

ARCH CAPITAL GROUP LTD.

Form 10-Q

November 09, 2015

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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 period ended September 30, 2015

Or

TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE  
ACT OF 1934

Commission file number: 001-26456

ARCH CAPITAL GROUP LTD.  
(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.)

Waterloo House, Ground Floor  
100 Pitts Bay Road, Pembroke HM 08  
(Address of principal executive offices)

(441) 278-9250  
(Registrant's telephone number, including area code)

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 period 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.

Large accelerated Filer  Accelerated Filer  Non-accelerated Filer  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

As of October 30, 2015, there were 122,450,741 common shares, \$0.0033 par value per share, of the registrant outstanding.

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Report of Independent Registered Public Accounting Firm

To the Board of Directors and Shareholders of  
Arch Capital Group Ltd.:

We have reviewed the accompanying consolidated balance sheet of Arch Capital Group Ltd. and its subsidiaries (the “Company”) as of September 30, 2015, and the related consolidated statements of income and comprehensive income for the three-month and nine-month periods ended September 30, 2015 and September 30, 2014, and the consolidated statements of changes in shareholders’ equity and cash flows for the nine-month periods ended September 30, 2015 and September 30, 2014. These interim financial statements are the responsibility of the Company’s management.

We conducted our review in accordance with the standards of the Public Company Accounting Oversight Board (United States). A review of interim financial information consists principally of applying analytical procedures and making inquiries of persons responsible for financial and accounting matters. It is substantially less in scope than an audit conducted in accordance with the standards of the Public Company Accounting Oversight Board (United States), the objective of which is the expression of an opinion regarding the financial statements taken as a whole. Accordingly, we do not express such an opinion.

Based on our review, we are not aware of any material modifications that should be made to the accompanying consolidated interim financial statements for them to be in conformity with accounting principles generally accepted in the United States of America.

We previously audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States), the consolidated balance sheet as of December 31, 2014, and the related consolidated statements of income, comprehensive income, changes in shareholders’ equity, and cash flows for the year then ended (not presented herein), and in our report dated February 27, 2015, we expressed an unqualified opinion on those consolidated financial statements. In our opinion, the information set forth in the accompanying consolidated balance sheet information as of December 31, 2014, is fairly stated in all material respects in relation to the consolidated balance sheet from which it has been derived.

/s/ PricewaterhouseCoopers LLP

New York, New York  
November 9, 2015

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CONSOLIDATED BALANCE SHEETS

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

	(Unaudited)	
	September 30, 2015	December 31, 2014
Assets		
Investments:		
Fixed maturities available for sale, at fair value (amortized cost: \$10,550,931 and \$10,701,557)	\$ 10,560,635	\$ 10,750,770
Short-term investments available for sale, at fair value (amortized cost: \$711,390 and \$801,758)	708,428	797,226
Collateral received under securities lending, at fair value (amortized cost: \$282,783 and \$40,473)	286,659	44,301
Equity securities available for sale, at fair value (cost: \$575,292 and \$562,534)	606,259	658,182
Other investments available for sale, at fair value (cost: \$245,356 and \$264,747)	281,014	296,224
Investments accounted for using the fair value option	2,783,165	2,425,053
Investments accounted for using the equity method	589,277	349,014
Total investments	15,815,437	15,320,770
Cash	649,779	485,702
Accrued investment income	76,142	74,316
Securities pledged under securities lending, at fair value (amortized cost: \$285,979 and \$52,076)	285,632	50,802
Premiums receivable	1,074,884	948,695
Reinsurance recoverable on unpaid and paid losses and loss adjustment expenses	1,832,386	1,812,845
Contractholder receivables	1,436,154	1,309,192
Prepaid reinsurance premiums	442,346	377,078
Deferred acquisition costs, net	448,893	414,525
Receivable for securities sold	705,821	78,170
Goodwill and intangible assets	103,620	109,539
Other assets	899,498	1,024,447
Total assets	\$ 23,770,592	\$ 22,006,081
Liabilities		
Reserve for losses and loss adjustment expenses	\$ 9,084,855	\$ 9,036,448
Unearned premiums	2,467,691	2,231,578
Reinsurance balances payable	235,562	219,312
Contractholder payables	1,436,154	1,309,192
Collateral held for insured obligations	242,928	184,219
Deposit accounting liabilities	270,876	327,384
Senior notes	791,264	791,141
Revolving credit agreement borrowings	339,077	100,000
Securities lending payable	292,838	50,529
Payable for securities purchased	817,371	128,413
Other liabilities	649,910	509,219
Total liabilities	16,628,526	14,887,435
Commitments and Contingencies		

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Redeemable noncontrolling interests	205,089	219,512
Shareholders' Equity		
Non-cumulative preferred shares	325,000	325,000
Common shares (\$0.0033 par, shares issued: 172,903,518 and 171,672,408)	576	572
Additional paid-in capital	450,948	383,073
Retained earnings	7,317,277	6,854,571
Accumulated other comprehensive income, net of deferred income tax	9,809	128,856
Common shares held in treasury, at cost (shares: 50,464,964 and 44,304,474)	(1,940,795 )	(1,562,019 )
Total shareholders' equity available to Arch	6,162,815	6,130,053
Non-redeemable noncontrolling interests	774,162	769,081
Total shareholders' equity	6,936,977	6,899,134
Total liabilities, noncontrolling interests and shareholders' equity	\$23,770,592	\$22,006,081

See Notes to Consolidated Financial Statements

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## ARCH CAPITAL GROUP LTD. AND SUBSIDIARIES

## CONSOLIDATED STATEMENTS OF INCOME

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

	(Unaudited) Three Months Ended September 30,		(Unaudited) Nine Months Ended September 30,	
	2015	2014	2015	2014
Revenues				
Net premiums written	\$971,972	\$959,539	\$2,982,547	\$2,996,457
Change in unearned premiums	(35,289 )	(55,888 )	(192,162 )	(325,874 )
Net premiums earned	936,683	903,651	2,790,385	2,670,583
Net investment income	86,233	80,105	252,190	220,089
Net realized gains (losses)	(89,698 )	18,515	(42,075 )	92,356
Other-than-temporary impairment losses	(8,901 )	(8,593 )	(17,274 )	(26,313 )
Less investment impairments recognized in other comprehensive income, before taxes	3,033	—	4,494	—
Net impairment losses recognized in earnings	(5,868 )	(8,593 )	(12,780 )	(26,313 )
Other underwriting income	7,623	1,702	26,876	5,317
Equity in net income (loss) of investment funds accounted for using the equity method	(2,118 )	4,966	19,938	17,459
Other income (loss)	(265 )	(7,815 )	52	(5,069 )
Total revenues	932,590	992,531	3,034,586	2,974,422
Expenses				
Losses and loss adjustment expenses	531,741	501,673	1,544,883	1,423,431
Acquisition expenses	171,566	163,547	510,067	482,047
Other operating expenses	156,959	149,480	483,449	451,629
Interest expense	13,300	4,152	30,047	32,890
Net foreign exchange gains	(14,680 )	(56,031 )	(61,598 )	(47,174 )
Total expenses	858,886	762,821	2,506,848	2,342,823
Income before income taxes	73,704	229,710	527,738	631,599
Income tax expense	(9,704 )	(6,446 )	(29,162 )	(17,473 )
Net income	\$64,000	\$223,264	\$498,576	\$614,126
Amounts attributable to noncontrolling interests	16,033	5,411	(19,417 )	5,065
Net income available to Arch	80,033	228,675	479,159	619,191
Preferred dividends	(5,484 )	(5,484 )	(16,453 )	(16,453 )
Net income available to Arch common shareholders	\$74,549	\$223,191	\$462,706	\$602,738
Net income per common share				
Basic	\$0.62	\$1.69	\$3.79	\$4.56
Diluted	\$0.60	\$1.64	\$3.66	\$4.42
Weighted average common shares and common share equivalents outstanding				
Basic	120,567,410	131,945,962	122,151,971	132,151,824
Diluted	125,011,773	135,876,605	126,354,759	136,354,172

See Notes to Consolidated Financial Statements

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ARCH CAPITAL GROUP LTD. AND SUBSIDIARIES  
CONSOLIDATED STATEMENTS OF COMPREHENSIVE INCOME  
(U.S. dollars in thousands)

	(Unaudited) Three Months Ended September 30, 2015		(Unaudited) Nine Months Ended September 30, 2014	
Comprehensive Income				
Net income	\$64,000	\$223,264	\$498,576	\$614,126
Other comprehensive income (loss), net of deferred income tax				
Unrealized appreciation (decline) in value of available-for-sale investments:				
Unrealized holding gains (losses) arising during period	(53,891 )	(90,619 )	(51,522 )	89,162 )
Portion of other-than-temporary impairment losses recognized in other comprehensive income, net of deferred income tax	(3,033 )	—	(4,494 )	—
Reclassification of net realized (gains) losses, net of income taxes, included in net income	12,278	(17,483 )	(39,868 )	(47,017 )
Foreign currency translation adjustments	(12,082 )	(23,595 )	(23,259 )	(14,923 )
Comprehensive income	7,272	91,567	379,433	641,348
Amounts attributable to noncontrolling interests	16,129	5,411	(19,321 )	5,065
Comprehensive income available to Arch	\$23,401	\$96,978	\$360,112	\$646,413

See Notes to Consolidated Financial Statements

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ARCH CAPITAL GROUP LTD. AND SUBSIDIARIES  
CONSOLIDATED STATEMENTS OF CHANGES IN SHAREHOLDERS' EQUITY  
(U.S. dollars in thousands)

	(Unaudited)	
	Nine Months Ended	
	September 30,	
	2015	2014
Non-cumulative preferred shares		
Balance at beginning and end of period	\$325,000	\$325,000
Common shares		
Balance at beginning of year	572	565
Common shares issued, net	4	6
Balance at end of period	576	571
Additional paid-in capital		
Balance at beginning of year	383,073	299,517
Common shares issued, net	7,440	6,401
Exercise of stock options	12,363	14,891
Amortization of share-based compensation	46,575	45,118
Other	1,497	481
Balance at end of period	450,948	366,408
Retained earnings		
Balance at beginning of year	6,854,571	6,042,154
Net income	498,576	614,126
Amounts attributable to noncontrolling interests	(19,417	) 5,065
Preferred share dividends	(16,453	) (16,453
Balance at end of period	7,317,277	6,644,892
Accumulated other comprehensive income		
Balance at beginning of year	128,856	74,964
Unrealized appreciation in value of available-for-sale investments, net of deferred income tax:		
Balance at beginning of year	161,598	80,692
Unrealized holding (losses) gains arising during period, net of reclassification adjustment	(91,390	) 42,145
Portion of other-than-temporary impairment losses recognized in other comprehensive income, net of deferred income tax	(4,494	) —
Balance at end of period	65,714	122,837
Foreign currency translation adjustments:		
Balance at beginning of year	(32,742	) (5,728
Foreign currency translation adjustments	(23,163	) (14,923
Balance at end of period	(55,905	) (20,651
Balance at end of period	9,809	102,186
Common shares held in treasury, at cost		
Balance at beginning of year	(1,562,019	) (1,094,704
Shares repurchased for treasury	(378,776	) (263,307

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Balance at end of period	(1,940,795 )	(1,358,011 )
Total shareholders' equity available to Arch	6,162,815	6,081,046
Non-redeemable noncontrolling interests	774,162	782,020
Total shareholders' equity	\$6,936,977	\$6,863,066

See Notes to Consolidated Financial Statements

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ARCH CAPITAL GROUP LTD. AND SUBSIDIARIES  
CONSOLIDATED STATEMENTS OF CASH FLOWS  
(U.S. dollars in thousands)

