from mergers and acquisitions assuming obligations thereunder.

On December 12, 2014, Aspen Holdings and the Borrowers entered into a first amendment to an amended and restated credit agreement, dated June 12, 2013, with various lenders and Barclays. Aspen Holdings has established, and may establish additional, special purpose entities that have issued or will issue insurance-linked securities to

third-party investors (each, an “ILS Entity” and collectively, the “ILS Entities”). Accordingly, the amended and restated credit agreement was amended, among other things, to (i) exclude ILS Entities from the definition of “Subsidiary”, (ii) permit the Borrowers to invest in ILS Entities and (iii) permit the Borrowers to engage in transactions with an ILS Entity.

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.

In addition, Aspen U.K. and Aspen Bermuda had a \$100.0 million secured letter of credit facility agreement with Barclays. All letters of credit issued under the facility were used to support reinsurance obligations of the parties to the agreement and their respective subsidiaries. The Company did not extend the maturity date of the Barclays secured letter of credit facility and, as a result, it expired on January 31, 2015 and no new letters of credit can be issued under this facility. As at September 30, 2016 and December 31, 2015, the Company had no outstanding collateralized letters of credit under this facility.

For further information relating to the Company's credit facilities, refer to Note 23 of the "Notes to Audited Consolidated Financial Statements" in the Company's 2015 Annual Report on Form 10-K filed with the SEC.

Interest Rate Swaps. As at September 30, 2016, no cash collateral was held by the Company's counterparties to support the current valuation of the interest rate swaps (December 31, 2015 — \$10.1 million). For more information on the Company's terminated interest rate swaps, refer to Note 10 of these unaudited condensed consolidated financial statements.

(b) Operating leases

Amounts outstanding under operating leases net of subleases as at September 30, 2016 were:

	2016	2017	2018	2019	2020	Later Years	Total
	(\$ in millions)						

Operating Lease Obligations	\$3.3	\$16.1	\$15.3	\$14.0	\$9.9	\$88.4	\$147.0
-----------------------------	-------	--------	--------	--------	-------	--------	---------

(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, notably 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 September 30, 2016 and December 31, 2015, 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.

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 and nine months ended September 30, 2016 and 2015. 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, 2015, as well as the discussions of critical accounting policies, contained in our Audited Consolidated Financial Statements in our 2015 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 Item 1A of our 2015 Annual Report on Form 10-K 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

We are a Bermuda holding company and write insurance and reinsurance business through our subsidiaries principally in Bermuda, the United Kingdom and the United States.

Key results for the three and nine months ended September 30, 2016 include:

Gross written premiums of \$763.5 million for the third quarter of 2016, an increase of 6.0% from the third quarter of 2015. Gross written premiums in reinsurance increased by 15.6% with the increase largely due to growth in agriculture business written within the specialty reinsurance business line. Gross written premiums in insurance decreased by 1.6% mainly due to reductions in global casualty and U.S. casualty business lines as we reposition the account;

There were \$24.9 million, or 3.7 combined ratio points, of pre-tax catastrophe losses net of reinsurance recoveries in the third quarter of 2016 compared with \$19.1 million, or 3.0 combined ratio points, of pre-tax catastrophe losses net of reinsurance recoveries in the third quarter of 2015;

Net favorable development on prior year loss reserves of \$35.4 million for the third quarter of 2016 had a favorable impact of 5.2 percentage points on the combined ratio, compared with a reserve release of \$39.0 million in the third quarter of 2015, which had a favorable impact of 6.1 percentage points on the combined ratio;

Combined ratio of 93.8% for the third quarter of 2016 compared with a combined ratio of 93.4% for the third quarter of 2015. The increase in combined ratio is mainly due to a \$5.8 million increase in catastrophe losses and a \$3.6 million reduction in net favorable development on prior year loss reserves;

Realized and unrealized foreign exchange gains of \$10.8 million for the third quarter of 2016 compared with losses of \$8.4 million in the third quarter of 2015 predominantly due to the continued strengthening of the U.S. Dollar;

Realized and unrealized investment gains of \$21.5 million for the third quarter of 2016 compared with losses of \$41.2 million in the third quarter of 2015. The gains in the current quarter were due to mark to market changes in the valuation of our equity and fixed income trading portfolios;

Diluted net income per ordinary share of \$1.40 for the quarter ended September 30, 2016 compared with diluted net income per ordinary share of \$0.30 in the third quarter last year;

Annualized net income return on average ordinary shareholders' equity of 11.2% for the third quarter of 2016 compared with 2.8% for the third quarter of 2015; and

Diluted book value per ordinary share⁽¹⁾ of \$50.49 as at September 30, 2016, up 9.8% from December 31, 2015, which included net unrealized losses on foreign currency translation, net of taxes, and net unrealized gains on investments, net of taxes, recognized through other comprehensive income of \$19.3 million and \$92.9 million, respectively.

(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 increased by \$287.3 million to \$3,904.1 million during the three months ended September 30, 2016. The most significant movements were:

a \$25.2 million reduction in accumulated other comprehensive income mainly due to a \$21.2 million net unrealized loss in the available for sale investment portfolio, a net unrealized loss in foreign currency translation of \$6.5 million and a \$2.5 million net gain on foreign exchange contracts;

net proceeds of \$241.3 million from the issuance of the 5.625% Preference Shares;

a \$73.0 million increase in retained earnings for the period; and

the repurchase of 144,289 ordinary shares for \$6.5 million pursuant to a 10b5-1 plan.

Ordinary shareholders' equity as at September 30, 2016 and December 31, 2015 was:

	As at September 30, 2016	As at December 31, 2015
	(\$ in millions, except for share amounts)	
Total shareholders' equity	\$ 3,904.1	\$ 3,419.9
Preference shares less issue expenses	(797.1)	(555.8)
Non-controlling interests	(1.3)	(1.3)
Net assets attributable to ordinary shareholders	\$ 3,105.7	\$ 2,862.8
Issued ordinary shares	60,210,770	60,918,373
Issued and potentially dilutive ordinary shares	61,516,418	62,240,466

Outlook and Trends

Overall, the rate environment continues to pose challenges in both our reinsurance and insurance segments, although the rate impact varies by line and geography.

We successfully integrated AgriLogic and are delighted with its growth trajectory. We expect healthy growth across all U.S. states where we have already established a strong presence and, at this stage, indications are that 2016 should be a good year in terms of underwriting experience for the agriculture industry. Across other lines, attractive opportunities continue to be brought to us despite the challenging market environment. The pace of rate reductions in reinsurance slowed to approximately 4% for the year to date. We achieved rate increases in the United States following some small natural catastrophe losses and in the Middle East following a degree of market disruption. Our reinsurance team continues to stay disciplined and avoids writing business that does not meet our underwriting targets.

In insurance, the pace of rate reductions also decreased to approximately 1% overall with pricing in the United States flat compared to international markets where rates decreased approximately 3%. We continue to proactively manage our diversified insurance business lines and selectively reduce exposure in areas where rates are under pressure and to not renew some business in favor of other opportunities with more attractive prospective margins. We expect the benefits from this effort will improve our insurance loss ratio and decrease volatility in 2017 and more significantly in 2018. This transformation is already showing results, with growth and improved profitability in target areas. For example, our global accident and health business continued to perform well, along with surety and cyber. In our marine, aviation and energy sub-segment, we saw growth for the first time in many quarters. However, we remain cautious with marine and energy business as market conditions continue to be pressured. In property and casualty, our U.K. property and casualty business continued its strong track record of profitability and we generated growth from our railroad and U.K. regional business lines.

See "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 2015 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 2015 Annual Report on Form 10-K filed with the SEC and the notes to the consolidated condensed unaudited financial statements contained in this report.

Results of Operations for the Three Months Ended September 30, 2016 Compared to the Three Months Ended September 30, 2015

The following is a discussion and analysis of our consolidated results of operations for the three months ended September 30, 2016 and 2015, 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 \$43.0 million, or 6.0%, in the third quarter of 2016 compared to the third quarter of 2015.

Gross written premiums from our reinsurance segment increased by \$49.3 million, or 15.6%, in the third quarter of 2016 compared to the third quarter of 2015. The increase was largely due to growth in agriculture business written within specialty reinsurance following our recent acquisition of AgriLogic, a specialist U.S. crop managing general agency business with an integrated agricultural consultancy. This growth was offset by a decrease in other property premiums due to adverse contract adjustments and the non-renewal of certain contracts which did not meet our underwriting targets and a decrease in property catastrophe premiums due to contracts renewing in the second quarter of this year which previously renewed in the third quarter.

Gross written premiums from our insurance segment decreased by \$6.3 million, or 1.6%, in the third quarter of 2016 compared to the third quarter of 2015 largely due to reductions in global casualty, U.S. casualty and U.S. professional business lines as we reposition the account, partially offset by growth in our U.S. based ocean cargo, accident and health and U.S. surety business lines and favorable contract adjustments in our marine liability business line.

The table below shows our gross written premiums for each business segment for the three months ended September 30, 2016 and 2015, and the percentage change in gross written premiums for each business segment:

Business Segment	Three Months Ended September 30, 2016 (\$ in millions)	Three Months Ended September 30, 2015 (\$ in millions)	% increase/(decrease)	
Reinsurance	\$ 365.9	\$ 316.6	15.6	%
Insurance	397.6	403.9	(1.6))%
Total	\$ 763.5	\$ 720.5	6.0	%

Ceded reinsurance. Total reinsurance ceded of \$125.1 million increased by \$56.4 million from the third quarter of 2015 due to increased ceded reinsurance for our U.S. inland marine, ocean cargo, U.S. excess casualty, property catastrophe business lines and additional ceded reinsurance for our new agriculture business reported in our specialty

reinsurance business line. The changes in our reinsurance program have reduced our retention ratio, defined as net written premium as a percentage of gross written premium, by 6.9% to 83.6% in the third quarter of 2016 compared to 90.5% in the third quarter of 2015.