	(Unaudited)	
	Nine Months Ended	
	September 30,	
	2015	2014
Operating Activities		
Net income	\$498,576	\$614,126
Adjustments to reconcile net income to net cash provided by operating activities:		
Net realized losses (gains)	21,980	(113,033 )
Net impairment losses recognized in earnings	12,780	26,313
Equity in net income or loss of investment funds accounted for using the equity method and other income or loss	3,983	3,784
Share-based compensation	46,575	45,118
Changes in:		
Reserve for losses and loss adjustment expenses, net of unpaid losses and loss adjustment expenses recoverable	139,577	94,255
Unearned premiums, net of prepaid reinsurance premiums	192,162	325,874
Premiums receivable	(108,741 )	(279,766 )
Deferred acquisition costs, net	(41,722 )	(72,120 )
Reinsurance balances payable	4,242	49,621
Other liabilities	6,638	117,889
Other items	31,529	(12,402 )
Net Cash Provided By Operating Activities	807,579	799,659
Investing Activities		
Purchases of fixed maturity investments	(22,382,104 )	(22,030,862 )
Purchases of equity securities	(485,526 )	(366,578 )
Purchases of other investments	(1,320,250 )	(1,136,285 )
Proceeds from sales of fixed maturity investments	21,411,554	20,273,351
Proceeds from sales of equity securities	509,008	305,034
Proceeds from sales, redemptions and maturities of other investments	858,368	566,518
Proceeds from redemptions and maturities of fixed maturity investments	630,397	636,729
Net settlements of derivative instruments	81,114	15,495
Proceeds from investment in joint venture	40,000	—
Net sales of short-term investments	181,741	678,388
Change in cash collateral related to securities lending	28,685	(2,737 )
Purchase of business, net of cash acquired	818	(235,578 )
Purchases of fixed assets	(10,901 )	(14,575 )
Change in other assets	(43,654 )	—
Net Cash Used For Investing Activities	(500,750 )	(1,311,100 )
Financing Activities		
Purchases of common shares under share repurchase program	(365,383 )	(251,919 )
Proceeds from common shares issued, net	697	3,248
Proceeds from borrowings	239,077	—
Change in cash collateral related to securities lending	(28,685 )	2,737
Third party investment in non-redeemable noncontrolling interests	—	796,903
Third party investment in redeemable noncontrolling interests	—	219,233
Dividends paid to redeemable noncontrolling interests	(13,810 )	(9,632 )

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Other	50,463	6,559	
Preferred dividends paid	(16,453	) (16,453	)
Net Cash Provided By (Used For) Financing Activities	(134,094	) 750,676	
Effects of exchange rate changes on foreign currency cash	(8,658	) (9,566	)
Increase in cash	164,077	229,669	
Cash beginning of year	485,702	434,057	
Cash end of period	\$649,779	\$663,726	
Income taxes paid	\$35,460	\$13,335	
Interest paid	\$25,195	\$22,111	

See Notes to Consolidated Financial Statements

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ARCH CAPITAL GROUP LTD. AND SUBSIDIARIES

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (UNAUDITED)

1. General

Arch Capital Group Ltd. (“ACGL”) is a Bermuda public limited liability company which provides insurance and reinsurance on a worldwide basis through its subsidiaries (together with ACGL, the “Company”). The Company’s consolidated financial statements include the results of Watford Holdings Ltd., the parent of Watford Re Ltd. (see Note 3).

The interim consolidated financial statements have been prepared in conformity with accounting principles generally accepted in the United States of America (“GAAP”). All significant intercompany transactions and balances have been eliminated in consolidation. The preparation of financial statements in conformity with GAAP requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities at the date of the financial statements and the reported amounts of revenues and expenses during the reporting period. Actual results could differ from those estimates and assumptions. In the opinion of management, the accompanying unaudited interim consolidated financial statements reflect all adjustments (consisting of normally recurring accruals) necessary for a fair statement of results on an interim basis. The results of any interim period are not necessarily indicative of the results for a full year or any future periods.

Certain information and footnote disclosures normally included in financial statements prepared in accordance with GAAP have been condensed or omitted; however, management believes that the disclosures are adequate to make the information presented not misleading. This report should be read in conjunction with the Company’s Annual Report on Form 10-K for the year ended December 31, 2014 (“2014 Form 10-K”), including the Company’s audited consolidated financial statements and related notes.

The Company has reclassified the presentation of certain prior year information to conform to the current presentation. Such reclassifications had no effect on the Company’s net income, comprehensive income, shareholders’ equity or cash flows. Tabular amounts are in U.S. Dollars in thousands, except share amounts, unless otherwise noted.

Acquisition of Gulf Reinsurance Limited

In May 2008, the Company provided \$100.0 million of funding to Gulf Reinsurance Limited, a wholly owned subsidiary of Gulf Re Holdings Limited (collectively, “Gulf Re”), pursuant to the joint venture agreement with Gulf Investment Corporation GSC (“GIC”). Under the agreement, Arch Re Bermuda and GIC each owned 50% of Gulf Re. The Company entered into a number of strategic initiatives related to Gulf Re in the 2014 fourth quarter, including an agreement to acquire complete ownership and effective control of Gulf Re. Such agreement was approved by the Dubai Financial Services Authority in April 2015 and the transaction closed on May 14, 2015. Pursuant to the agreement, Gulf Re distributed \$130.6 million in total to the Company and GIC, and Gulf Re maintained \$50.7 million of equity capital. The Company purchased GIC’s remaining investment in Gulf Re for \$25.6 million through a transfer of fixed maturity investments. GIC will continue to participate equally with the Company in the financial results of Gulf Re and have the ability to purchase shares in Gulf Re over the next seven years. The acquisition resulted in no goodwill or other intangible assets as the fair value of Gulf Re was equal to its book value at closing.

2. Recent Accounting Pronouncements

Recently Issued Accounting Standards Adopted

The Company adopted accounting guidance in the 2015 second quarter which changes the accounting for repurchase and resale-to-maturity agreements by requiring that such agreements be recognized as financing arrangements, and requires that a transfer of a financial asset and a repurchase agreement entered into contemporaneously be accounted for separately. The new accounting guidance also requires additional disclosures about certain transferred financial assets accounted for as sales and certain securities lending transactions. Disclosures are not required to be presented for comparative periods before the effective date. See Note 6, “Investment Information—Securities Lending Agreements.”

The Company adopted accounting guidance in the 2015 second quarter which relates to the presentation of debt issuance costs. Such guidance requires presentation of debt issuance costs in the balance sheet as a deduction from the carrying amount of the related debt liability instead of a deferred charge. The Company previously included its debt issuance costs within ‘other assets.’ The guidance was applied retrospectively and resulted in reductions in ‘other assets’ and ‘senior notes’ at June 30, 2015

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ARCH CAPITAL GROUP LTD. AND SUBSIDIARIES

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (UNAUDITED)

of \$8.8 million, respectively, and \$8.9 million at December 31, 2014, respectively. The adoption of this change in accounting principle did not impact the Company's shareholders' equity or net income.

The Company adopted accounting guidance pertaining to the categorization within the fair value hierarchy of certain investments measured at fair value using the net asset value per share as a practical expedient. These investments are no longer required to be categorized within the fair value hierarchy but are still required to be reported in the fair value hierarchy table to permit reconciliation back to the consolidated balance sheet. Additionally, certain disclosures are no longer applicable for investments that are eligible to be measured using the practical expedient, but for which the practical expedient was not elected. The guidance was applied retrospectively and only impacted the Company's disclosures. See Note 7, "Fair Value."

Recently Issued Accounting Standards Not Yet Adopted

An accounting standard was issued in the 2014 second quarter which will change the manner in which most companies recognize revenue. The standard requires that revenue reflect the transfer of goods or services to customers based on the consideration or payment the company expects to be entitled to in exchange for those goods or services; however, the standard does not change the accounting for insurance contracts or financial instruments. The new standard also requires enhanced disclosures about revenue. This accounting guidance is effective in the 2018 first quarter and may be applied on a full retrospective or modified retrospective approach. The Company is assessing the impact the implementation of this standard will have on its consolidated financial statements.

An accounting standard was issued in the 2015 first quarter providing targeted improvements to consolidation guidance for limited partnerships and other similarly structured entities. The new standard addresses instances where a reporting entity consolidates another entity when the reporting entity is simply acting on the behalf of others, amongst other related issues. While the standard is targeted, the application is relevant for all companies that are required to assess whether or not to consolidate certain entities. The standard is effective in the 2016 first quarter and early adoption is permitted. The Company is assessing the impact the implementation of this standard will have on its consolidated financial statements.

A new accounting standard was issued in the 2015 second quarter requiring new disclosures about the reserve for losses and loss adjustment expenses for short-duration insurance contracts. These disclosures will provide additional insight into an insurance entity's ability to underwrite and anticipate costs associated with claims. This accounting guidance is effective for the 2016 annual reporting period and interim periods thereafter and should be applied retrospectively. The Company is assessing the impact the implementation of this standard will have on its consolidated financial statements.

3. Variable Interest Entity and Noncontrolling Interests

Variable interest entity

On March 20, 2014, the Company invested \$100.0 million and acquired approximately 11% of Watford Holdings Ltd.'s common equity and a warrant to purchase additional common equity. Watford Holdings Ltd. is the parent of Watford Re Ltd., a multi-line Bermuda reinsurance company (together with Watford Holdings Ltd., "Watford Re"). Watford Re is considered a variable interest entity ("VIE") and the Company concluded that it is the primary beneficiary of Watford Re. As such, the results of Watford Re are included in the Company's consolidated financial statements.



The Company concluded that Watford Re represents a separate operating segment and provides the income statement and total investable assets, total assets and total liabilities of Watford Re within Note 5. At September 30, 2015, Watford Re's liabilities included unearned premiums of \$274.7 million and reserves for losses and loss adjustment expenses of \$223.9 million, some of which is related to transactions with the Company, along with \$239.1 million of revolving credit agreement borrowings (see Note 9). For the nine months ended September 30, 2015, Watford Re generated \$204.3 million of cash provided by operating activities and \$268.3 million of cash provided by financing activities, partially offset by \$354.5 million of cash used for investing activities.

The Company does not guarantee or provide credit support for Watford Re, and the Company's financial exposure to Watford Re is limited to its investment in Watford Re's common and preferred shares and counterparty credit risk (mitigated by collateral) arising from the reinsurance transactions.

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## ARCH CAPITAL GROUP LTD. AND SUBSIDIARIES

## NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (UNAUDITED)

## Non-redeemable noncontrolling interests

The Company accounts for the portion of Watford Re's common equity attributable to third party investors in the shareholders' equity section of its consolidated balance sheets. The noncontrolling ownership in Watford Re's common shares was approximately 89% at September 30, 2015. The portion of Watford Re's income or loss attributable to third party investors is recorded in the consolidated statements of income in 'amounts attributable to noncontrolling interests.' The following table sets forth activity in the non-redeemable noncontrolling interests:

	Three Months Ended		Nine Months Ended	
	September 30,		September 30,	
	2015	2014	2015	2014
Balance, beginning of period	\$794,880	\$792,340	\$769,081	\$—
Sale of shares to noncontrolling interests	—	—	—	796,903
Amounts attributable to noncontrolling interests	(20,621 )	(10,320 )	5,178	(14,883 )
Foreign currency translation adjustments	(97 )	—	(97 )	—
Balance, end of period	\$774,162	\$782,020	\$774,162	\$782,020

## Redeemable noncontrolling interests

The Company accounts for redeemable noncontrolling interests in the mezzanine section of its consolidated balance sheets in accordance with applicable accounting guidance. Such redeemable noncontrolling interests relate to the 9,065,200 cumulative redeemable preference shares ("Watford Preference Shares") issued in late March 2014 with a par value of \$0.01 per share and a liquidation preference of \$25.00 per share. Preferred dividends, including the accretion of the discount and issuance costs, are included in 'amounts attributable to noncontrolling interests' in the Company's consolidated statements of income. The following table sets forth activity in the redeemable non-controlling interests:

	Three Months Ended		Nine Months Ended	
	September 30,		September 30,	
	2015	2014	2015	2014
Balance, beginning of period	\$204,996	\$219,326	\$219,512	\$—
Sale of shares to noncontrolling interests	—	—	—	219,233
Shares acquired by the Company (1)	—	—	(14,700 )	—
Accretion of preference share issuance costs	93	93	277	186
Balance, end of period	\$205,089	\$219,419	\$205,089	\$219,419

During the 2015 second quarter, the Company acquired Gulf Re, which owns 600,000 Watford Preference Shares. (1) Such shares, net of a discount, along with related dividends and accretion of the discount, are eliminated in consolidation.

The portion of Watford Re's income or loss attributable to third party investors is recorded in the consolidated statements of income in 'amounts attributable to noncontrolling interests' as summarized in the table below:

	Three Months Ended		Nine Months Ended	
	September 30,		September 30,	
	2015	2014	2015	2014
Amounts attributable to non-redeemable noncontrolling interests	\$20,621	\$10,320	\$(5,178 )	\$14,883
Dividends attributable to redeemable noncontrolling interests	(4,588 )	(4,909 )	(14,239 )	(9,818 )
Amounts attributable to noncontrolling interests	\$16,033	\$5,411	\$(19,417 )	\$5,065



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## ARCH CAPITAL GROUP LTD. AND SUBSIDIARIES

## NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (UNAUDITED)

## 4. Earnings Per Common Share

The following table sets forth the computation of basic and diluted earnings per common share:

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2015	2014	2015	2014
Numerator:				
Net income	\$64,000	\$223,264	\$498,576	\$614,126
Amounts attributable to noncontrolling interests	16,033	5,411	(19,417 )	5,065
Net income available to Arch	80,033	228,675	479,159	619,191
Preferred dividends	(5,484 )	(5,484 )	(16,453 )	(16,453 )
Net income available to Arch common shareholders	\$74,549	\$223,191	\$462,706	\$602,738
Denominator:				
Weighted average common shares outstanding — basic	120,567,410	131,945,962	122,151,971	132,151,824
Effect of dilutive common share equivalents:				
Nonvested restricted shares	1,322,053	1,156,790	1,260,247	1,134,481
Stock options (1)	3,122,310	2,773,853	2,942,541	3,067,867
Weighted average common shares and common share equivalents outstanding — diluted	125,011,773	135,876,605	126,354,759	136,354,172
Earnings per common share:				
Basic	\$0.62	\$1.69	\$3.79	\$4.56
Diluted	\$0.60	\$1.64	\$3.66	\$4.42

Certain stock options were not included in the computation of diluted earnings per share where the exercise price of the stock options exceeded the average market price and would have been anti-dilutive or where, when applying the treasury stock method to in-the-money options, the sum of the proceeds, including unrecognized compensation, (1)exceeded the average market price and would have been anti-dilutive. For the 2015 third quarter and 2014 third quarter, the number of stock options excluded were 390,406 and 1,355,087, respectively. For the nine months ended September 30, 2015 and 2014, the number of stock options excluded were 957,838 and 1,378,249, respectively.

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ARCH CAPITAL GROUP LTD. AND SUBSIDIARIES

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (UNAUDITED)

5. Segment Information

The Company classifies its businesses into three underwriting segments — insurance, reinsurance and mortgage — and two other operating segments — ‘other’ and corporate (non-underwriting). The Company determined its reportable segments using the management approach described in accounting guidance regarding disclosures about segments of an enterprise and related information. The accounting policies of the segments are the same as those used for the preparation of the Company’s consolidated financial statements. Intersegment business is allocated to the segment accountable for the underwriting results.

The Company’s insurance, reinsurance and mortgage segments each have managers who are responsible for the overall profitability of their respective segments and who are directly accountable to the Company’s chief operating decision makers, the Chairman, President and Chief Executive Officer of ACGL and the Chief Financial Officer of ACGL. The chief operating decision makers do not assess performance, measure return on equity or make resource allocation decisions on a line of business basis. Management measures segment performance for its three underwriting segments based on underwriting income or loss. The Company does not manage its assets by underwriting segment, with the exception of goodwill and intangible assets, and, accordingly, investment income is not allocated to each underwriting segment.

The insurance segment consists of the Company’s insurance underwriting units which offer specialty product lines on a worldwide basis. Product lines include: construction and national accounts; excess and surplus casualty; lenders products; professional lines; programs; property, energy, marine and aviation; travel, accident and health; and other (consisting of alternative markets, excess workers' compensation and surety business).

The reinsurance segment consists of the Company’s reinsurance underwriting units which offer specialty product lines on a worldwide basis. Product lines include: casualty; marine and aviation; other specialty; property catastrophe; property excluding property catastrophe (losses on a single risk, both excess of loss and pro rata); and other (consisting of life reinsurance, casualty clash and other).

The mortgage segment includes the results of Arch Mortgage Insurance Company (“Arch MI U.S.”) and Arch Mortgage Insurance Limited, leading providers of mortgage insurance products and services to the U.S. and European markets, respectively. Arch MI U.S. is approved as an eligible mortgage insurer by Federal National Mortgage Association (“Fannie Mae”) and Federal Home Loan Mortgage Corporation (“Freddie Mac”), each a government sponsored enterprise, or “GSE.” The mortgage segment also includes GSE credit risk-sharing transactions and mortgage reinsurance for the U.S. and Australian markets.

The corporate (non-underwriting) segment results include net investment income, other income (loss), other expenses incurred by the Company, interest expense, net realized gains or losses, net impairment losses included in earnings, equity in net income or loss of investment funds accounted for using the equity method, net foreign exchange gains or losses, income taxes and items related to the Company’s non-cumulative preferred shares. Such amounts exclude the results of the ‘other’ segment.

The ‘other’ segment includes the results of Watford Re (see Note 3). Watford Re has its own management and board of directors that is responsible for the overall profitability of the ‘other’ segment. For the ‘other’ segment, performance is measured based on net income or loss.



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## ARCH CAPITAL GROUP LTD. AND SUBSIDIARIES

## NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (UNAUDITED)

The following tables summarize the Company's underwriting income or loss by segment, together with a reconciliation of underwriting income or loss to net income available to common shareholders:

	Three Months Ended September 30, 2015					
	Insurance	Reinsurance	Mortgage	Sub-Total	Other	Total
Gross premiums written (1)	\$752,438	\$329,327	\$74,657	\$1,158,451	\$131,165	\$1,189,192
Premiums ceded	(209,443 )	(92,182 )	(7,832 )	(311,486 )	(6,158 )	(217,220 )
Net premiums written	542,995	237,145	66,825	846,965	125,007	971,972
Change in unearned premiums	(20,451 )	23,286	(12,277 )	(9,442 )	(25,847 )	(35,289 )
Net premiums earned	522,544	260,431	54,548	837,523	99,160	936,683
Other underwriting income	519	2,783	3,565	6,867	756	7,623
Losses and loss adjustment expenses	(339,859 )	(115,780 )	(9,562 )	(465,201 )	(66,540 )	(531,741 )
Acquisition expenses, net	(77,076 )	(55,416 )	(10,428 )	(142,920 )	(28,646 )	(171,566 )
Other operating expenses	(84,620 )	(37,131 )	(21,048 )	(142,799 )	(3,421 )	(146,220 )
Underwriting income (loss)	\$21,508	\$54,887	\$17,075	93,470	1,309	94,779
Net investment income				67,251	18,982	86,233
Net realized gains (losses)				(53,480 )	(36,218 )	(89,698 )
Net impairment losses recognized in earnings				(5,868 )	—	(5,868 )
Equity in net income (loss) of investment funds accounted for using the equity method				(2,118 )	—	(2,118 )
Other income (loss)				(265 )	—	(265 )
Other expenses				(10,739 )	—	(10,739 )
Interest expense				(12,014 )	(1,286 )	(13,300 )
Net foreign exchange gains (losses)				16,056	(1,376 )	14,680
Income (loss) before income taxes				92,293	(18,589 )	73,704
Income tax expense				(9,704 )	—	(9,704 )
Net income (loss)				82,589	(18,589 )	64,000
Dividends attributable to redeemable noncontrolling interests				—	(4,588 )	(4,588 )
Amounts attributable to noncontrolling interests				—	20,621	20,621
Net income (loss) available to Arch				82,589	(2,556 )	80,033
Preferred dividends				(5,484 )	—	(5,484 )
Net income (loss) available to Arch common shareholders				\$77,105	\$(2,556 )	\$74,549

## Underwriting Ratios

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Loss ratio	65.0	% 44.5	% 17.5	% 55.5	% 67.1	% 56.8	%
Acquisition expense ratio	14.8	% 21.3	% 19.1	% 17.1	% 28.9	% 18.3	%
Other operating expense ratio	16.2	% 14.3	% 38.6	% 17.1	% 3.4	% 15.6	%
Combined ratio	96.0	% 80.1	% 75.2	% 89.7	% 99.4	% 90.7	%
Goodwill and intangible assets	\$29,834	\$2,149	\$71,637	\$103,620	\$—	\$103,620	
Total investable assets				\$14,733,732	\$1,593,523	\$16,327,255	
Total assets				21,679,795	2,090,797	23,770,592	
Total liabilities				15,627,574	1,000,952	16,628,526	

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Certain amounts included in the gross premiums written of each segment are related to intersegment transactions. (1) Accordingly, the sum of gross premiums written for each segment does not agree to the total gross premiums written as shown in the table above due to the elimination of intersegment transactions in the total.



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## ARCH CAPITAL GROUP LTD. AND SUBSIDIARIES

## NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (UNAUDITED)

	Three Months Ended September 30, 2014						
	Insurance	Reinsurance	Mortgage	Sub-Total	Other	Total	
Gross premiums written (1)	\$726,683	\$345,747	\$66,389	\$1,138,392	\$103,483	\$1,159,907	
Premiums ceded	(187,689 )	(83,502 )	(7,904 )	(278,668 )	(3,668 )	(200,368 )	)
Net premiums written	538,994	262,245	58,485	859,724	99,815	959,539	
Change in unearned premiums	(19,607 )	34,303	(5,539 )	9,157	(65,045 )	(55,888 )	)
Net premiums earned	519,387	296,548	52,946	868,881	34,770	903,651	
Other underwriting income	499	215	988	1,702	—	1,702	
Losses and loss adjustment expenses	(338,319 )	(123,784 )	(15,987 )	(478,090 )	(23,583 )	(501,673 )	)
Acquisition expenses, net	(81,775 )	(60,205 )	(11,958 )	(153,938 )	(9,609 )	(163,547 )	)
Other operating expenses	(83,138 )	(36,337 )	(17,913 )	(137,388 )	(1,658 )	(139,046 )	)
Underwriting income (loss)	\$16,654	\$76,437	\$8,076	101,167	(80 )	101,087	)
Net investment income				72,239	7,866	80,105	
Net realized gains (losses)				31,411	(12,896 )	18,515	
Net impairment losses recognized in earnings				(8,593 )	—	(8,593 )	)
Equity in net income (loss) of investment funds accounted for using the equity method				4,966	—	4,966	
Other income (loss)				(7,815 )	—	(7,815 )	)
Other expenses				(10,434 )	—	(10,434 )	)
Interest expense				(4,152 )	—	(4,152 )	)
Net foreign exchange gains (losses)				57,611	(1,580 )	56,031	
Income (loss) before income taxes				236,400	(6,690 )	229,710	
Income tax expense				(6,446 )	—	(6,446 )	)
Net income (loss)				229,954	(6,690 )	223,264	)
Dividends attributable to redeemable noncontrolling interests				—	(4,909 )	(4,909 )	)
Amounts attributable to noncontrolling interests				—	10,320	10,320	
Net income (loss) available to Arch				229,954	(1,279 )	228,675	)
Preferred dividends				(5,484 )	—	(5,484 )	)
Net income (loss) available to Arch common shareholders				\$224,470	\$(1,279 )	\$223,191	)
<b>Underwriting Ratios</b>							
Loss ratio	65.1	% 41.7	% 30.2	% 55.0	% 67.8	% 55.5	%
Acquisition expense ratio	15.7	% 20.3	% 22.6	% 17.7	% 27.6	% 18.1	%
Other operating expense ratio	16.0	% 12.3	% 33.8	% 15.8	% 4.8	% 15.4	%

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Combined ratio	96.8	% 74.3	% 86.6	% 88.5	% 100.2	% 89.0	%
Goodwill and intangible assets	\$24,024	\$3,939	\$83,565	\$111,528	\$—	\$111,528	
Total investable assets				\$14,580,425	\$1,124,048	\$15,704,473	
Total assets				21,205,209	1,403,018	22,608,227	
Total liabilities				15,221,030	304,712	15,525,742	

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Certain amounts included in the gross premiums written of each segment are related to intersegment transactions. (1) Accordingly, the sum of gross premiums written for each segment does not agree to the total gross premiums written as shown in the table above due to the elimination of intersegment transactions in the total.