Net premiums earned. Net premiums earned in the third quarter of 2016 increased by 6.3% from the third quarter of 2015. Net premiums earned increased by 11.1% and 2.4% in reinsurance and insurance, respectively.

Losses and loss adjustment expenses. The loss ratio for the quarter increased 0.1 percentage points from 57.1% in the third quarter of 2015 to 57.2% largely due to a \$5.8 million increase in catastrophe losses and a \$3.6 million reduction in prior-year reserve releases.

In the reinsurance segment, the loss ratio for the three months ended September 30, 2016 was 56.5% compared to 59.7% in the equivalent period in 2015. The decrease in the loss ratio in the quarter is largely attributable to the lack of significant large losses in the quarter compared with \$27.0 million of losses associated with the port explosion in Tianjin, China in the third quarter of 2015 partially offset by changes in business mix towards lines which have higher non-catastrophe loss ratios. Catastrophe losses decreased by \$2.0 million and prior year reserve releases decreased by \$4.0 million compared to the same period in 2015. In the third quarter of 2016, we experienced \$14.8 million of natural catastrophe losses, net of reinsurance recoveries, including \$10.3 million from weather-related events in the U.S. and \$3.4 million from a hailstorm in the Netherlands. The comparable quarter of 2015 experienced \$16.8 million of natural catastrophe losses, net of reinsurance recoveries, including \$7.0 million from the wildfires in the U.S. State of Washington and \$9.8 million of other losses associated with an earthquake in Chile and weather-related events in the U.S., New Zealand and Australia. Reserve releases for the current quarter were as a result of favorable development across all of our reinsurance business lines. The comparative period benefited from favorable reserve development in U.S. casualty and property pro rata business lines.

In the insurance segment, the loss ratio of 57.7% in the third quarter of 2016 increased from 55.0% in the third quarter of 2015 largely due to a \$7.8 million increase in catastrophe losses, a \$7.6 million decrease in prior year reserve release and higher U.S. casualty losses offset by a reduction in large losses. We experienced \$10.1 million of natural catastrophe losses in the period and \$2.3 million in the comparative period primarily due to U.S. weather-related events. In the third quarter of 2016, we experienced no significant large losses while in the comparative period in 2015 we experienced \$11.2 million of mid-sized fire and energy losses in addition to \$3.0 million of losses from the port explosion in Tianjin, China. Prior year reserve releases decreased from \$22.9 million in the third quarter of 2015 to \$15.3 million in the current period. Reserve releases in the current quarter were mainly as a result of favorable development in our marine, aviation and energy and financial and professional business lines. Reserve releases in the comparative quarter were principally from our property and casualty lines. 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 loss ratios for our two business segments for the three months ended September 30, 2016 and 2015 were as follows:

Business Segment	Three Months Ended September 30, 2016	Three Months Ended September 30, 2015
Reinsurance	56.5 %	59.7 %
Insurance	57.7 %	55.0 %
Total Loss Ratio	57.2 %	57.1 %

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 third quarter 2016 catastrophe losses as losses associated with weather-related events in the U.S. and a hailstorm in the Netherlands. We have defined catastrophe losses in the third quarter of 2015 as losses largely associated with wildfires in the U.S. State of Washington, an earthquake in Chile and weather-related events in the U.S, New Zealand and Australia.

The underlying changes in loss ratios by business segment are shown in the tables below for the three months ended September 30, 2016 and 2015. 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 September 30, 2016	Total Loss Ratio	Current Year Loss Adjustments	Loss Ratio Excluding
---	------------------	-------------------------------	----------------------

					Current Year Adjustments	
Reinsurance	56.5	%	(4.7	)%	51.8	%
Insurance	57.7	%	(2.8	)%	54.9	%
Total	57.2	%	(3.7	)%	53.5	%

46

For the Three Months Ended September 30, 2015	Total Loss		Current Year		Loss Ratio Excluding	
	Ratio		Adjustments		Current Year	Adjustments
Reinsurance	59.7	%	(5.9)	)%	53.8	%
Insurance	55.0	%	(0.6)	)%	54.4	%
Total	57.1	%	(3.0)	)%	54.1	%

For information relating to the movement of prior year reserves, please see “Reserves for Losses and Loss Adjustment Expenses” below.

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 September 30, 2016 and 2015:

Ratios Based on Gross Earned Premium	Three Months Ended			Three Months Ended		
	September 30, 2016			September 30, 2015		
	Reinsurance	Insurance	Total	Reinsurance	Insurance	Total
Policy acquisition expense ratio	14.5%	17.5 %	16.2%	21.3%	15.7 %	18.0%
General and administrative expense ratio ⁽¹⁾	13.0	13.0	14.7	11.4	12.0	13.7
Gross expense ratio	27.5	30.5	30.9	32.7	27.7	31.7
Effect of reinsurance	4.3	6.8	5.7	2.3	5.6	4.6
Total net expense ratio	31.8%	37.3 %	36.6%	35.0%	33.3 %	36.3%

(1) The total group general and administrative expense ratio includes corporate expenses which are not allocated to the segments.

The policy acquisition expense ratio decreased in the third quarter of 2016 compared to the equivalent quarter of 2015 due to a reduction in the reinsurance segment ratio partially offset by an increase in the insurance segment ratio. The increase in the insurance segment ratio is largely due to lower over-rider commissions. The decrease in the reinsurance segment policy acquisition expense ratio was largely due to changes in business mix toward agriculture as a result of our acquisition of AgriLogic which has lower average commission rates and away from other property, casualty and specialty business written on a pro rata basis which have higher average commission rates.

General, administrative and corporate expenses increased by \$24.5 million from \$100.5 million in the third quarter of 2015 to \$125.0 million in the third quarter of 2016 largely driven by costs following our acquisition of AgriLogic in addition to reorganization costs and other planned expenses to support the growth in our business. The general, administrative and corporate expense ratio, before the effect of reinsurance, increased by 1.0 percentage point in the third quarter of 2016 compared to the equivalent period in 2015.

Net investment income. Net investment income for the quarter of \$46.4 million increased by 3.1% compared to \$45.0 million in the third quarter of 2015 due to an increase in dividend income and a reduction in investment expenses.

Change in fair value of derivatives. In the three months ended September 30, 2016, we recorded no change in the fair value of our terminated interest rate swaps (2015 — loss of \$2.8 million), a gain of \$0.6 million (2015 — gain of \$12.9 million) in respect of foreign exchange contracts not designated as hedging instruments and a loss of \$3.1 million (2015 — loss of \$0.8 million) in respect of foreign exchange contracts designated as hedging instruments.

Income before tax. In the third quarter of 2016, income before tax was \$100.5 million (2015 — \$30.0 million) comprised of the amounts set out in the table below:

	Three Months Ended September 30, 2016	Three Months Ended September 30, 2015
	(\$ in millions)	
Underwriting income	\$55.6	\$ 57.0
Corporate expenses	(13.4)	(14.5)
Non-operating (expenses)	(6.3)	—
Net other (expense)/income	2.4	(2.3)
Net investment income	46.4	45.0
Change in fair value of derivatives	0.6	10.1
Change in fair value of loan notes issued by variable interest entities	(9.8)	(8.3)
Realized and unrealized investment gains	26.7	10.7
Realized and unrealized investment losses	(5.2)	(51.9)
Net realized and unrealized foreign exchange gains/(losses)	10.8	(8.4)
Interest expense	(7.3)	(7.4)
Income before tax	\$100.5	\$ 30.0

Taxes. Income tax expense for the three months ended September 30, 2016 was \$4.9 million (2015 — \$1.8 million) equating to an estimated effective tax rate of 4.9% (2015 — 6.0%). The reduction in the effective tax rate is primarily due to an agreement with Her Majesty's Revenue and Customs ("HMRC") of the deductions available for certain interest payments in prior periods. 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 corporate tax rate remains at 20%, with a further reduction to 19% from April 1, 2017 and 17% from April 1, 2020) and the United States (where the federal income tax rate is 35%).

Net income after tax. Net income after tax for the three months ended September 30, 2016 was \$95.6 million, equivalent to basic earnings per ordinary share of \$1.43 adjusted for the \$9.5 million preference share dividends and \$0.2 million non-controlling interest. Fully diluted earnings per ordinary share were \$1.40 for the three months ended September 30, 2016. Net income after tax for the three months ended September 30, 2015 was \$28.2 million, equivalent to basic earnings per ordinary share of \$0.30 after deducting \$9.5 million preference share dividends and \$0.3 million non-controlling interest. Fully diluted earnings per ordinary share were \$0.30 for the three months ended September 30, 2015.

Realized and unrealized investment gains/(losses). Total realized and unrealized investment gains for the three months ended September 30, 2016 were \$21.5 million (2015 — loss of \$41.2 million) comprising the amounts set out in the table below:

	Three Months Ended September 30, 2016	Three Months Ended September 30, 2015
	(\$ in millions)	
Available for sale:		
Fixed income securities — gross realized gains	\$5.5	\$ 2.4
Fixed income securities — gross realized (losses)	(0.9)	(0.3)

Edgar Filing: ASPEN INSURANCE HOLDINGS LTD - Form 10-Q

Short-term investments — gross realized gains	0.1	—
Short-term investments — gross realized (losses)	(0.2)	—
Trading:		
Fixed income securities — gross realized gains	4.3	0.5
Fixed income securities — gross realized (losses)	(0.5)	(1.2)
Equity securities — gross realized gains	8.1	7.8
Equity securities — gross realized (losses)	(4.2)	(12.3)
Catastrophe bonds	0.3	0.7
Net change in gross unrealized gains	9.0	(38.8)
Total realized and unrealized investment gains/(losses)	\$21.5	\$ (41.2)

48

Other comprehensive income. We recorded a \$25.2 million reduction in our total other comprehensive income for the three months ended September 30, 2016 (2015 — reduction of \$4.9 million), net of taxes. The reduction was mainly due to a \$16.8 million loss in the net unrealized available for sale investment portfolio (2015 — \$25.3 million net unrealized gain), a \$6.5 million net unrealized loss in foreign currency translation (2015 — \$27.9 million net unrealized loss), a \$2.5 million net gain from hedged foreign exchange contracts (2015 — \$0.2 million loss) and a \$4.4 million reclassification of net realized gains to net income (2015 — \$1.8 million reclassified net realized gains).