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## ARCH CAPITAL GROUP LTD. AND SUBSIDIARIES

## NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (UNAUDITED)

	Nine Months Ended						Total
	September 30, 2015						
	Insurance	Reinsurance	Mortgage	Sub-Total	Other		
Gross premiums written (1)	\$2,263,401	\$1,156,540	\$203,770	\$3,625,382	\$387,752	\$3,730,423	
Premiums ceded	(669,336 )	(318,197 )	(23,404 )	(1,012,608 )	(17,979 )	(747,876 )	
Net premiums written	1,594,065	838,343	180,366	2,612,774	369,773	2,982,547	
Change in unearned premiums	(53,782 )	(24,230 )	(22,992 )	(101,004 )	(91,158 )	(192,162 )	
Net premiums earned	1,540,283	814,113	157,374	2,511,770	278,615	2,790,385	
Other underwriting income	1,467	6,870	14,969	23,306	3,570	26,876	
Losses and loss adjustment expenses	(978,681 )	(339,495 )	(33,010 )	(1,351,186 )	(193,697 )	(1,544,883 )	
Acquisition expenses, net	(228,877 )	(170,380 )	(31,046 )	(430,303 )	(79,764 )	(510,067 )	
Other operating expenses	(261,793 )	(114,182 )	(61,096 )	(437,071 )	(8,876 )	(445,947 )	
Underwriting income (loss)	\$72,399	\$196,926	\$47,191	316,516	(152 )	316,364	
Net investment income				204,710	47,480	252,190	
Net realized gains (losses)				(14,831 )	(27,244 )	(42,075 )	
Net impairment losses recognized in earnings				(12,780 )	—	(12,780 )	
Equity in net income (loss) of investment funds accounted for using the equity method				19,938	—	19,938	
Other income (loss)				52	—	52	
Other expenses				(37,502 )	—	(37,502 )	
Interest expense				(28,761 )	(1,286 )	(30,047 )	
Net foreign exchange gains (losses)				60,338	1,260	61,598	
Income (loss) before income taxes				507,680	20,058	527,738	
Income tax expense				(29,162 )	—	(29,162 )	
Net income (loss)				478,518	20,058	498,576	
Dividends attributable to redeemable noncontrolling interests				—	(14,239 )	(14,239 )	
Amounts attributable to noncontrolling interests				—	(5,178 )	(5,178 )	
Net income (loss) available to Arch				478,518	641	479,159	
Preferred dividends				(16,453 )	—	(16,453 )	
Net income (loss) available to Arch common shareholders				\$462,065	\$641	\$462,706	
<b>Underwriting Ratios</b>							
Loss ratio	63.5	% 41.7	% 21.0	% 53.8	% 69.5	% 55.4	%
Acquisition expense ratio	14.9	% 20.9	% 19.7	% 17.1	% 28.6	% 18.3	%
Other operating expense ratio	17.0	% 14.0	% 38.8	% 17.4	% 3.2	% 16.0	%

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Combined ratio	95.4	% 76.6	% 79.5	% 88.3	% 101.3	% 89.7	%
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Certain amounts included in the gross premiums written of each segment are related to intersegment transactions. (1) Accordingly, the sum of gross premiums written for each segment does not agree to the total gross premiums written as shown in the table above due to the elimination of intersegment transactions in the total.

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## ARCH CAPITAL GROUP LTD. AND SUBSIDIARIES

## NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (UNAUDITED)

	Nine Months Ended September 30, 2014						
	Insurance	Reinsurance	Mortgage	Sub-Total	Other	Total	
Gross premiums written (1)	\$2,309,560	\$1,212,641	\$169,772	\$3,690,462	\$190,239	\$3,726,804	
Premiums ceded	(646,082 )	(215,623 )	(17,622 )	(877,816 )	(6,428 )	(730,347 )	)
Net premiums written	1,663,478	997,018	152,150	2,812,646	183,811	2,996,457	
Change in unearned premiums	(158,878 )	(23,495 )	(9,606 )	(191,979 )	(133,895 )	(325,874 )	)
Net premiums earned	1,504,600	973,523	142,544	2,620,667	49,916	2,670,583	
Other underwriting income	1,513	834	2,970	5,317	—	5,317	
Losses and loss adjustment expenses	(936,615 )	(413,745 )	(39,938 )	(1,390,298 )	(33,133 )	(1,423,431 )	)
Acquisition expenses, net	(235,156 )	(199,673 )	(32,593 )	(467,422 )	(14,625 )	(482,047 )	)
Other operating expenses	(250,111 )	(110,198 )	(48,077 )	(408,386 )	(4,402 )	(412,788 )	)
Underwriting income (loss)	\$84,231	\$250,741	\$24,906	359,878	(2,244 )	357,634	
Net investment income				211,690	8,399	220,089	
Net realized gains (losses)				102,074	(9,718 )	92,356	
Net impairment losses recognized in earnings				(26,313 )	—	(26,313 )	)
Equity in net income (loss) of investment funds accounted for using the equity method				17,459	—	17,459	
Other income (loss)				(5,069 )	—	(5,069 )	)
Other expenses				(36,512 )	(2,329 )	(38,841 )	)
Interest expense				(32,890 )	—	(32,890 )	)
Net foreign exchange gains (losses)				48,191	(1,017 )	47,174	
Income (loss) before income taxes				638,508	(6,909 )	631,599	
Income tax expense				(17,473 )	—	(17,473 )	)
Net income (loss)				621,035	(6,909 )	614,126	
Dividends attributable to redeemable noncontrolling interests				—	(9,818 )	(9,818 )	)
Amounts attributable to noncontrolling interests				—	14,883	14,883	
Net income (loss) available to Arch				621,035	(1,844 )	619,191	
Preferred dividends				(16,453 )	—	(16,453 )	)
Net income (loss) available to Arch common shareholders				\$604,582	\$(1,844 )	\$602,738	
 Underwriting Ratios							
Loss ratio	62.3	% 42.5	% 28.0	% 53.1	% 66.4	% 53.3	%
Acquisition expense ratio	15.6	% 20.5	% 22.9	% 17.8	% 29.3	% 18.1	%
Other operating expense ratio	16.6	% 11.3	% 33.7	% 15.6	% 8.8	% 15.5	%

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Combined ratio	94.5	% 74.3	% 84.6	% 86.5	% 104.5	% 86.9	%
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Certain amounts included in the gross premiums written of each segment are related to intersegment transactions. (1) Accordingly, the sum of gross premiums written for each segment does not agree to the total gross premiums written as shown in the table above due to the elimination of intersegment transactions in the total.

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## ARCH CAPITAL GROUP LTD. AND SUBSIDIARIES

## NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (UNAUDITED)

## 6. Investment Information

At September 30, 2015, total investable assets of \$16.33 billion included \$14.73 billion managed by the Company and \$1.59 billion attributable to Watford Re.

## Available For Sale Investments

The following table summarizes the fair value and cost or amortized cost of the Company's investments classified as available for sale:

	Estimated Fair Value	Gross Unrealized Gains	Gross Unrealized Losses	Cost or Amortized Cost	OTTI Unrealized Losses (2)
September 30, 2015					
Fixed maturities (1):					
Corporate bonds	\$2,796,038	\$28,418	\$(54,489)	\$2,822,109	\$(3,033)
Mortgage backed securities	809,876	13,155	(2,998)	799,719	(3,554)
Municipal bonds	1,830,987	27,600	(2,771)	1,806,158	—
Commercial mortgage backed securities	810,973	10,058	(2,594)	803,509	—
U.S. government and government agencies	2,338,724	14,352	(2,138)	2,326,510	—
Non-U.S. government securities	887,120	13,070	(36,488)	910,538	—
Asset backed securities	1,372,549	9,032	(4,850)	1,368,367	(22)
Total	10,846,267	115,685	(106,328)	10,836,910	(6,609)
Equity securities	606,259	68,494	(37,527)	575,292	—
Other investments	281,014	39,287	(3,629)	245,356	—
Short-term investments	708,428	166	(3,128)	711,390	—
Total	\$12,441,968	\$223,632	\$(150,612)	\$12,368,948	\$(6,609)
December 31, 2014					
Fixed maturities (1):					
Corporate bonds	\$3,108,513	\$37,928	\$(38,974)	\$3,109,559	\$(317)
Mortgage backed securities	943,343	18,843	(3,842)	928,342	(3,307)
Municipal bonds	1,494,122	31,227	(1,044)	1,463,939	—
Commercial mortgage backed securities	1,114,528	14,594	(3,822)	1,103,756	—
U.S. government and government agencies	1,447,972	8,345	(1,760)	1,441,387	—
Non-U.S. government securities	1,015,153	21,311	(37,203)	1,031,045	—
Asset backed securities	1,677,941	8,425	(6,089)	1,675,605	(22)
Total	10,801,572	140,673	(92,734)	10,753,633	(3,646)
Equity securities	658,182	109,012	(13,364)	562,534	—
Other investments	296,224	31,839	(362)	264,747	—
Short-term investments	797,226	738	(5,270)	801,758	—
Total	\$12,553,204	\$282,262	\$(111,730)	\$12,382,672	\$(3,646)

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(1)

In securities lending transactions, the Company receives collateral in excess of the fair value of the securities pledged. For purposes of this table, the Company has excluded the collateral received under securities lending, at fair value and included the securities pledged under securities lending, at fair value. See “—Securities Lending Agreements.”

(2) Represents the total other-than-temporary impairments (“OTTI”) recognized in accumulated other comprehensive income (“AOCI”). It does not include the change in fair value subsequent to the impairment measurement date. At September 30, 2015, the net unrealized loss related to securities for which a non-credit OTTI was recognized in AOCI was \$2.3 million, compared to a net unrealized gain of \$0.9 million at December 31, 2014.



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## ARCH CAPITAL GROUP LTD. AND SUBSIDIARIES

## NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (UNAUDITED)

The following table summarizes, for all available for sale securities in an unrealized loss position, the fair value and gross unrealized loss by length of time the security has been in a continual unrealized loss position:

	Less than 12 Months		12 Months or More		Total	
	Estimated Fair Value	Gross Unrealized Losses	Estimated Fair Value	Gross Unrealized Losses	Estimated Fair Value	Gross Unrealized Losses
September 30, 2015						
Fixed maturities (1):						
Corporate bonds	\$1,208,894	\$(37,606)	\$135,135	\$(16,883)	\$1,344,029	\$(54,489)
Mortgage backed securities	235,252	(1,986)	52,621	(1,012)	287,873	(2,998)
Municipal bonds	219,610	(2,567)	9,717	(204)	229,327	(2,771)
Commercial mortgage backed securities	263,779	(2,376)	19,774	(218)	283,553	(2,594)
U.S. government and government agencies	283,534	(2,138)	—	—	283,534	(2,138)
Non-U.S. government securities	391,631	(23,526)	52,976	(12,962)	444,607	(36,488)
Asset backed securities	467,485	(3,262)	126,982	(1,588)	594,467	(4,850)
Total	3,070,185	(73,461)	397,205	(32,867)	3,467,390	(106,328)
Equity securities	311,608	(37,527)	—	—	311,608	(37,527)
Other investments	45,151	(3,629)	—	—	45,151	(3,629)
Short-term investments	33,873	(3,128)	—	—	33,873	(3,128)
Total	\$3,460,817	\$(117,745)	\$397,205	\$(32,867)	\$3,858,022	\$(150,612)
December 31, 2014						
Fixed maturities (1):						
Corporate bonds	\$1,309,637	\$(32,903)	\$148,963	\$(6,071)	\$1,458,600	\$(38,974)
Mortgage backed securities	293,624	(1,476)	59,107	(2,366)	352,731	(3,842)
Municipal bonds	210,614	(588)	13,643	(456)	224,257	(1,044)
Commercial mortgage backed securities	232,147	(770)	125,894	(3,052)	358,041	(3,822)
U.S. government and government agencies	618,381	(1,626)	3,438	(134)	621,819	(1,760)
Non-U.S. government securities	510,766	(31,172)	46,910	(6,031)	557,676	(37,203)
Asset backed securities	612,950	(2,486)	243,452	(3,603)	856,402	(6,089)
Total	3,788,119	(71,021)	641,407	(21,713)	4,429,526	(92,734)
Equity securities	181,002	(13,364)	—	—	181,002	(13,364)
Other investments	59,638	(362)	—	—	59,638	(362)
Short-term investments	79,271	(5,270)	—	—	79,271	(5,270)
Total	\$4,108,030	\$(90,017)	\$641,407	\$(21,713)	\$4,749,437	\$(111,730)

(1) In securities lending transactions, the Company receives collateral in excess of the fair value of the securities pledged. For purposes of this table, the Company has excluded the collateral received under securities lending, at fair value and included the securities pledged under securities lending, at fair value. See “—Securities Lending

Agreements.”

At September 30, 2015, on a lot level basis, approximately 2,300 security lots out of a total of approximately 5,540 security lots were in an unrealized loss position and the largest single unrealized loss from a single lot in the Company’s fixed maturity portfolio was \$3.6 million. At December 31, 2014, on a lot level basis, approximately 1,900 security lots out of a total of approximately 4,790 security lots were in an unrealized loss position and the largest single unrealized loss from a single lot in the Company’s fixed maturity portfolio was \$2.9 million.

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## ARCH CAPITAL GROUP LTD. AND SUBSIDIARIES

## NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (UNAUDITED)

The contractual maturities of the Company's fixed maturities are shown in the following table. Expected maturities, which are management's best estimates, will differ from contractual maturities because borrowers may have the right to call or prepay obligations with or without call or prepayment penalties.

Maturity	September 30, 2015		December 31, 2014	
	Estimated Fair Value	Amortized Cost	Estimated Fair Value	Amortized Cost
Due in one year or less	\$329,589	\$331,322	\$235,930	\$233,794
Due after one year through five years	4,510,824	4,518,625	4,074,562	4,077,408
Due after five years through 10 years	2,583,000	2,585,634	2,475,726	2,461,356
Due after 10 years	429,456	429,734	279,542	273,372
	7,852,869	7,865,315	7,065,760	7,045,930
Mortgage backed securities	809,876	799,719	943,343	928,342
Commercial mortgage backed securities	810,973	803,509	1,114,528	1,103,756
Asset backed securities	1,372,549	1,368,367	1,677,941	1,675,605
Total (1)	\$10,846,267	\$10,836,910	\$10,801,572	\$10,753,633

(1) In securities lending transactions, the Company receives collateral in excess of the fair value of the securities pledged. For purposes of this table, the Company has excluded the collateral received under securities lending, at fair value and included the securities pledged under securities lending, at fair value. See "—Securities Lending Agreements."

## Securities Lending Agreements

From time to time, the Company enters into securities lending agreements with financial institutions to enhance investment income. The Company loans certain of its securities to third parties, primarily major brokerage firms, for short periods of time through a lending agent. The Company maintains legal control over the securities it lends, retains the earnings and cash flows associated with the loaned securities and receives a fee from the borrower for the temporary use of the securities. An indemnification agreement with the lending agent protects the Company in the event a borrower becomes insolvent or fails to return any of the securities on loan to the Company.

The Company receives collateral in the form of cash or securities. Cash collateral primarily consists of short-term investments. At September 30, 2015, the fair value of the cash collateral received on securities lending was \$15.7 million, which included \$5.4 million that was reinvested in sub-prime mortgage backed securities, and the fair value of security collateral received was \$271.0 million. At December 31, 2014, the fair value of the cash collateral received on securities lending was \$44.3 million, which included \$5.8 million that was reinvested in sub-prime mortgage backed securities, and the fair value of security collateral received was nil.

The Company's securities lending transactions were accounted for as secured borrowings with significant investment categories as follows:

Securities Lending Transactions	September 30, 2015				
	Remaining Contractual Maturity of the Agreements				
	Overnight and Continuous	Less than 30 Days	30-90 Days	90 Days or More	Total
U.S. government and government agencies	\$225,898	\$—	\$22,784	\$3,569	\$252,251
Corporate bonds	35,266	—	—	—	35,266

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Equity securities	5,321	—	—	—	5,321
Total	\$266,485	\$—	\$22,784	\$3,569	\$292,838
Gross amount of recognized liabilities for securities lending in offsetting disclosure in Note 8					\$—
Amounts related to securities lending not included in offsetting disclosure in Note 8					\$292,838

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## ARCH CAPITAL GROUP LTD. AND SUBSIDIARIES

## NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (UNAUDITED)

## Other Investments

The following table summarizes the Company's other investments, including available for sale and fair value option components:

	September 30, 2015	December 31, 2014
Available for sale:		
Asian and emerging markets	\$ 210,680	\$ 236,586
Investment grade fixed income	31,429	59,638
Credit related funds	13,722	—
Other	25,183	—
Total available for sale	281,014	296,224
Fair value option:		
Term loan investments (par value: \$1,188,216 and \$1,094,337)	1,152,693	1,073,649
Mezzanine debt funds	112,782	121,341
Credit related funds	194,957	114,436
Investment grade fixed income	58,204	69,108
Asian and emerging markets	59,667	25,800
Other (1)	124,591	137,094
Total fair value option	1,702,894	1,541,428
Total	\$ 1,983,908	\$ 1,837,652

(1) Includes fund investments with strategies in mortgage servicing rights, transportation and infrastructure assets and other.

Certain of the Company's other investments are in investment funds for which the Company has the option to redeem at agreed upon values as described in each investment fund's subscription agreement. Depending on the terms of the various subscription agreements, investments in investment funds may be redeemed daily, monthly, quarterly or on other terms. Two common redemption restrictions which may impact the Company's ability to redeem these investment funds are gates and lockups. A gate is a suspension of redemptions which may be implemented by the general partner or investment manager of the fund in order to defer, in whole or in part, the redemption request in the event the aggregate amount of redemption requests exceeds a predetermined percentage of the investment fund's net assets which may otherwise hinder the general partner or investment manager's ability to liquidate holdings in an orderly fashion in order to generate the cash necessary to fund extraordinarily large redemption payouts. A lockup period is the initial amount of time an investor is contractually required to hold the security before having the ability to redeem. If the investment funds are eligible to be redeemed, the time to redeem such fund can take weeks or months following the notification.

## Fair Value Option

The following table summarizes the Company's assets and liabilities which are accounted for using the fair value option:

	September 30, 2015	December 31, 2014
Fixed maturities	\$ 926,589	\$ 632,024
Other investments	1,702,894	1,541,428
Short-term investments	153,604	251,601

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Equity securities	78	—
Investments accounted for using the fair value option	\$ 2,783,165	\$ 2,425,053

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## ARCH CAPITAL GROUP LTD. AND SUBSIDIARIES

## NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (UNAUDITED)

## Net Investment Income

The components of net investment income were derived from the following sources:

	Three Months Ended		Nine Months Ended	
	September 30,		September 30,	
	2015	2014	2015	2014
Fixed maturities	\$70,626	\$66,052	\$210,497	\$194,370
Term loan investments	16,922	14,066	49,699	26,643
Equity securities (dividends)	3,486	2,779	8,743	8,971
Short-term investments	127	905	548	1,417
Other (1)	10,277	7,913	33,513	21,732
Gross investment income	101,438	91,715	303,000	253,133
Investment expenses	(15,205)	(11,610)	(50,810)	(33,044)
Net investment income	\$86,233	\$80,105	\$252,190	\$220,089

(1) Includes income distributions from investment funds and other items.

## Net Realized Gains (Losses)

Net realized gains (losses) were as follows, excluding other-than-temporary impairment provisions:

	Three Months Ended		Nine Months Ended	
	September 30,		September 30,	
	2015	2014	2015	2014
Available for sale securities:				
Gross gains on investment sales	\$51,933	\$62,727	\$231,757	\$185,541
Gross losses on investment sales	(53,953)	(35,012)	(168,087)	(108,053)
Change in fair value of assets and liabilities accounted for using the fair value option:				
Fixed maturities	(41,236)	(9,023)	(49,729)	318
Other investments	(75,251)	(1,085)	(68,179)	27,676
Equity securities	71	—	—	—
Short-term investments	(9)	638	1,462	638
Derivative instruments (1)	35,889	7,449	31,069	7,083
Other (2)	(7,142)	(7,179)	(20,368)	(20,847)
Net realized gains (losses)	\$(89,698)	\$18,515	\$(42,075)	\$92,356

(1) See Note 8 for information on the Company's derivative instruments.

(2) Includes the re-measurement of contingent consideration liability amounts.

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## ARCH CAPITAL GROUP LTD. AND SUBSIDIARIES

## NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (UNAUDITED)

## Other-Than-Temporary Impairments

The Company performs quarterly reviews of its available for sale investments in order to determine whether declines in fair value below the amortized cost basis were considered other-than-temporary in accordance with applicable guidance. The following table details the net impairment losses recognized in earnings by asset class:

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2015	2014	2015	2014
Fixed maturities:				
Mortgage backed securities	\$(85 )	\$(2 )	\$(1,483 )	\$(2 )
Corporate bonds	(4,282 )	(147 )	(6,268 )	(811 )
Commercial mortgage backed securities	—	(7 )	—	(7 )
Asset backed securities	—	(29 )	—	(40 )
Total	(4,367 )	(185 )	(7,751 )	(860 )
Short-term investments	—	—	(2,341 )	—
Equity securities	(1,501 )	(95 )	(1,754 )	(373 )
Other investments	—	(8,313 )	(934 )	(25,080 )
Net impairment losses recognized in earnings	\$(5,868 )	\$(8,593 )	\$(12,780 )	\$(26,313 )

A description of the methodology and significant inputs used to measure the amount of net impairment losses recognized in earnings 2015 third quarter is as follows:

Corporate bonds — the Company reviewed the business prospects, credit ratings, estimated loss given default factors, foreign currency impacts and information received from asset managers and rating agencies for certain corporate bonds. Approximately half of the impairment losses for the 2015 third quarter resulted from non-investment grade corporate bonds in the energy sector, reflecting current market conditions, with the remaining half related to foreign currency fluctuations on non-U.S. Dollar denominated investments based on the remaining time to maturity. The amortized cost basis of the corporate bonds were adjusted down, if required, to the expected recovery value calculated in the OTTI review process;

Equity securities – the Company utilized information received from asset managers on common stocks, including the business prospects, recent events, industry and market data and other factors. For certain equities which were in an unrealized loss position and where the Company determined that it did not have the intent or ability to hold such securities for a reasonable period of time by which the fair value of the securities would increase and the Company would recover its cost, the cost basis of such securities was adjusted down accordingly.

The Company believes that the \$6.6 million of OTTI included in accumulated other comprehensive income at September 30, 2015 on the securities which were considered by the Company to be impaired was due to market and sector-related factors (i.e., not credit losses). At September 30, 2015, the Company did not intend to sell these securities, or any other securities which were in an unrealized loss position, and determined that it is more likely than not that the Company will not be required to sell such securities before recovery of their cost basis.