Non-controlling interest. In the three months ended September 30, 2016, we recorded a decrease of \$0.2 million (2015 — \$0.3 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 September 30, 2016 were \$22.8 million (2015 — \$22.2 million). The dividend on our ordinary shares increased from \$0.21 per ordinary share to \$0.22 per ordinary share on April 21, 2016.

Underwriting Results by Business Segments — Third 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-underwriting) 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 September 30, 2016 and 2015. The contributions of each business segment to gross written premiums in the three months ended September 30, 2016 and 2015 were as follows:

Business Segment	Gross Written Premiums			
	Three Months Ended September 30, 2016		Three Months Ended September 30, 2015	
	(\$ in millions)	(% of total)	(\$ in millions)	(% of total)
Reinsurance	\$365.9	47.9 %	\$316.6	43.9 %
Insurance	397.6	52.1	403.9	56.1
Total	\$763.5	100.0%	\$720.5	100.0%

Reinsurance

Our reinsurance segment consists of property catastrophe reinsurance, other property reinsurance (risk excess, pro rata and facultative), casualty reinsurance (U.S. treaty, international treaty and global facultative) and specialty reinsurance (credit and surety, agriculture insurance and reinsurance, marine, aviation, terrorism, engineering and other specialty lines). For a more detailed description of this segment, see Part I, Item 1, “Business — Business Segments — Reinsurance” in the Company’s 2015 Annual Report on Form 10-K filed with the SEC.

Gross written premiums. Gross written premiums in our reinsurance segment increased by 15.6% compared to the three months ended September 30, 2015. The table below shows our gross written premiums for each line of business for the three months ended September 30, 2016 and 2015, and the percentage change in gross written premiums for each line of business:

Lines of Business	Three Months	Three Months	% increase/(decrease)
-------------------	--------------	--------------	-----------------------

Edgar Filing: ASPEN INSURANCE HOLDINGS LTD - Form 10-Q

	Ended September 30, 2016 (\$ in millions)	Ended September 30, 2015 (\$ in millions)		
Property catastrophe reinsurance	\$ 47.3	\$ 49.1	(3.7)%
Other property reinsurance	77.4	105.2	(26.4)%
Casualty reinsurance	79.3	77.9	1.8	%
Specialty reinsurance	161.9	84.4	91.8	%
Total	\$ 365.9	\$ 316.6	15.6	%

49

The decrease in property catastrophe gross written premiums was primarily due to contracts renewing in the second quarter of this year which renewed in the third quarter last year. The decrease in other property reinsurance was largely due to adverse contract adjustments and the non-renewal of certain contracts which did not meet our underwriting targets. Our casualty reinsurance marginally increased due to growth in our international casualty business line. The increase in our specialty reinsurance business was largely due to \$103.3 million of agriculture business sourced following our recent acquisition of AgriLogic offset by reductions in our credit and surety and specialty marine business lines.

Losses and loss adjustment expenses. The loss ratio for the three months ended September 30, 2016 was 56.5% compared to 59.7% in the equivalent period in 2015. The decrease in the loss ratio in the quarter is largely attributable to no significant large losses in the quarter compared with \$27.0 million of losses associated with the port explosion in Tianjin, China in the third quarter of 2015 partially offset by changes in business mix towards lines which have higher non-catastrophe loss ratios.

We experienced a \$2.0 million decrease in catastrophe losses and a \$4.0 million decrease in prior year reserve releases compared to the same period in 2015. In the third quarter of 2016, we experienced \$14.8 million of natural catastrophe losses, net of reinsurance recoveries, including \$10.3 million from weather-related events in the U.S. and \$3.4 million from a hailstorm in the Netherlands. The comparable quarter of 2015 experienced \$16.8 million of natural catastrophe losses including \$7.0 million from the wildfires in the U.S. State of Washington and \$9.8 million of other losses associated with the earthquake in Chile and weather-related events in the U.S., New Zealand and Australia. Reserve releases for the current quarter were as a result of favorable development across all of our reinsurance business lines. The comparative period in 2015 benefited from favorable reserve development in U.S. casualty and property pro rata business lines. 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 \$53.0 million for the three months ended September 30, 2016, equivalent to 16.8% of net premiums earned, compared to \$64.8 million, or 22.8% of net premiums earned in the equivalent period in 2015. The reduction in the acquisition expense ratio was largely due to changes in business mix toward agriculture and specialty marine business lines which have lower average commission rates and away from other property, casualty and specialty business written on a pro rata basis which have higher average commission rates. The general and administrative expenses of \$47.4 million increased compared to \$34.7 million in the equivalent period in 2015 due to costs following our acquisition of AgriLogic in addition to other planned expenses to support business growth while the equivalent period in 2015 reported a reduction in performance-related accruals. The general and administrative expense ratio increased to 15.0% from 12.2% in the same period in 2015 due to the increase in expenses noted above together with the impact of an increase in ceded premiums which reduced the growth in net premiums earned.

Insurance

Our 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 2015 Annual Report on Form 10-K filed with the SEC.

Gross written premiums. Gross written premiums in our insurance segment decreased by 1.6% compared to the three months ended September 30, 2015. The table below shows our gross written premiums for each line of business for the three months ended September 30, 2016 and 2015, and the percentage change in gross written premiums for each line of business:

Lines of Business	Three Months Ended September 30, 2016 (\$ in millions)	Three Months Ended September 30, 2015 (\$ in millions)	% increase/(decrease)
Property and casualty insurance	\$ 184.9	\$ 208.5	(11.3)%

Edgar Filing: ASPEN INSURANCE HOLDINGS LTD - Form 10-Q

Marine, aviation and energy insurance	96.3	85.3	12.9	%
Financial and professional lines insurance	116.4	110.1	5.7	%
Total	\$ 397.6	\$ 403.9	(1.6)%

The decrease in property and casualty gross written premiums is largely attributable to reductions in global casualty and U.S. casualty business lines as we reposition the account. The increase in gross written premiums in marine, aviation and energy insurance is largely attributable to growth in our new U.S. based ocean cargo business line and favorable contract adjustments in our marine liability business line. The increase in gross written premiums in financial and professional insurance is largely attributable to growth in our accident and health and U.S. surety insurance business lines offset by reductions in our U.S. professional business lines.

Losses and loss adjustment expenses. The loss ratio of 57.7% in the third quarter of 2016 increased from 55.0% in the third quarter of 2015 largely due to a \$7.8 million increase in catastrophe losses, a \$7.6 million decrease in prior year reserve releases and higher U.S. casualty losses offset by a reduction in large losses. The insurance segment experienced catastrophe

losses for U.S. weather-related events in the third quarter of 2016 and 2015 of \$10.1 million and \$2.3 million, respectively. In the third quarter of 2016, we experienced no significant large losses while in the comparative period in 2015 we experienced \$11.2 million of mid-sized fire and energy losses in addition to \$3.0 million of losses from the port explosion in Tianjin, China.

Prior year reserve releases decreased from \$22.9 million in the third quarter of 2015 to \$15.3 million in the third quarter of 2016. Reserve releases in the third quarter of 2016 were mainly as a result of favorable development in our marine, aviation and energy and financial and professional business lines. Reserve releases in the comparative quarter were principally from our property and casualty lines. 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 for the three months ended September 30, 2016 increased to 21.4% of net premiums earned compared to 18.9% in the third quarter of 2015 due largely to lower over-rider commissions. Our general and administrative expenses increased by \$6.6 million from \$51.3 million in the third quarter of 2015 to \$57.9 million in the current quarter due to reorganization costs and costs associated with growth in our insurance business.

Results of Operations for the Nine Months Ended September 30, 2016 Compared to the Nine Months Ended September 30, 2015

The following is a discussion and analysis of our consolidated results of operations for the nine months ended September 30, 2016 and 2015, 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 our business segments.

Gross written premiums. Gross written premiums increased by \$178.4 million, or 7.6%, in the first nine months of 2016 compared to the same period in 2015.

Gross written premiums from our reinsurance segment increased by 14.5% in the first nine months of 2016 largely due to growth in specialty reinsurance and casualty reinsurance business lines. The increase in our specialty reinsurance business is due to growth in agriculture business written following our acquisition of AgriLogic and growth in specialty marine business. The increase in our casualty reinsurance lines of business is largely due to growth in our U.S. casualty treaty and international casualty business lines.

Gross written premiums from our insurance segment increased by 1.9% in the first nine months of 2016 mainly due to growth in our financial and professional lines offset by a reduction in our property and casualty insurance and marine, aviation and energy insurance lines. The increase in gross written premiums in financial and professional insurance was largely attributable to growth in our accident and health, credit and political risks, management liability and financial institutions business lines. The decrease in gross written premiums in property and casualty insurance was largely attributable to reductions in our global casualty, U.S. casualty and U.S. environmental business lines offset by growth in our U.S. excess casualty and railroad insurance business lines. The decrease in gross written premiums in marine, aviation and energy insurance was largely due to challenging market conditions in our marine and energy liability, U.S. inland marine, offshore energy, and energy and construction insurance business lines offset by growth in our ocean cargo and aviation insurance business line.