The following table provides a roll forward of the amount related to credit losses recognized in earnings for which a portion of an OTTI was recognized in accumulated other comprehensive income:

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2015	2014	2015	2014



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Balance at start of period	\$20,906	\$21,441	\$20,196	\$60,062
Credit loss impairments recognized on securities not previously impaired	4,024	—	8,794	—
Credit loss impairments recognized on securities previously impaired	41	151	175	162
Reductions for increases in cash flows expected to be collected that are recognized over the remaining life of the security	—	—	—	—
Reductions for securities sold during the period	—	(217	) (4,194	) (38,849
Balance at end of period	\$24,971	\$21,375	\$24,971	\$21,375

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## ARCH CAPITAL GROUP LTD. AND SUBSIDIARIES

## NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (UNAUDITED)

## Restricted Assets

The Company is required to maintain assets on deposit, which primarily consist of fixed maturities, with various regulatory authorities to support its insurance and reinsurance operations. The Company's insurance and reinsurance subsidiaries maintain assets in trust accounts as collateral for insurance and reinsurance transactions with affiliated companies and also have investments in segregated portfolios primarily to provide collateral or guarantees for letters of credit to third parties. See Note 9 for further details. The following table details the value of the Company's restricted assets:

	September 30, 2015	December 31, 2014
Assets used for collateral or guarantees:		
Affiliated transactions	\$ 3,737,514	\$ 4,138,527
Third party agreements	1,071,260	970,120
Deposits with U.S. regulatory authorities	405,817	337,981
Deposits with non-U.S. regulatory authorities	40,365	—
Trust funds	100,789	72,461
Total restricted assets	\$ 5,355,745	\$ 5,519,089

## 7. Fair Value

Accounting guidance regarding fair value measurements addresses how companies should measure fair value when they are required to use a fair value measure for recognition or disclosure purposes under GAAP and provides a common definition of fair value to be used throughout GAAP. It defines fair value as the price that would be received to sell an asset or paid to transfer a liability in an orderly fashion between market participants at the measurement date. In addition, it establishes a three-level valuation hierarchy for the disclosure of fair value measurements. The valuation hierarchy is based upon the transparency of inputs to the valuation of an asset or liability as of the measurement date. The level in the hierarchy within which a given fair value measurement falls is determined based on the lowest level input that is significant to the measurement (Level 1 being the highest priority and Level 3 being the lowest priority).

The levels in the hierarchy are defined as follows:

Level 1: Inputs to the valuation methodology are observable inputs that reflect quoted prices (unadjusted) for identical assets or liabilities in active markets

Level 2: Inputs to the valuation methodology include quoted prices for similar assets and liabilities in active markets, and inputs that are observable for the asset or liability, either directly or indirectly, for substantially the full term of the financial instrument

Level 3: Inputs to the valuation methodology are unobservable and significant to the fair value measurement

Following is a description of the valuation methodologies used for securities measured at fair value, as well as the general classification of such securities pursuant to the valuation hierarchy. The Company reviews its securities measured at fair value and discusses the proper classification of such investments with investment advisers and others.

The Company determines the existence of an active market based on its judgment as to whether transactions for the financial instrument occur in such market with sufficient frequency and volume to provide reliable pricing

information. The independent pricing sources obtain market quotations and actual transaction prices for securities that have quoted prices in active markets. The Company uses quoted values and other data provided by nationally recognized independent pricing sources as inputs into its process for determining fair values of its fixed maturity investments. To validate the techniques or models used by pricing sources, the Company's review process includes, but is not limited to: (i) quantitative analysis (e.g., comparing the quarterly return for each managed portfolio to its target benchmark, with significant differences identified and investigated); (ii) a review of the average number of prices obtained in the pricing process and the range of resulting fair values; (iii) initial and ongoing evaluation of methodologies used by outside parties to calculate fair value; (iv) a comparison of the fair value estimates to the Company's knowledge of the current market; (v) a comparison of the pricing services' fair values to other pricing services' fair values for the same investments; and (vi) periodic back-testing, which includes randomly selecting purchased or sold securities and comparing the executed prices to the fair value estimates from the pricing service. A price source hierarchy was maintained in order to determine which price source would be used (i.e., a price obtained from a pricing

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ARCH CAPITAL GROUP LTD. AND SUBSIDIARIES

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (UNAUDITED)

service with more seniority in the hierarchy will be used over a less senior one in all cases). The hierarchy prioritizes pricing services based on availability and reliability and assigns the highest priority to index providers. Based on the above review, the Company will challenge any prices for a security or portfolio which are considered not to be representative of fair value. The Company did not adjust any of the prices obtained from the independent pricing sources at September 30, 2015.

In certain circumstances, when fair values are unavailable from these independent pricing sources, quotes are obtained directly from broker-dealers who are active in the corresponding markets. Such quotes are subject to the validation procedures noted above. Of the \$15.36 billion of financial assets and liabilities measured at fair value at September 30, 2015, approximately \$300.7 million, or 2.0%, were priced using non-binding broker-dealer quotes. Of the \$15.06 billion of financial assets and liabilities measured at fair value at December 31, 2014, approximately \$260.8 million, or 1.7%, were priced using non-binding broker-dealer quotes.

Fixed maturities. The Company uses the market approach valuation technique to estimate the fair value of its fixed maturity securities, when possible. The market approach includes obtaining prices from independent pricing services, such as index providers and pricing vendors, as well as to a lesser extent quotes from broker-dealers. The independent pricing sources obtain market quotations and actual transaction prices for securities that have quoted prices in active markets. Each source has its own proprietary method for determining the fair value of securities that are not actively traded. In general, these methods involve the use of “matrix pricing” in which the independent pricing source uses observable market inputs including, but not limited to, investment yields, credit risks and spreads, benchmarking of like securities, broker-dealer quotes, reported trades and sector groupings to determine a reasonable fair value.

The following describes the significant inputs generally used to determine the fair value of the Company’s fixed maturity securities by asset class:

U.S. government and government agencies — valuations provided by independent pricing services, with all prices provided through index providers and pricing vendors. The Company determined that all U.S. Treasuries would be classified as Level 1 securities due to observed levels of trading activity, the high number of strongly correlated pricing quotes received on U.S. Treasuries and other factors. The fair values of U.S. government agency securities are generally determined 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.

- Corporate bonds — valuations provided by independent pricing services, substantially all through index providers and pricing vendors with a small amount through broker-dealers. The fair values of these securities are generally determined using the spread above the risk-free yield curve. These spreads are generally obtained from the new issue market, secondary trading and from broker-dealers who trade in the relevant security market. As the significant inputs used in the pricing process for corporate bonds are observable market inputs, the fair value of these securities are classified within Level 2.

• Mortgage-backed securities — valuations provided by independent pricing services, substantially all through pricing vendors and index providers with a small amount through broker-dealers. The fair values of these securities are generally determined through the use of pricing models (including Option Adjusted Spread) which use spreads to determine the expected average life of the securities. These spreads are generally obtained from the new issue market, secondary trading and from broker-dealers who trade in the relevant security market. The pricing services also review prepayment speeds and other indicators, when applicable. As the significant inputs used in the pricing process for mortgage-backed securities are observable market inputs, the fair value of these securities are classified within Level

2.

Municipal bonds — valuations provided by independent pricing services, with all prices provided through index providers and pricing vendors. The fair values of these securities are generally determined using spreads obtained from broker-dealers who trade in the relevant security market, trade prices and the new issue market. As the significant inputs used in the pricing process for municipal bonds are observable market inputs, the fair value of these securities are classified within Level 2.

Commercial mortgage-backed securities — valuations provided by independent pricing services, substantially all through index providers and pricing vendors with a small amount through broker-dealers. The fair values of these securities are generally determined through the use of pricing models which use spreads to determine the appropriate average life of the securities. These spreads are generally obtained from the new issue market, secondary trading and from broker-dealers

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ARCH CAPITAL GROUP LTD. AND SUBSIDIARIES

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (UNAUDITED)

who trade in the relevant security market. The pricing services also review prepayment speeds and other indicators, when applicable. As the significant inputs used in the pricing process for commercial mortgage-backed securities are observable market inputs, the fair value of these securities are classified within Level 2.

Non-U.S. government securities — valuations provided by independent pricing services, with all prices provided through index providers and pricing vendors. The fair values of these securities are generally based on international indices or valuation models which include daily observed yield curves, cross-currency basis index spreads and country credit spreads. As the significant inputs used in the pricing process for non-U.S. government securities are observable market inputs, the fair value of these securities are classified within Level 2.

Asset-backed securities — valuations provided by independent pricing services, substantially all through index providers and pricing vendors with a small amount through broker-dealers. The fair values of these securities generally determined through the use of pricing models (including Option Adjusted Spread) which use spreads to determine the appropriate average life of the securities. These spreads are generally obtained from the new issue market, secondary trading and from broker-dealers who trade in the relevant security market. The pricing services also review prepayment speeds and other indicators, when applicable. As the significant inputs used in the pricing process for asset-backed securities are observable market inputs, the fair value of these securities are classified within Level 2.

During the 2015 second quarter, the Company transferred \$44.6 million of U.S. government agency securities from Level 1 to Level 2 based on a review of the pricing of such securities, as described above.

Equity securities. The Company determined that exchange-traded equity securities would be included in Level 1 as their fair values are based on quoted market prices in active markets. Other equity securities are included in Level 2 of the valuation hierarchy.

Other investments. The Company determined that exchange-traded investments in mutual funds would be included in Level 1 as their fair values are based on quoted market prices in active markets. Other investments also include term loan investments for which fair values are estimated by using quoted prices of term loan investments with similar characteristics, pricing models or matrix pricing. Such investments are generally classified within Level 2. The fair values for certain of the Company's other investments are determined using net asset values as advised by external fund managers. The net asset value is based on the fund manager's valuation of the underlying holdings in accordance with the fund's governing documents. In accordance with applicable accounting guidance, certain investments that are measured at fair value using the net asset value per share (or its equivalent) practical expedient have not been classified in the fair value hierarchy.

During the 2015 second quarter, the Company transferred \$99.7 million of other investments from Level 2 to Level 1 based on a review of the pricing of such securities, as described above.

Derivative instruments. The Company's futures contracts, foreign currency forward contracts, interest rate swaps and other derivatives trade in the over-the-counter derivative market. The Company uses the market approach valuation technique to estimate the fair value for these derivatives based on significant observable market inputs from third party pricing vendors, non-binding broker-dealer quotes and/or recent trading activity. As the significant inputs used in the pricing process for these derivative instruments are observable market inputs, the fair value of these securities are classified within Level 2.

Short-term investments. The Company determined that certain of its short-term investments held in highly liquid money market-type funds would be included in Level 1 as their fair values are based on quoted market prices in active

markets. The fair values of other short-term investments are generally determined using the spread above the risk-free yield curve and are classified within Level 2.

Contingent consideration liabilities. Contingent consideration liabilities (included in 'other liabilities' in the consolidated balance sheets) includes amounts related to the acquisition of CMG Mortgage Insurance Company and its affiliated mortgage insurance companies and other acquisitions. Such amounts are remeasured at fair value at each balance sheet date with changes in fair value recognized in 'net realized gains (losses).' To determine the fair value of contingent consideration liabilities, the Company estimates future payments using an income approach based on modeled inputs which include a weighted average cost of capital. The Company determined that contingent consideration liabilities would be included within Level 3.

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## ARCH CAPITAL GROUP LTD. AND SUBSIDIARIES

## NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (UNAUDITED)

The following table presents the Company's financial assets and liabilities measured at fair value by level at September 30, 2015:

	Estimated Fair Value	Estimated Fair Value Measurements Using:		
		Quoted Prices in Significant Active Markets for Identical Assets (Level 1)	Other Observable Inputs (Level 2)	Significant Unobservable Inputs (Level 3)
Assets measured at fair value:				
Available for sale securities:				
Fixed maturities (1):				
Corporate bonds	\$2,796,038	\$—	\$2,796,038	\$—
Mortgage backed securities	809,876	—	809,876	—
Municipal bonds	1,830,987	—	1,830,987	—
Commercial mortgage backed securities	810,973	—	810,973	—
U.S. government and government agencies	2,338,724	2,292,409	46,315	—
Non-U.S. government securities	887,120	—	887,120	—
Asset backed securities	1,372,549	—	1,315,049	57,500
Total	10,846,267	2,292,409	8,496,358	57,500
Equity securities	606,259	605,677	582	—
Short-term investments	708,428	703,316	5,112	—
Other investments	60,526	60,526	—	—
Other investments measured at net asset value (2)	220,488	—	—	—
Total other investments	281,014	60,526	—	—
Derivative instruments (4)	16,865	—	16,865	—
Fair value option:				
Corporate bonds	767,567	—	767,567	—
Non-U.S. government bonds	76,973	—	76,973	—
Mortgage backed securities	59,435	—	59,435	—
Asset backed securities	22,499	—	22,499	—
U.S. government and government agencies	115	115	—	—
Short-term investments	153,604	153,604	—	—
Equity securities	78	78	—	—
Other investments	1,221,194	68,501	1,152,693	—
Other investments measured at net asset value (2)	481,700	—	—	—
Total	2,783,165	222,298	2,079,167	—
Total assets measured at fair value	\$15,241,998	\$3,884,226	\$10,598,084	\$57,500
Liabilities measured at fair value:				
Contingent consideration liabilities	\$(80,852)	) \$—	\$—	\$(80,852)
Securities sold but not yet purchased (3)	(25,384)	) —	(25,384)	) —



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Derivative instruments (4)	(38,027 )	—	(38,027 )	—
Total liabilities measured at fair value	\$(144,263 )	\$—	\$(63,411 )	\$(80,852 )

(1) In securities lending transactions, the Company receives collateral in excess of the fair value of the securities pledged. For purposes of this table, the Company has excluded the collateral received under securities lending, at fair value and included the securities pledged under securities lending, at fair value. See Note 6, “Investment Information—Securities Lending Agreements.”

(2) In accordance with applicable accounting guidance, certain investments that are measured at fair value using the net asset value per share (or its equivalent) practical expedient have not been classified in the fair value hierarchy. The fair value amounts presented in this table are intended to permit reconciliation of the fair value hierarchy to the amounts presented in the consolidated balance sheets.

(3) Represents the Company’s obligations to deliver securities that it did not own at the time of sale. Such amounts are included in “other liabilities” on the Company’s consolidated balance sheets.

(4) See Note 8, “Derivative Instruments.”

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## ARCH CAPITAL GROUP LTD. AND SUBSIDIARIES

## NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (UNAUDITED)

The following table presents the Company's financial assets and liabilities measured at fair value by level at December 31, 2014:

	Estimated Fair Value	Estimated Fair Value Measurements Using:		
		Quoted Prices in Active Markets for Identical Assets (Level 1)	Other Observable Inputs (Level 2)	Significant Unobservable Inputs (Level 3)
Assets measured at fair value:				
Available for sale securities:				
Fixed maturities (1):				
Corporate bonds	\$3,108,513	\$—	\$3,108,513	\$—
Mortgage backed securities	943,343	—	943,343	—
Municipal bonds	1,494,122	—	1,494,122	—
Commercial mortgage backed securities	1,114,528	—	1,114,528	—
U.S. government and government agencies	1,447,972	1,447,972	—	—
Non-U.S. government securities	1,015,153	—	1,015,153	—
Asset backed securities	1,677,941	—	1,620,441	57,500
Total	10,801,572	1,447,972	9,296,100	57,500
Equity securities	658,182	658,182	—	—
Short-term investments	797,226	759,621	37,605	—
Other investments	97,372	—	97,372	—
Other investments measured at net asset value (2)	198,852	—	—	—
Total other investments	296,224	—	97,372	—
Derivative instruments (3)	15,876	—	15,876	—
Fair value option:				
Corporate bonds	497,101	—	497,101	—
Non-U.S. government bonds	88,411	—	88,411	—
Mortgage backed securities	22,190	—	22,190	—
Asset backed securities	24,322	—	24,322	—
Short-term investments	251,601	250,580	1,021	—
Other investments	1,140,266	—	1,140,266	—
Other investments measured at net asset value (2)	401,162	—	—	—
Total	2,425,053	250,580	1,773,311	—
Total assets measured at fair value	\$14,994,133	\$3,116,355	\$11,220,264	\$57,500
Liabilities measured at fair value:				
Contingent consideration liabilities	\$(61,845)	) \$—	\$—	\$(61,845)
Derivative instruments (3)	(5,397)	) —	(5,397)	) —
Total liabilities measured at fair value	\$(67,242)	) \$—	\$(5,397)	) \$(61,845)

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(1) In securities lending transactions, the Company receives collateral in excess of the fair value of the securities pledged. For purposes of this table, the Company has excluded the collateral received under securities lending, at fair value and included the securities pledged under securities lending, at fair value. See Note 6, "Investment Information—Securities Lending Agreements."

(2) In accordance with applicable accounting guidance, certain investments that are measured at fair value using the net asset value per share (or its equivalent) practical expedient have not been classified in the fair value hierarchy. The fair value amounts presented in this table are intended to permit reconciliation of the fair value hierarchy to the amounts presented in the consolidated balance sheets.

(3) See Note 8, "Derivative Instruments."

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## ARCH CAPITAL GROUP LTD. AND SUBSIDIARIES

## NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (UNAUDITED)

The following table presents a reconciliation of the beginning and ending balances for all financial assets and liabilities measured at fair value on a recurring basis using Level 3 inputs:

s	Assets				Fair Value Option Total	Liabilities
	Available For Sale	Corporate Bonds	Other Investments	Other Investments		Contingent Consideration Liabilities
Three Months Ended September 30, 2015						
Balance at beginning of period	\$57,500	\$—	\$—	\$—	\$57,500	\$ (71,256 )
Total gains or (losses) (realized/unrealized)						
Included in earnings (1)	—	—	—	—	—	(9,596 )
Included in other comprehensive income	—	—	—	—	—	—
Purchases, issuances, sales and settlements						
Purchases	—	—	—	—	—	—
Issuances	—	—	—	—	—	—
Sales	—	—	—	—	—	—
Settlements	—	—	—	—	—	—
Transfers in and/or out of Level 3	—	—	—	—	—	—
Balance at end of period	\$57,500	\$—	\$—	\$—	\$57,500	\$ (80,852 )
Three Months Ended September 30, 2014						
Balance at beginning of period	\$—	\$—	\$—	\$—	\$—	\$ (53,099 )
Total gains or (losses) (realized/unrealized)						
Included in earnings (1)	—	—	—	—	—	(5,562 )
Included in other comprehensive income	—	—	—	—	—	—
Purchases, issuances, sales and settlements						
Purchases	—	—	—	—	—	—
Issuances	—	—	—	—	—	—
Sales	—	—	—	—	—	—
Settlements	—	—	—	—	—	—
Transfers in and/or out of Level 3	—	—	—	—	—	—
Balance at end of period	\$—	\$—	\$—	\$—	\$—	\$ (58,661 )
Nine Months Ended September 30, 2015						
Balance at beginning of period	\$57,500	\$—	\$—	\$—	\$57,500	\$ (61,845 )
Total gains or (losses) (realized/unrealized)						
Included in earnings (1)	—	—	—	—	—	(17,939 )

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Included in other comprehensive income	—	—	—	—	—	—
Purchases, issuances, sales and settlements						
Purchases	—	—	—	—	—	—
Issuances	—	—	—	—	—	(1,068 )
Sales	—	—	—	—	—	—
Settlements	—	—	—	—	—	—
Transfers in and/or out of Level 3	—	—	—	—	—	—
Balance at end of period	\$57,500	\$—	\$—	\$—	\$57,500	\$(80,852 )
Nine Months Ended September 30, 2014						
Balance at beginning of period	\$—	\$2,045	\$170,420	\$377,525	\$549,990	\$—
Total gains or (losses) (realized/unrealized)						
Included in earnings (1)	—	—	—	—	—	(16,899 )
Included in other comprehensive income	—	—	—	—	—	—
Purchases, issuances, sales and settlements						
Purchases	—	—	—	—	—	—
Issuances	—	—	—	—	—	(41,762 )
Sales	—	(2,045 )	—	—	(2,045 )	—
Settlements	—	—	—	—	—	—
Transfers in and/or out of Level 3 (2)	—	—	(170,420 )	(377,525 )	(547,945 )	—
Balance at end of period	\$—	\$—	\$—	\$—	\$—	\$(58,661 )

Gains or losses on fixed maturities available for sale were included in net realized gains (losses) while gains or (1) losses on other investments were included in net realized gains (losses) or net investment income. Gains or losses on contingent consideration liabilities were included in net realized gains (losses).

In accordance with applicable accounting guidance, certain investments that are measured at fair value using the (2) net asset value per share (or its equivalent) practical expedient have not been classified in the fair value hierarchy. The transfers out of Level 3 presented in this table are intended to permit reconciliation to information previously presented.

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## ARCH CAPITAL GROUP LTD. AND SUBSIDIARIES

## NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (UNAUDITED)

## Financial Instruments Disclosed, But Not Carried, At Fair Value

The Company uses various financial instruments in the normal course of its business. The carrying values of cash, accrued investment income, receivable for securities sold, certain other assets, payable for securities purchased and certain other liabilities approximated their fair values at September 30, 2015, due to their respective short maturities. As these financial instruments are not actively traded, their respective fair values are classified within Level 2.

At September 30, 2015, the senior notes of ACGL were carried at their cost, net of debt issuance costs, of \$296.9 million and had a fair value of \$387.6 million while the senior notes of Arch-U.S. were carried at their cost, net of debt issuance costs, of \$494.4 million and had a fair value of \$543.7 million. The fair values of the senior notes were obtained from a third party pricing service and are based on observable market inputs. As such, the fair value of the senior notes is classified within Level 2.

## 8. Derivative Instruments

The Company's investment strategy allows for the use of derivative securities. The Company's derivative instruments are recorded on its consolidated balance sheets at fair value. The Company utilizes exchange traded U.S. Treasury note, Eurodollar and other futures contracts and commodity futures to manage portfolio duration or replicate investment positions in its portfolios and the Company routinely utilizes foreign currency forward contracts, currency options, index futures contracts and other derivatives as part of its total return objective. In addition, certain of the Company's investments are managed in portfolios which incorporate the use of foreign currency forward contracts which are intended to provide an economic hedge against foreign currency movements.

In addition, the Company purchases to-be-announced mortgage backed securities ("TBAs") as part of its investment strategy. TBAs represent commitments to purchase a future issuance of agency mortgage backed securities. For the period between purchase of a TBA and issuance of the underlying security, the Company's position is accounted for as a derivative. The Company purchases TBAs in both long and short positions to enhance investment performance and as part of its overall investment strategy.

The Company did not hold any derivatives which were designated as hedging instruments at September 30, 2015 or December 31, 2014. The following table summarizes information on the fair values and notional values of the Company's derivative instruments.

	Estimated Fair Value			
	Asset Derivatives	Liability Derivatives	Net Derivatives	Notional Value (1)
September 30, 2015				
Futures contracts (2)	\$189	\$(3,528)	\$(3,339)	\$1,702,327
Foreign currency forward contracts (2)	10,678	(7,235)	3,443	1,018,620
TBAs (3)	307,356	(290,865)	16,491	568,463
Other (2)	5,998	(27,264)	(21,266)	1,446,622
Total	\$324,221	\$(328,892)	\$(4,671)	
December 31, 2014				
Futures contracts (2)	\$2,156	\$(1,907)	\$249	\$2,549,027
Foreign currency forward contracts (2)	10,511	(1,145)	9,366	397,106
TBAs (3)	10,592	—	10,592	10,056
Other (2)	3,209	(2,345)	864	735,684

Total \$26,468 \$(5,397 ) \$21,071

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- (1) Represents the absolute notional value of all outstanding contracts, consisting of long and short positions.
  - (2) The fair value of asset derivatives are included in 'other assets' and the fair value of liability derivatives are included in 'other liabilities.'
  - (3) The fair value of TBAs are included in 'fixed maturities available for sale, at fair value.'