The table below shows our gross written premiums for each business segment for the nine months ended September 30, 2016 and 2015, and the percentage change in gross written premiums for each business segment:

Business Segment	Nine Months Ended September 30, 2016 (\$ in millions)	Nine Months Ended September 30, 2015 (\$ in millions)	% increase	
	Reinsurance	\$ 1,216.1	\$ 1,062.1	14.5
Insurance	1,324.8	1,300.4	1.9	%
Total	\$ 2,540.9	\$ 2,362.5	7.6	%

Ceded reinsurance. Total reinsurance ceded for the first nine months of 2016 of \$378.0 million increased by \$74.9 million compared to the first nine months of 2015. Ceded reinsurance costs increased for our reinsurance segment due to increased ceded reinsurance for our property catastrophe business line due to new business opportunities which were written in conjunction with an increase in retrocession costs and for our new agriculture business reported in our specialty reinsurance business line. Ceded reinsurance costs increased for our insurance segment due to increased ceded reinsurance in our marine, aviation and energy and financial and professional business lines. Our retention ratio, defined as net written premium as a percentage of gross written premium, decreased by 1.0% to 82.4% in the first nine months of 2016 compared to 83.4% in the first nine months of 2015.

Net premiums earned. Net premiums earned in the first nine months of 2016 increased by 9.8% compared to the first nine months of 2015 due to an increase in gross written premiums partially offset by higher ceded premiums.

Losses and loss adjustment expenses. The loss ratio increased by 2.7 percentage points from 56.0% in the first nine months of 2015 to 58.7% for the first nine months of 2016.

In the reinsurance segment, the loss ratio for the nine months ended September 30, 2016 was 55.2% compared to 48.8% in the equivalent period in 2015 largely due to a \$50.3 million increase in catastrophe losses, changes in business mix towards lines which have higher non-catastrophe loss ratios and a \$1.3 million reduction in reserve releases, offset by lower large losses. In the first nine months of 2016, we experienced \$77.2 million of natural catastrophe losses, net of reinsurance recoveries, including \$35.9 million associated with the wildfires in Canada, \$26.0 million from weather-related events in the U.S., \$7.5 million from an earthquake in Japan, \$3.4 million from a hailstorm in the Netherlands and \$2.2 million from an earthquake in Taiwan.

In the comparable period in 2015 we experienced \$26.9 million of natural catastrophe losses, including \$7.0 million from the wildfires in the U.S. State of Washington and \$18.9 million of other losses associated with an earthquake in Chile and weather-related events in the U.S., Europe, New Zealand and Australia. Reserve releases decreased from \$53.4 million in the first nine months of 2015 to \$52.1 million in the current period. For the nine months ended September 30, 2016 there were no significant large losses compared with \$27.0 million of losses associated with the port explosion in Tianjin, China in the equivalent period of 2015.

In the insurance segment, the loss ratio of 61.5% for the first nine months of 2016 was the same as the comparable period in 2015 largely due to higher catastrophe losses and a reduction in reserve releases, offset by a reduction in large losses. In the first nine months of 2016, there were \$34.6 million of catastrophe losses associated with U.S. weather-related events compared to \$17.6 million in the first nine months of 2015. Large losses in the first nine months of 2016 included \$29.6 million of energy-related losses, \$11.8 million of fire-related losses and a \$4.2 million aviation loss. In the comparative period of 2015, large losses included \$23.6 million from fire and weather-related events in the U.S., \$37.6 million of energy-related losses, \$5.0 from a train derailment and \$3.0 million of losses from the port explosion in Tianjin, China. Prior year reserve releases decreased by \$18.1 million from \$44.2 million in the first nine months of 2015 to \$26.1 million in the equivalent period in 2016. The reserve releases in the nine-month period were principally from our marine, aviation and energy lines, most notably our energy physical damage, which offset adverse development in our property and casualty lines of business. The release in the comparative period in 2015 was due primarily from our property and casualty lines, most notably excess casualty, U.K. commercial and U.S. property business lines offsetting adverse development in our marine, aviation and energy lines of business.

We monitor the loss ratio as a measure of relative underwriting performance where a lower ratio represents a better result than a higher ratio. The loss ratios for our two business segments for the nine months ended September 30, 2016 and 2015 were as follows:

Business Segment	Nine Months Ended September 30, 2016		Nine Months Ended September 30, 2015	
Reinsurance	55.2	%	48.8	%
Insurance	61.5	%	61.5	%
Total Loss Ratio	58.7	%	56.0	%

We also present, in the tables below, 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 defined the major 2016 catastrophe losses in the first nine months of 2016 as losses associated with the wildfires in Canada, weather-related events in the U.S., a hailstorm in the Netherlands and several earthquakes. We defined major 2015 catastrophe losses in the first nine months of 2015 as losses associated with storms in the U.S., Europe, New Zealand and Australia, the Chilean earthquake and wildfires in the U.S.

The underlying changes in loss ratios by business segment are shown in the tables below for the nine months ended September 30, 2016 and 2015. 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 claims and reinstatement premiums, if applicable, from catastrophe loss events.

For the Nine Months Ended September 30, 2016	Total Loss Ratio		Current Year Adjustments		Loss Ratio Excluding Current Year Adjustments	
	Reinsurance	55.2	%	(8.6))%	46.6
Insurance	61.5	%	(3.1)	)%	58.4	%
Total	58.7	%	(5.5)	)%	53.2	%

For the Nine Months Ended September 30, 2015	Total Loss Ratio	Current Year Adjustments	Loss Ratio Excluding Current Year Adjustments
--	------------------	--------------------------	---

	Ratio		Adjustments		Ratio Excluding Current Year Adjustments	
Reinsurance	48.8	%	(3.4	)%	45.4	%
Insurance	61.5	%	(1.7	)%	59.8	%
Total	56.0	%	(2.4	)%	53.6	%

53

Reserve releases in our reinsurance segment decreased from \$53.4 million in the first nine months of 2015 to \$52.1 million in the equivalent period in 2016. Reserve releases in the insurance segment reduced from \$44.2 million in the first nine months of 2015 to \$26.1 million in the first nine months of 2016. Refer to “Reserves for Losses and Loss Adjustment Expenses” below for a description of the key elements giving rise to these reserve releases.

Expense ratio. We monitor the expense ratio as a measure of the cost effectiveness of our amortization of deferred policy acquisition costs and, 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 each of the nine months ended September 30, 2016 and 2015:

Ratios Based on Gross Earned Premium	Nine Months Ended September 30, 2016			Nine Months Ended September 30, 2015		
	Reinsurance	Insurance	Total	Reinsurance	Insurance	Total
Policy acquisition expense ratio	16.3%	16.7 %	16.5%	19.7%	15.5 %	17.2%
General and administrative expense ratio ⁽¹⁾	13.0	12.9	15.1	12.0	12.0	14.0
Gross expense ratio	29.3	29.6	31.6	31.7	27.5	31.2
Effect of reinsurance	3.5	5.7	5.1	2.1	6.0	4.8
Total net expense ratio	32.8%	35.3 %	36.7%	33.8%	33.5 %	36.0%

(1) The total group general and administrative expense ratio includes corporate expenses which are not allocated to the segments.

Policy acquisition expenses increased by \$22.4 million in the first nine months of 2016 compared with the equivalent period in 2015 due to an increases in business written. The reduction in the policy acquisition ratio, before the effect of reinsurance, is due to a change in the mix of business written in the reinsurance segment as a result of our acquisition of AgriLogic and the receipt of FET refunds, offset by lower over-rider commissions.

General, administrative and corporate expenses increased by \$63.1 million in the first nine months of 2016 compared to the first nine months of 2015. The general, administrative and corporate expense ratio, before the effect of reinsurance, increased by 1.0 percentage point compared to the prior period in 2015 due to an increase in costs in our reinsurance segment as a result of our acquisition of AgriLogic and increased corporate costs associated with the growth in our business and reorganization costs.

Net investment income. Net investment income for the first nine months of 2016 was \$143.9 million, an increase of 3.5% compared to \$139.1 million in the first nine months of 2015 due primarily to an increase in interest income from our larger fixed income portfolio, growth in equity dividends and a reduction in investment expenses.

Change in fair value of derivatives. In the nine months ended September 30, 2016, we recorded a charge of \$3.3 million (2015 — charge of \$6.2 million) in respect of our terminated interest rate swaps and a loss of \$3.7 million (2015 — gain of \$10.5 million) in respect of foreign exchange contracts not designated as hedging instruments and a loss of \$5.6 million (2015 — loss of \$3.5 million) in respect of foreign exchange contracts designated as hedging instruments.

Income before tax. In the nine months ended September 30, 2016, income before tax was \$283.6 million (2015 — \$214.3 million) comprising the amounts set out in the table below:

	Nine Months Ended September 30, 2016	Nine Months Ended September 30, 2015
	(\$ in millions)	
Underwriting income	\$144.0	\$ 191.7
Corporate expenses	(50.6)	(43.8)
Non-operating expenses	(6.3)	—
Other (expenses)/income	2.3	(0.4)
Net investment income	143.9	139.1
Change in fair value of derivatives	(7.0)	4.3
Change in fair value of loan notes issued by variable interest entities	(13.7)	(14.5)
Realized and unrealized investment gains	137.4	81.6
Realized and unrealized investment losses	(34.1)	(95.2)
Net realized and unrealized foreign exchange losses	(10.2)	(26.4)
Interest expense	(22.1)	(22.1)
Income before tax	\$283.6	\$ 214.3

In the nine months ended September 30, 2016, we recorded a net change in gross realized and unrealized gains of \$103.3 million driven primarily by mark to market gains in both our fixed income and equity portfolios.

Taxes. Income tax expense for the nine months ended September 30, 2016 was \$8.7 million (2015 — \$9.1 million) equating to an estimated effective tax rate of 3.1% (2015 — 4.2%). The reduction in the effective tax rate was primarily due to an agreement with HMRC of the deductions available for certain interest payments in prior periods. The effective tax rate represents an estimate of the tax rate which will apply to our pre-tax income for 2016 including adjustments to prior period estimates. The effective tax rate for the year is subject to revision in future periods if circumstances change and depends on the relative profitability the business underwritten in Bermuda (where the rate of tax on corporate profits is zero), the U.K. (where the corporate tax rate remains at 20%, with a further reduction to 19% from April 1, 2017 and 17% from April 1, 2020) and the U.S. (where the federal income tax rate is 35%).

Net income after tax. Net income after tax for the nine months ended September 30, 2016 was \$274.9 million, equivalent to basic earnings per share of \$4.07 adjusted for the \$28.4 million preference share dividends and \$nil non-controlling interest. Net income after tax for the nine months ended September 30, 2015 was \$205.2 million, equivalent to basic earnings per ordinary share of \$2.86, adjusted for the \$28.4 million preference share dividends and \$0.8 million of non-controlling interest. Fully diluted earnings per ordinary share were \$3.97 for the nine months ended September 30, 2016 compared to \$2.80 for the equivalent period in 2015.

Investment gains. Realized and unrealized investment gains for the nine months ended September 30, 2016 were \$103.3 million (2015 — \$13.6 million loss) comprising the amounts set out in the table below:

	Nine Months Ended September 30, 2016	Nine Months Ended September 30, 2015
	(\$ in millions)	
Available for sale:		
Fixed income maturities — gross realized gains	\$14.7	\$ 9.7
Fixed income maturities — gross realized (losses)	(4.6)	(1.4)
Equity securities — gross realized gains	—	31.9
Equity securities — gross realized (losses)	—	(3.0)
Cash and cash equivalents — gross realized gains	0.1	—
Cash and cash equivalents — gross realized (losses)	(0.5)	—
Trading:		
Fixed income securities — gross realized gains	9.5	3.8
Fixed income securities — gross realized (losses)	(6.9)	(3.8)
Equity securities — gross realized gains	23.3	36.2
Equity securities — gross realized (losses)	(22.2)	(25.4)
Catastrophe bonds	0.1	(0.1)
Net change in gross unrealized gains	89.8	(61.5)
Total realized and unrealized investment gains (losses)	\$103.3	\$ (13.6)

In the nine months ended September 30, 2016, we recorded a net change in gross unrealized gains of \$89.8 million driven by mark to market gains in both our fixed income and equity portfolios.

Other-than-temporary impairments. A security is impaired when its fair value is below its amortized cost. We review our aggregate investment portfolio, including equities, on an individual security basis for potential OTTI each quarter based on criteria including issuer-specific circumstances, credit ratings actions and general macro-economic conditions. The total OTTI charge for the nine months ended September 30, 2016 and 2015 was \$Nil. For a more detailed description of OTTI, please refer to Part II, Item 7, “Management’s Discussion and Analysis of Financial Condition and Results of Operations” in the Company’s 2015 Annual Report on Form 10-K filed with the SEC.

Other comprehensive income. We recorded an increase in our total other comprehensive income for the nine months ended September 30, 2016 of \$72.3 million (2015 — reduction of \$120.7 million), net of taxes. This is comprised of a \$102.0 million net unrealized gain on the available for sale investment portfolio (2015 — \$19.6 million net unrealized loss), a \$9.1 million reclassification of net realized gains to net income (2015 — \$33.1 million reclassified net realized gains), a net unrealized loss in foreign currency translation of \$19.3 million (2015 — \$70.2 million net unrealized loss) and a net unrealized loss on hedged derivative contracts of \$1.3 million (2015 — gain of \$2.2 million).

Non-controlling interest. In the nine months ended September 30, 2016, the change in the amount owed to the non-controlling interest in respect of Aspen Risk Management Limited, our U.K. regional property and casualty subsidiary was \$Nil (2015 — increase of \$0.8 million).

Dividends. The dividend on our ordinary shares increased from \$0.21 per ordinary share to \$0.22 per ordinary share on April 21, 2016. The dividend on our ordinary shares increased from \$0.20 per ordinary share to \$0.21 per ordinary share on April 22, 2015. Dividends paid on our ordinary and preference shares in the nine months ended September 30, 2016 were \$39.5 million and \$28.4 million, respectively (2015 — \$38.1 million and \$28.4 million).

Underwriting Results by Business Segments — Nine Months

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 nine months ended September 30, 2016 and 2015. The contributions of each business segment to gross written premiums in the nine months ended September 30, 2016 and 2015 were as follows:

Business Segment	Gross Written Premiums			
	Nine Months Ended September 30, 2016		Nine Months Ended September 30, 2015	
	(\$ in millions)	(% of gross written premiums)	(\$ in millions)	(% of gross written premiums)
Reinsurance	\$1,216.1	47.9 %	\$1,062.1	45.0 %
Insurance	1,324.8	52.1	1,300.4	55.0
Total	\$2,540.9	100.0 %	\$2,362.5	100.0 %

Reinsurance

Gross written premiums. Gross written premiums in our reinsurance segment for the nine months ended September 30, 2016 increased by 14.5% compared to the nine months ended September 30, 2015. The table below shows our gross written premiums for each line of business for the nine months ended September 30, 2016 and 2015, and the percentage change in gross written premiums for each line of business:

Lines of Business	Nine Months Ended		Nine Months Ended		% increase/ (decrease)
	September 30, 2016		September 30, 2015		
	(\$ in millions)	(\$ in millions)	(\$ in millions)	(\$ in millions)	
Property catastrophe reinsurance	\$ 272.6	\$ 270.2	0.9	%	
Other property reinsurance	264.7	299.1	(11.5)	%	
Casualty reinsurance	263.7	241.6	9.1	%	
Specialty reinsurance	415.1	251.2	65.2	%	
Total	\$ 1,216.1	\$ 1,062.1	14.5	%	

Gross written premiums in our property catastrophe business lines increased marginally compared to the prior year due to new business opportunities which were written in conjunction with an increase in retrocession costs which offset reductions in business written due to challenging market conditions. The decrease in other property reinsurance was largely due to challenging market conditions and adjustments in prior year premium estimates on proportional contracts. The increase in our casualty reinsurance lines of business was largely due to growth in our U.S. casualty treaty and international casualty business lines. The increase in our specialty reinsurance business was due to growth in agriculture business written following our acquisition of AgriLogic and favorable premium adjustments from prior years.

Losses and loss adjustment expenses. The loss ratio for the nine months ended September 30, 2016 was 55.2% compared to 48.8% in the equivalent period in 2015 due largely to a \$50.3 million increase in catastrophe losses, changes in business mix towards lines which have higher non-catastrophe loss ratios and a \$1.3 million reduction in reserve releases. In the first nine months of 2016, we experienced \$77.2 million of natural catastrophe losses, net of reinsurance recoveries, including \$35.9 million associated with the wildfires in Canada, \$26.0 million from weather-related events in the U.S., \$7.5 million from an earthquake in Japan, \$3.4 million from a hailstorm in the Netherlands and \$2.2 million from an earthquake in Taiwan. In the comparable period in 2015 we experienced a loss of \$27.0 million of losses associated with the port explosion in Tianjin, China and \$26.9 million of natural catastrophe losses, including \$7.0 million from the wildfires in the U.S. State of Washington and \$18.9 million of other losses

associated with the earthquake in Chile and weather-related events in the U.S., Europe, New Zealand and Australia. Reserve releases decreased from \$53.4 million in the first nine months of 2015 to \$52.1 million in the current period. 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 \$163.1 million for the nine months ended September 30, 2016 equivalent to 18.2% of net premiums earned compared to \$168.6 million, or 21.0% of net premiums earned, in the equivalent period in 2015. The decrease in the acquisition ratio is due to the receipt of FET refunds and changes in business mix toward agriculture and specialty marine business lines, which have lower average commission rates and away from other property, casualty and specialty business written on a pro rata basis which have higher average rates.

The general and administrative expense ratio of 14.6% increased from 12.8% for the same period in 2015 due predominantly to costs associated with our acquisition of AgriLogic.

Insurance

Gross written premiums. Gross written premiums in our insurance segment for the nine months ended September 30, 2016 increased by 1.9% compared to the nine months ended September 30, 2015. The table below shows our gross written premiums for each line of business for the nine months ended September 30, 2016 and 2015, and the percentage change in gross written premiums for each line:

Lines of Business	Nine Months Ended September 30, 2016 (\$ in millions)	Nine Months Ended September 30, 2015 (\$ in millions)	% increase/ (decrease)
Property and casualty insurance	\$ 668.8	\$ 676.7	(1.2)%
Marine, aviation and energy insurance	307.8	320.2	(3.9)%
Financial and professional lines insurance	348.2	303.5	14.7 %
Total	\$ 1,324.8	\$ 1,300.4	1.9 %

The decrease in gross written premiums in property and casualty insurance is largely attributable to reductions in our global casualty, U.S. casualty and U.S. environmental business lines offset by growth in our U.S. excess casualty and railroad insurance business lines. The decrease in gross written premiums in marine, aviation and energy insurance is largely due to challenging market conditions in our marine and energy liability, U.S. inland marine, offshore energy, and energy and construction insurance business lines offset by growth in our ocean cargo and aviation insurance business lines. The increase in gross written premiums in financial and professional insurance is largely attributable to growth in our accident and health, credit and political risks, management liability and financial institutions business lines.

Losses and loss adjustment expenses. The loss ratio for the first nine months of 2016 remained the same at 61.5% for the comparable period in 2015 largely due to higher catastrophe losses and a reduction in reserve releases offset by fewer large losses. In the first nine months of 2016, there were \$34.6 million of catastrophe losses associated with U.S. weather-related events compared to \$17.6 million in the first nine months of 2015. Large losses in the first nine months of 2016 included \$29.6 million of energy-related losses, \$11.8 million of fire-related losses and a \$4.2 million aviation loss. In the comparative period of 2015, there were large losses including \$23.6 million from fire and weather-related events in the U.S., \$37.6 million of energy-related losses, \$5.0 from a train derailment and \$3.0 million of losses from the port explosion in Tianjin, China. Prior year reserve releases decreased by \$18.1 million from \$44.2 million in the first nine months of 2015 to \$26.1 million in the current period. The reserve releases in the nine-month period were principally from our marine, aviation and energy lines most notably our energy physical damage offsetting adverse development in our property and casualty lines of business. The release in the comparative period in 2015 came primarily from our property and casualty lines, most notably excess casualty, U.K. commercial and U.S. property business lines offsetting adverse development in our marine, aviation and energy lines of business. 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 for the nine months ended September 30, 2016 increased to 19.9% of net premiums earned compared to 18.9% in the comparable period in 2015 due largely to lower over-rider commissions. Our general and administrative expenses in the first nine months of 2016 increased by \$21.9 million to \$173.7 million from \$151.8 million in the comparable period of 2015 predominantly due to costs associated with growth in our insurance business.

Cash and Investments

As at September 30, 2016 and December 31, 2015, total cash and investments were \$9.3 billion and \$8.8 billion, respectively. The composition of our investment portfolio is summarized below:

	As at September 30, 2016		As at December 31, 2015	
	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	\$1,086.4	11.7 %	\$1,123.1	12.7 %
U.S. agency	127.3	1.4	158.7	1.8
Municipal	26.2	0.3	26.6	0.3
Corporate	2,790.8	29.9	2,660.6	30.4
Non-U.S. government-backed corporate	82.4	0.9	82.1	0.9
Foreign government	583.1	6.3	644.2	7.3
Asset-backed	69.1	0.7	76.0	0.9
Non-agency commercial mortgage-backed	15.5	0.2	26.7	0.3
Agency mortgage-backed	1,183.9	12.6	1,153.1	13.1
Total fixed income securities — available for sale	\$5,964.7	64.0 %	\$5,951.1	67.7 %
Fixed income securities — trading				
U.S. government	44.4	0.5	27.3	0.3
U.S. agency	—	—	—	—
Municipal	4.9	—	0.5	—
Corporate	677.0	7.3	558.2	6.3
Foreign government	213.1	2.3	179.5	2.0
Asset-backed	15.5	0.2	20.5	0.2
Mortgage-backed securities	42.0	0.5	—	—
Bank loans	—	—	2.0	—
Total fixed income securities — trading	\$996.9	10.9 %	\$788.0	8.8 %
Total other investments	13.0	0.1	8.9	0.1
Total catastrophe bonds — trading	17.8	0.2	55.4	0.6
Total equity securities — trading	797.7	8.6	736.4	8.4
Total short-term investments — available for sale	169.1	1.8	162.9	1.8
Total short-term investments — trading	169.6	1.8	9.5	0.1
Total cash and cash equivalents	1,183.3	12.6	1,099.5	12.5
Total cash and investments	\$9,312.1	100.0 %	\$8,811.7	100.0 %

Fixed Income Securities. As at September 30, 2016, the average credit quality of our fixed income portfolio was “AA-,” with 88.9% of the portfolio rated “A” or higher. As at December 31, 2015, the average credit quality of our fixed income portfolio was “AA-,” with 88.8% 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 lowest rating was used. Our fixed income portfolio duration as at September 30, 2016 was 3.64 years compared to 3.65 years as at December 31, 2015 (December 31, 2015 – 3.57 years including the impact of the interest rate swaps).

Mortgage-Backed Securities. The following table summarizes the fair value of our mortgage-backed securities by rating and class as at September 30, 2016. Our mortgage-backed portfolio is supported by loans diversified across a number of geographic and economic sectors.

	AAAAA and Below		Total
	(\$ in millions)		
Agency	\$—	\$ 1,225.9	\$1,225.9
Non-agency commercial	1.2	14.3	15.5
Total mortgage-backed securities	\$1.2	\$ 1,240.2	\$1,241.4

Equity Securities. Equity securities are comprised of U.S. and foreign equity securities and in prior periods were classified as available for sale or trading. As a result of rebalancing equity investments across subsidiary company balance sheets, a portion of equities were sold that were classified as available for sale, with a commensurate purchase of equities designated as trading securities. As a result, there was a realized investment gain of \$28.9 million on this sale in 2015. The total investment return from the available for sale and trading equity portfolios for the three and nine months ended September 30, 2016 and 2015 was as follows:

	For the Three Months Ended		For the Nine Months Ended	
	September 30, 2016	September 30, 2015	September 30, 2016	September 30, 2015
	(\$ in millions)		(\$ in millions)	
Available for Sale Equity Portfolio				
Dividend income	\$ —	\$ —	—	\$ 0.1
Net realized investment gains	—	—	—	31.5
Net unrealized (losses), gross of tax	—	—	—	(31.5)
Net realized foreign exchange (losses)	—	—	—	(5.5)
Net unrealized foreign exchange gains	—	—	—	4.2
Total investment (loss)/return from the available for sale equity portfolio	\$ —	\$ —	—	\$ (1.2)

	For the Three Months Ended		For the Nine Months Ended	
	September 30, 2016	September 30, 2015	September 30, 2016	September 30, 2015
	(\$ in millions)		(\$ in millions)	
Trading Equity Portfolio				
Dividend income	\$5.5	\$ 4.6	\$17.9	\$ 16.5
Net realized investment gains	6.5	2.9	9.9	27.8
Net unrealized gains/(losses), gross of tax	4.0	(28.0)	37.6	(49.9)
Net realized foreign exchange (losses)	(2.8)	(5.4)	(9.0)	(15.8)
Net unrealized foreign exchange gains/(losses)	2.1	(5.2)	9.4	(2.3)
Total investment (loss)/return from the trading equity portfolio	\$15.3	\$ (31.1)	\$65.8	\$ (23.7)

Interest rate swaps. On May 9, 2016, we terminated the remainder of our interest rate swap program. As at September 30, 2016, the interest rate swaps program had a notional value of \$Nil compared with \$756.3 million at December 31, 2015. For the nine months ended September 30, 2016, there was a charge in respect of the interest rate swaps of \$3.3 million which consisted of a \$9.9 million mark to market gain less \$13.0 million of net interest payments. For more information on our terminated interest rate swaps, refer to Note 10 “Derivative Contracts — Interest Rate Swaps” of the consolidated condensed unaudited financial statements contained in this report.

European Fixed Income and Equity Exposures. As at September 30, 2016, we had \$984.7 million, or 10.6% of our total cash and investments, invested in securities issued by European issuers, including the U.K. Our European exposures consisted of sovereigns, agencies, government guaranteed bonds, covered bonds, corporate bonds and

equities. We have no exposure to the sovereign debt of Greece, Ireland, Italy, Portugal or Spain (“GIIPS”). We manage our European fixed income exposures by proactively adapting our investment guidelines to our views on the European debt crisis. We continue to prohibit purchases of GIIPS, Belgian sovereign and guaranteed debt, peripheral European bank debt and corporate bonds issued by companies domiciled in GIIPS countries. We may purchase bonds issued by U.K and non-peripheral European select corporate financial issuers.

The tables below summarize our European holdings by country (Eurozone and non-Eurozone), rating and sector as at September 30, 2016. Equity investments included in the table below are not rated (“NR”). Where the credit ratings were split between the two main rating agencies, S&P and Moody’s, the lowest rating was used.

As at September 30, 2016 by Ratings

Country	AAA	AA	A	BBB	BB	NR	Market Value	Market Value %
(\$ in millions except percentages)								
Austria	\$—	\$10.3	\$—	\$—	\$—	\$—	\$10.3	1.1 %
Belgium	—	—	24.6	—	—	7.9	32.4	3.3
Czech Republic	—	—	—	—	—	0.2	0.2	—
Denmark	4.5	—	—	0.8	—	6.4	11.7	1.2
Finland	—	15.5	—	—	—	11.0	26.5	2.7
France	—	22.3	38.2	1.0	—	15.4	76.9	7.8
Germany	37.3	16.9	70.2	16.3	—	17.8	158.5	16.1
Ireland	—	—	—	—	—	0.3	0.3	—
Latvia	—	—	—	—	—	—	—	—
Lithuania	—	—	3.5	—	—	—	3.5	0.4
Luxembourg	—	—	—	0.3	—	—	0.3	—
Netherlands	19.1	—	41.6	8.5	—	—	69.3	7.0
Norway	3.9	—	13.3	0.4	—	—	17.6	1.8
Poland	—	—	—	9.4	—	0.1	9.5	1.0
Romania	—	—	—	7.0	—	—	7.0	0.7
Sweden	—	13.8	—	1.0	—	9.1	24.0	2.4
Switzerland	6.3	24.8	18.3	5.2	—	69.8	124.4	12.6
United Kingdom	10.9	186.5	62.9	45.3	—	106.7	412.3	41.9
Total European Exposures	\$82.0	\$290.1	\$272.6	\$95.2	\$—	-\$244.7	\$984.7	100.0%

Edgar Filing: ASPEN INSURANCE HOLDINGS LTD - Form 10-Q

As at September 30, 2016 by Sectors

Country	Sovereign	ABS	Government Guaranteed Bonds	Agency	Local Government	Corporate Financial Issuers	Corporate Non- Financial Issuers	Covered Bonds	Equity	Market Value	Unrealized Pre-tax Gain/(Loss)
(\$ in millions except percentages)											
Austria	\$3.1	\$—	\$ 7.3	\$—	\$ —	\$ —	\$ —	\$—	\$—	\$10.3	\$ 0.2
Belgium	—	—	—	—	—	—	24.6	—	7.9	32.4	2.7
Czech Republic	—	—	—	—	—	—	—	—	0.2	0.2	—
Denmark	—	—	—	—	4.5	—	0.8	—	6.4	11.7	(0.5)
Finland	8.8	—	—	—	6.7	—	—	—	11.0	26.5	3.3
France	1.5	—	5.5	23.1	—	6.4	25.0	—	15.4	76.9	0.1
Germany	7.2	—	27.7	6.0	11.8	—	88.0	—	17.8	158.5	4.8
Ireland	—	—	—	—	—	—	—	—	0.3	0.3	0.1
Latvia	—	—	—	—	—	—	—	—	—	—	—
Lithuania	3.5	—	—	—	—	—	—	—	—	3.5	—
Luxembourg	—	—	—	—	—	—	0.3	—	—	0.3	—
Netherlands	—	—	—	20.2	—	16.0	33.0	—	—	69.3	2.0
Norway	—	—	—	17.2	—	—	0.4	—	—	17.6	0.7
Poland	9.4	—	—	—	—	—	—	—	0.1	9.5	0.3
Romania	7.0	—	—	—	—	—	—	—	—	7.0	0.5
Sweden	—	—	—	7.1	—	7.7	—	—	9.1	24.0	1.1
Switzerland	6.3	—	—	—	—	7.8	40.5	—	69.8	124.4	7.3
United Kingdom	183.7	0.5	2.8	—	—	13.5	94.2	10.9	106.7	412.3	28.7
Total European Exposures	\$230.5	\$0.5	\$ 43.3	\$ 73.6	\$ 23.0	\$ 51.4	\$ 306.8	\$ 10.9	\$244.7	\$984.7	\$ 51.3

Reserves for Losses and Loss Adjustment Expenses

As at September 30, 2016, we had total net loss and loss adjustment expense reserves of \$4,826.8 million (December 31, 2015 — \$4,583.4 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 September 30, 2016 and December 31, 2015, respectively:

As at September 30, 2016

Business Segment	Gross	Reinsurance Recoverable	Net
(\$ in millions)			
Reinsurance	\$2,561.0	\$ (65.6)	\$2,495.4
Insurance	2,685.6	(354.2)	2,331.4
Total losses and loss expense reserves	\$5,246.6	\$ (419.8)	\$4,826.8

As at December 31, 2015

Business Segment	Gross	Reinsurance Recoverable	Net
(\$ in millions)			
Reinsurance	\$2,441.9	\$ (32.4)	\$2,409.5
Insurance	2,496.3	(322.4)	2,173.9
Total losses and loss expense reserves	\$4,938.2	\$ (354.8)	\$4,583.4

For the nine months ended September 30, 2016, there was a reduction of our estimate of the ultimate net claims to be paid in respect of prior accident years of \$78.2 million. An analysis of this reduction by business segment is as follows for the three and nine months ended September 30, 2016 and 2015:

Business Segment	For the Three Months Ended		For the Nine Months Ended	
	September 30, 2016	September 30, 2015	September 30, 2016	September 30, 2015
	(\$ in millions)		(\$ in millions)	
Reinsurance	\$20.1	\$ 16.1	\$52.1	\$ 53.4
Insurance	15.3	22.9	26.1	44.2
Total losses and loss expense reserves reductions	\$35.4	\$ 39.0	\$78.2	\$ 97.6

The key elements which gave rise to the net positive development during the three months ended September 30, 2016 were as follows:

Reinsurance. Net reserve releases were \$20.1 million in the current quarter. Reserve releases in the quarter were as a result of favorable development across all of our reinsurance lines, the largest of which were from our other property and casualty reinsurance business lines due to better than expected development.

Insurance. Net reserve releases were \$15.3 million in the current quarter. The largest releases in the quarter were from marine, aviation and energy and financial and professional lines due to better than expected development offset by adverse development in our property and casualty lines of business.

The key elements which gave rise to the net positive development during the nine months ended September 30, 2016 were as follows:

Reinsurance. Net reserve releases were \$52.1 million in the period. The largest releases in the period were from our other property, casualty and specialty reinsurance lines due to better than expected development.

Insurance. Net reserve releases were \$26.1 million in the period. The largest releases in the period were from marine, aviation and energy and financial and professional lines due to better than expected development offset by adverse development in our property and casualty lines of business.

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 2015 Annual Report on Form 10-K filed with the SEC.

Capital Management

The following table shows our capital structure as at September 30, 2016 compared to December 31, 2015:

	As at September 30, 2016	As at December 31, 2015
	(\$ in millions)	
Share capital, additional paid-in capital, retained income and accumulated other comprehensive income attributable to ordinary shareholders	\$3,107.0	\$ 2,864.1
Preference shares (liquidation preferences net of issue costs)	797.1	555.8
Long-term debt	549.3	549.2
Loan notes issued by variable interest entities ⁽¹⁾	115.0	190.6
Total capital	\$4,568.4	\$ 4,159.7

⁽¹⁾ We do not consider the loan notes issued by VIEs to be part of our permanent capital as the noteholders have no recourse to the other assets of the Company.

As at September 30, 2016, total shareholders’ equity was \$3,904.1 million compared to \$3,557.1 million as at December 31, 2015. Our total shareholders’ equity as at September 30, 2016 includes three classes of preference shares with a total value as measured by their respective liquidation preferences of \$797.1 million net of share issuance costs

(December 31, 2015 — \$555.8 million).

On September 20, 2016, we issued 10,000,000 shares of 5.625% Perpetual Non-Cumulative Preference Shares with a liquidation preference of \$25 per share (the "5.625% Preference Shares"). Net proceeds were \$241.3 million, comprising \$250.0 million of total liquidation preference less \$8.7 million of issue expenses. The 5.625% Preference Shares have no stated maturity but are callable at our option on or after the 10 year anniversary of the date of issuance.

63

On April 21, 2016, we announced a 5% increase in our quarterly dividend to our ordinary shareholders from \$0.21 per ordinary share to \$0.22 per ordinary share. On April 22, 2015, we announced a 5% increase in our quarterly dividend to our ordinary shareholders from \$0.20 per ordinary share to \$0.21 per ordinary share.

We acquired and cancelled 144,289 and 1,122,328 ordinary shares, respectively, in the three and nine months ended September 30, 2016. The total consideration paid was \$6.5 million and \$50.0 million, respectively, with an average price per ordinary share for the three and nine months ended September 30, 2016 of \$45.17 and \$44.55, respectively. As at September 30, 2016, we had \$366.3 million remaining under our current share repurchase authorization of \$500.0 million granted on February 5, 2015.

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. As at September 30, 2016, this ratio was 32.0% (December 31, 2015 — 31.1%).

Our senior notes are the only material debt issued by Aspen Holdings currently outstanding. As at September 30, 2016 and December 31, 2015, the value of the debt less amortization expenses was \$549.3 million and \$549.2 million, respectively. Management monitors the ratio of debt to total capital which was 14.5% as at September 30, 2016 (December 31, 2015 — 17.8%).

In addition to the senior notes issued by Aspen Holdings, Silverton has also issued Loan Notes. The fair value of the Loan Notes as at September 30, 2016 was \$115.0 million (December 31, 2015 — \$190.6 million). For further information relating to Silverton, refer to Note 7 of the “Notes to the Audited Consolidated Financial Statements” in the Company’s 2015 Annual Report on Form 10-K filed with the SEC and Note 7 of the consolidated condensed unaudited 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 \$3,904.1 million as at September 30, 2016 (December 31, 2015 — \$3,419.9 million). We believe our financial strength provides us with the flexibility and capacity to obtain funds through debt or equity financing. Our 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 September 30, 2016, Aspen Holdings held \$337.5 million of cash, cash equivalents and investments (December 31, 2015 — \$136.2 million) with the increase largely due to the issuance of the 5.625% Perpetual Shares, comprising \$250.0 million of total liquidation preference less \$8.7 million of issuance expenses. This was offset by the \$52.7 million acquisition cost for AgriLogic and the \$50.0 million cost for the repurchase of ordinary shares in the first nine months of 2016. 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. On October 21, 2013, and 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., requested that it be afforded the opportunity to provide a prior “non-objection” to all future dividend payments made by Aspen U.K. 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 2015 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 16 of the “Notes to the Audited Consolidated Financial Statements” in our 2015 Annual Report on Form 10-K filed with the SEC.

Operating Subsidiaries. As at September 30, 2016, the Operating Subsidiaries held \$898.7 million (December 31, 2015 — \$1,136.4 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 September 30, 2016 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.

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 2015 Annual Report on Form 10-K filed with the SEC.

Consolidated Cash Flows for the Nine Months Ended September 30, 2016. Total net cash flow from operations for the nine months ended September 30, 2016 was \$379.8 million, an increase of \$16.1 million from the comparative period in 2015. The increase is mainly attributable to growth in our business. For the nine months ended September 30, 2016, our cash flow from operations provided us with sufficient liquidity to meet our operating requirements.

Letter of Credit Facilities. For information relating to our credit facilities, refer to Note 16 of the consolidated condensed unaudited financial statements 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 September 30, 2016:

	2016	2017	2018	2019	2020	Later Years	Total
	(\$ in millions)						
Operating Lease Obligations	\$3.3	\$16.1	\$15.3	\$14.0	\$9.9	\$88.4	\$147.0
Long-Term Debt Obligations ⁽¹⁾	—	—	—	—	250.0	300.0	550.0
Reserves for losses and LAE ⁽²⁾	431.3	1,203.3	876.4	651.5	455.3	1,628.8	5,246.6
Total	\$434.6	\$1,219.4	\$891.7	\$665.5	\$715.2	\$2,017.2	\$5,943.6

The long-term debt obligations disclosed above do not include the \$29.0 million annual interest payments on our ⁽¹⁾ outstanding senior notes or \$37.8 million dividends payable to holders of our preference shares or the Loan Notes issued by Silverton in the amount of \$115.0 million.

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 and there could be a material acceleration or deceleration of claims payments depending on factors ⁽²⁾ 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 the Company's 2015 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 2015 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 for the three and nine months ended September 30, 2016 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 September 30, 2016, 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, and we may from time to time make other verbal or written, 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 involve risks and uncertainties, including statements regarding our capital needs, business strategy, expectations and intentions. Statements that use the terms “believe,” “do not believe,” “anticipate,” “expect,” “assume,” “objective,” “target,” “could,” “would,” “should,” “plan,” “estimate,” “outlook,” “trends,” “future,” “seek,” “will,” “may,” “aim,” “likely,” “continue,” “intend,” “guidance,” “on track,” and similar are intended to identify forward-looking statements. These statements reflect our current views with respect to future events and because our business is subject to numerous risks, uncertainties and other factors, our actual results could differ materially from those anticipated in the forward-looking statements. The risks, uncertainties and other factors set forth in our 2015 Annual Report on Form 10-K filed with the SEC and other cautionary statements made in this report, as well as the factors set forth below, should be read and understood as being applicable to all related forward-looking statements wherever they appear in this report.

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 uncertainties and other factors, many of which are outside our control that could cause actual results to differ materially from such statements.

All forward-looking statements address matters that involve risks and uncertainties. Accordingly, there are or will be important factors that could cause actual results to differ materially from those indicated in these 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 filed with the United States SEC and the following:

- 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 impact of the vote and resulting negotiations as a result of the vote by the U.K. electorate in favor of a U.K. exit from the E.U. in the recent referendum;
- the reliability of, and changes in assumptions to, natural and man-made catastrophe pricing, accumulation and estimated loss models;
- 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 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 insurers and reinsurers 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 (re)insurance industry;
loss of one or more of our senior underwriters or key personnel;

67

- changes in our ability to exercise capital management initiatives (including our share repurchase program) or to arrange banking facilities as a result of prevailing market conditions 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;
- 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 adjusters, 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;
- the continuing and uncertain impact of the current depressed lower growth economic environment in many of the countries in which we operate;
- 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;
- a decline in our Operating Subsidiaries' ratings with S&P, A.M. Best or Moody's;
- 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, the banking system and the Eurozone crisis;
- 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 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. 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 rate changes described in "Management's Discussion and Analysis of Financial Condition and Results of Operations — Outlook and Trends" reflect management's assessment of changes in exposure-adjusted rates on renewals only. This does not include contracts with fundamental changes to terms and conditions. The calculation involves a degree of judgment in relation to comparability of contracts in the different business lines. Due to changes in assumptions underlying the pricing of contracts, the trends in premium rates reflected in our outlook and trends may not be comparable over time. The future profitability of each business line is dependent upon many factors besides the trends in premium rates.

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 disclose any difference between our actual results and those reflected in such statements.

68

If one or more of these or other risks or uncertainties materialize, or if our underlying assumptions prove to be incorrect, actual results may vary materially from what we projected. All forward-looking statements in this report reflect our current views with respect to future events and are subject to these and other risks, uncertainties and assumptions relating to our operations, results of operations, growth strategy and liquidity. All subsequent written and oral forward-looking statements attributable to us or individuals acting on our behalf are expressly qualified in their entirety by the points made above. You should specifically consider the factors identified in this report which could cause actual results to differ before making an investment decision.

Reconciliation of Non-U.S. GAAP Financial Measures

Net income available to ordinary shareholders', a non-U.S. GAAP financial measure, is calculated as net income for the period less the amount attributable to non-controlling interest and dividends on preference shares during the period.

	Three Months Ended September 30, 2016	Three Months Ended September 30, 2015
	(\$ in millions)	
Net income	\$95.6	\$ 28.2
Amount attributable to non-controlling interest	0.2	(0.3)
Dividends on preference shares	(9.5)	(9.5)
Net income available to ordinary shareholders'	\$86.3	\$ 18.4

Average ordinary shareholders' equity, a non-U.S. GAAP financial measure, is calculated as the arithmetic average on a monthly basis for the stated periods of shareholders' equity excluding the aggregate value of the liquidation preferences of our preference shares, net of issuance costs, and the total amount of non-controlling interest.

	Three Months Ended September 30, 2016	Three Months Ended September 30, 2015
	(\$ in millions)	
Total shareholders' equity	\$3,904.1	\$ 3,371.3
Total non-controlling interest	(1.3)	(1.3)
Total preference shares	(797.1)	(555.8)
Average adjustment	(23.1)	(3.7)
Average ordinary shareholders' equity	\$3,082.6	\$ 2,810.5

Annualized net income return on average equity, a non-U.S. GAAP financial measure, is calculated by dividing net income available to ordinary shareholders' by average ordinary shareholders' equity and annualizing the product.

Item 3. Quantitative and Qualitative Disclosures about Market Risk

Interest rate 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. Our strategy for managing interest rate risk includes maintaining a high quality portfolio with a relatively short duration to reduce the effect of interest rate changes on market value. On May 9, 2016, we terminated our interest rate swap program which aimed to partially mitigate our exposure to interest rate. For more information on the terminated interest rate swaps, refer to Item 2 “Cash and Investments — Interest rate swaps” above.

As at September 30, 2016, our fixed income portfolio had an approximate duration of 3.64 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 \$ in millions	7,651.8	7,517.5	7,383.1	7,248.7	7,114.3
Gain/(loss) \$ in millions	268.7	134.4	—	(134.4)	(268.8)
Percentage of portfolio	3.6	% 1.8	% —	% (1.8)	% (3.6)

Equity risk. We have invested in equity securities which had a fair market value of \$797.7 million as at September 30, 2016, equivalent to 8.6% of the total of investments, cash and cash equivalents at that date (December 31, 2015 — \$736.4 million, 8.4%). These equity investments are exposed to equity price risk, defined as the potential for loss in market value due to a decline in equity prices. We believe that the effects of diversification and the relatively small size of our investments in equities relative to total invested assets mitigate our exposure to equity price risk.

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 September 30, 2016, 88.7% (December 31, 2015 — 88.7%) of our cash, cash equivalents and investments were held in U.S. Dollars, 5.0% (December 31, 2015 — 5.1%) were in British Pounds and 6.3% (December 31, 2015 — 6.2%) were in other currencies. For the nine months ended September 30, 2016, 18.7% (December 31, 2015 — 15.3%) 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 2016.

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 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 September 30, 2016 would have impacted our net reportable British Pound net assets by approximately \$12.7 million for the nine months ended September 30, 2016 (September 30, 2015 — approximately \$4.0 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 for the three and nine months ended September 30, 2016 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 predominantly 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 September 30, 2016, the average rating of fixed income securities in our investment portfolio was “AA-” (December 31, 2015 — “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 Commission 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 and nine months ended September 30, 2016. 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 and nine months ended September 30, 2016 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 the Company’s risk factors as discussed in the Company’s Annual Report on Form 10-K for the year ended December 31, 2015 and Quarterly Report on Form 10-Q for the quarter ended June 30, 2016, each filed with the United States Securities and Exchange Commission. 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

The following table provides information about purchases by the Company during the quarter ended September 30, 2016 of the Company’s ordinary shares.

	Total Number of Shares (or Units) Purchased	Weighted Average Price Paid per Share (or Unit)	Total Number of Shares (or Units) Purchased as Part of Publicly Announced Plans or Programs	Maximum Number (or Approximate Dollar Value) of Shares (or Units) That May Yet Be Purchased Under the Plans or Programs (\$ in millions)
July 1, 2016 to July 31, 2016	144,289	\$ 45.17	144,289	\$ 366.3
August 1, 2016 to August 31, 2016	—	\$ —	—	\$ —
September 1, 2016 to September 30, 2016	—	\$ —	—	\$ —
Total ⁽¹⁾	144,289	\$ —	144,289	\$ 366.3

During the third quarter of 2016, the Company repurchased 144,289 ordinary shares in the open market pursuant to (1)a 10b5-1 plan. The Company had \$366.3 million remaining under its current share buyback authorization as at September 30, 2016.

Item 3. Defaults Upon Senior Securities

None.

Item 4. Mine Safety Disclosures

None.

Item 5. Other Information

Disclosure of Certain Activities Relating to Iran

73

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 September 30, 2016, 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
----------------	-------------

- | | |
|------|---|
| 3.1 | Certificate of Designation of 5.625% Perpetual Non-Cumulative Preference Shares (incorporated herein by reference to Exhibit 3.1 to the Company's Current Report on Form 8-K filed on September 21, 2016). |
| 4.1 | Form of stock certificate evidencing the 5.625% Perpetual Non-Cumulative Preference Shares (incorporated herein by reference to Exhibit 4.1 to the Company's Current Report on Form 8-K filed on September 21, 2016). |
| 31.1 | <u>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.</u> |
| 31.2 | <u>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.</u> |
| 32.1 | <u>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.</u> |
| 101 | The following financial information from Aspen Insurance Holdings Limited's quarterly report on Form 10-Q for the quarter and nine months ended September 30, 2016 formatted in XBRL: (i) Unaudited Condensed Consolidated Balance Sheets at September 30, 2016 and December 31, 2015; (ii) Unaudited Condensed Consolidated Statements of Operations and Other Comprehensive Income for the three and nine months ended September 30, 2016 and 2015; (iii) Unaudited Condensed Consolidated Statements of Shareholders' Equity for the nine months ended September 30, 2016 and 2015; (iv) Unaudited Condensed Consolidated Statements of Cash Flows for the nine months ended September 30, 2016 and 2015; 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: November 7, 2016 By: /s/ Christopher O'Kane
Christopher O'Kane
Chief Executive Officer

Date: November 7, 2016 By: /s/ Scott Kirk
Scott Kirk
Chief Financial Officer