The Company's derivative instruments can be traded under master netting agreements, which establish terms that apply to all derivative transactions with a counterparty. In the event of a bankruptcy or other stipulated event of default, such agreements provide that the non-defaulting party may elect to terminate all outstanding derivative transactions, in which case all individual derivative positions (loss or gain) with a counterparty are closed out and netted and replaced with a single amount, usually

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## ARCH CAPITAL GROUP LTD. AND SUBSIDIARIES

## NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (UNAUDITED)

referred to as the termination amount, which is expressed in a single currency. The resulting single net amount, where positive, is payable to the party “in-the-money” regardless of whether or not it is the defaulting party, unless the parties have agreed that only the non-defaulting party is entitled to receive a termination payment where the net amount is positive and is in its favor. Effectively, contractual close-out netting reduces derivatives credit exposure from gross to net exposure. At September 30, 2015, asset derivatives and liability derivatives of \$298.4 million and \$309.6 million, respectively, were subject to a master netting agreement, compared to \$25.3 million and \$5.4 million, respectively, at December 31, 2014. The remaining derivatives included in the table above were not subject to a master netting agreement.

All realized and unrealized contract gains and losses on the Company’s derivative instruments are reflected in net realized gains (losses) in the consolidated statements of income, as summarized in the following table:

	Three Months Ended		Nine Months Ended	
	September 30,		September 30,	
Derivatives not designated as hedging instruments:	2015	2014	2015	2014
Net realized gains (losses):				
Futures contracts	\$28,562	\$(354)	\$16,442	\$4,969
Foreign currency forward contracts	5,395	6,558	13,490	2,490
TBAs	1,064	660	1,368	353
Other	868	585	(231)	(729)
Total	\$35,889	\$7,449	\$31,069	\$7,083

## 9. Commitments and Contingencies

## Letter of Credit and Revolving Credit Facilities

As of September 30, 2015, the Company had a \$300 million unsecured revolving loan and letter of credit facility and a \$500 million secured letter of credit facility (the “Credit Agreement”). The Credit Agreement expires on June 30, 2019. In addition, the Company had access to secured letter of credit facilities of approximately \$228.6 million as of September 30, 2015, which are available on a limited basis and for limited purposes (together with the secured portion of the Credit Agreement and these letter of credit facilities, the “LOC Facilities”). At September 30, 2015, the Company had \$451.8 million in outstanding letters of credit under the LOC Facilities, which were secured by investments with a fair value of \$517.4 million, and had \$100.0 million of borrowings outstanding under the Credit Agreement. The Company was in compliance with all covenants contained in the LOC Facilities at September 30, 2015.

As of September 30, 2015, Watford Re had a \$100 million letter of credit facility expiring on May 19, 2016 and an \$800 million secured credit facility expiring on June 4, 2018, that provides for borrowings and the issuance of letters of credit not to exceed \$400 million. At September 30, 2015, Watford Re had \$102.8 million in outstanding letters of credit under the two facilities and \$239.1 million of borrowings outstanding under the secured credit facility, backed by Watford Re’s investment portfolio. Watford Re was in compliance with all covenants contained in both of its credit facilities at September 30, 2015. The Company does not guarantee or provide credit support for Watford Re, and the Company’s financial exposure to Watford Re is limited to its investment in Watford Re’s common and preferred shares and counterparty credit risk (mitigated by collateral) arising from the reinsurance transactions.

## Investment Commitments

The Company’s investment commitments, which are primarily related to agreements entered into by the Company to invest in funds and separately managed accounts when called upon, were approximately \$1.23 billion at September



30, 2015, compared to \$968.9 million at December 31, 2014.

10. Share Transactions

Share Repurchases

The board of directors of ACGL has authorized the investment in ACGL's common shares through a share repurchase program. Since the inception of the share repurchase program, ACGL has repurchased approximately 124.1 million common shares for an aggregate purchase price of \$3.61 billion. During the nine months ended September 30, 2015, ACGL repurchased 5.9 million common shares for an aggregate purchase price of \$365.4 million, compared to 4.6 million common shares

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repurchased for an aggregate purchase price of \$251.9 million during the 2014 period. At September 30, 2015, \$521.8 million of share repurchases were available under the program. The timing and amount of the repurchase transactions under this program will depend on a variety of factors, including market conditions and corporate and regulatory considerations.

## 11. Income Taxes

ACGL is incorporated under the laws of Bermuda and, under current Bermuda law, is not obligated to pay any taxes in Bermuda based upon income or capital gains. The Company has received a written undertaking from the Minister of Finance in Bermuda under the Exempted Undertakings Tax Protection Act 1966 that, in the event that any legislation is enacted in Bermuda imposing any tax computed on profits, income, gain or appreciation on any capital asset, or any tax in the nature of estate duty or inheritance tax, such tax will not be applicable to ACGL or any of its operations until March 31, 2035. This undertaking does not, however, prevent the imposition of taxes on any person ordinarily resident in Bermuda or any company in respect of its ownership of real property or leasehold interests in Bermuda.

ACGL and its non-U.S. subsidiaries will be subject to U.S. federal income tax only to the extent that they derive U.S. source income that is subject to U.S. withholding tax or income that is effectively connected with the conduct of a trade or business within the U.S. and is not exempt from U.S. tax under an applicable income tax treaty with the U.S. ACGL and its non-U.S. subsidiaries will be subject to a withholding tax on dividends from U.S. investments and interest from certain U.S. payors (subject to reduction by any applicable income tax treaty). ACGL and its non-U.S. subsidiaries intend to conduct their operations in a manner that will not cause them to be treated as engaged in a trade or business in the United States and, therefore, will not be required to pay U.S. federal income taxes (other than U.S. excise taxes on insurance and reinsurance premium and withholding taxes on dividends and certain other U.S. source investment income). However, because there is uncertainty as to the activities which constitute being engaged in a trade or business within the United States, there can be no assurances that the U.S. Internal Revenue Service will not contend successfully that ACGL or its non-U.S. subsidiaries are engaged in a trade or business in the United States. If ACGL or any of its non-U.S. subsidiaries were subject to U.S. income tax, ACGL's shareholders' equity and earnings could be materially adversely affected. ACGL has subsidiaries and branches that operate in various jurisdictions around the world that are subject to tax in the jurisdictions in which they operate. The significant jurisdictions in which ACGL's subsidiaries and branches are subject to tax are the United States, United Kingdom, Ireland, Canada, Switzerland and Denmark.

The Company's income tax provision on income before income taxes resulted in an expense of 5.5% for the nine months ended September 30, 2015, compared to an expense of 2.8% for the 2014 period. The Company's effective tax rate, which is based upon the expected annual effective tax rate, may fluctuate from period to period based on the relative mix of income or loss reported by jurisdiction and the varying tax rates in each jurisdiction. The Company had a net deferred tax asset of \$139.9 million at September 30, 2015, compared to \$131.0 million at December 31, 2014. In addition, the Company paid \$35.5 million in income taxes for the nine months ended September 30, 2015, while the Company paid \$13.3 million for the 2014 period.

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## ARCH CAPITAL GROUP LTD. AND SUBSIDIARIES

## NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (UNAUDITED)

## 12. Other Comprehensive Income (Loss)

The following tables present details about amounts reclassified from accumulated other comprehensive income and the tax effects allocated to each component of other comprehensive income (loss):

Details About AOCI Components	Consolidated Statement of Income Line Item That Includes Reclassification	Amounts Reclassified from AOCI			
		Three Months Ended September 30,		Nine Months Ended September 30,	
		2015	2014	2015	2014
Unrealized appreciation on available-for-sale investments					
	Net realized gains (losses)	\$ (2,019 )	\$ 27,715	\$ 63,671	\$ 77,488
	Other-than-temporary impairment losses	(8,901 )	(8,593 )	(17,274 )	(26,313 )
	Total before tax	(10,920 )	19,122	46,397	51,175
	Income tax (expense) benefit	(1,358 )	(1,639 )	(6,529 )	(4,158 )
	Net of tax	\$ (12,278 )	\$ 17,483	\$ 39,868	\$ 47,017
			Before Tax Amount	Tax Expense (Benefit)	Net of Tax Amount
Three Months Ended September 30, 2015					
Unrealized appreciation (decline) in value of investments:					
	Unrealized holding gains (losses) arising during period		\$ (44,687 )	\$ 9,204	\$ (53,891 )
	Portion of other-than-temporary impairment losses recognized in other comprehensive income (loss)		(3,033 )	—	(3,033 )
	Less reclassification of net realized gains (losses) included in net income		(10,920 )	1,358	(12,278 )
	Foreign currency translation adjustments		(12,638 )	(556 )	(12,082 )
	Other comprehensive income (loss)		\$ (49,438 )	\$ 7,290	\$ (56,728 )
Three Months Ended September 30, 2014					
Unrealized appreciation (decline) in value of investments:					
	Unrealized holding gains (losses) arising during period		\$ (90,276 )	\$ 343	\$ (90,619 )
	Portion of other-than-temporary impairment losses recognized in other comprehensive income (loss)		—	—	—
	Less reclassification of net realized gains (losses) included in net income		19,122	1,639	17,483
	Foreign currency translation adjustments		(23,595 )	—	(23,595 )
	Other comprehensive income (loss)		\$ (132,993 )	\$ (1,296 )	\$ (131,697 )
Nine Months Ended September 30, 2015					
Unrealized appreciation (decline) in value of investments:					
	Unrealized holding gains (losses) arising during period		\$ (46,929 )	\$ 4,593	\$ (51,522 )
	Portion of other-than-temporary impairment losses recognized in other comprehensive income (loss)		(4,494 )	—	(4,494 )
	Less reclassification of net realized gains (losses) included in net income		46,397	6,529	39,868
	Foreign currency translation adjustments		(24,567 )	(1,308 )	(23,259 )
	Other comprehensive income (loss)		\$ (122,387 )	\$ (3,244 )	\$ (119,143 )
Nine Months Ended September 30, 2014					
Unrealized appreciation (decline) in value of investments:					

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Unrealized holding gains (losses) arising during period	\$ 100,274	\$ 11,112	\$ 89,162
Portion of other-than-temporary impairment losses recognized in other comprehensive income (loss)	—	—	—
Less reclassification of net realized gains (losses) included in net income	51,175	4,158	47,017
Foreign currency translation adjustments	(14,923 )	—	(14,923 )
Other comprehensive income (loss)	\$ 34,176	\$ 6,954	\$ 27,222

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## ARCH CAPITAL GROUP LTD. AND SUBSIDIARIES

## NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (UNAUDITED)

## 13. Guarantor Financial Information

The following tables present condensed financial information for ACGL, Arch Capital Group (U.S.) Inc. (“Arch-U.S.”), a 100% owned subsidiary of ACGL, and ACGL’s other subsidiaries.

September 30, 2015

Condensed Consolidating Balance Sheet	ACGL (Parent Guarantor)	Arch-U.S. (Subsidiary Issuer)	Other ACGL Subsidiaries	Consolidating Adjustments and Eliminations	ACGL Consolidated
<b>Assets</b>					
Total investments	\$34	\$55,053	\$15,775,050	\$(14,700 )	\$15,815,437
Cash	10,381	9,256	630,142	—	649,779
Investments in subsidiaries	6,579,718	1,715,121	—	(8,294,839 )	—
Due from subsidiaries and affiliates	—	48,548	442,508	(491,056 )	—
Premiums receivable	—	—	1,521,960	(447,076 )	1,074,884
Reinsurance recoverable on unpaid and paid losses and loss adjustment expenses	—	—	5,739,246	(3,906,860 )	1,832,386
Contractholder receivables	—	—	1,436,154	—	1,436,154
Prepaid reinsurance premiums	—	—	1,602,870	(1,160,524 )	442,346
Deferred acquisition costs, net	—	—	448,893	—	448,893
Other assets	3,534	43,860	2,644,143	(620,824 )	2,070,713
Total assets	\$6,593,667	\$1,871,838	\$30,240,966	\$(14,935,879)	\$23,770,592
<b>Liabilities</b>					
Reserve for losses and loss adjustment expenses	\$—	\$—	\$12,969,850	\$(3,884,995 )	\$9,084,855
Unearned premiums	—	—	3,628,215	(1,160,524 )	2,467,691
Reinsurance balances payable	—	—	669,285	(433,723 )	235,562
Contractholder payables	—	—	1,436,154	—	1,436,154
Collateral held for insured obligations	—	—	242,928	—	242,928
Deposit accounting liabilities	—	—	482,756	(211,880 )	270,876
Senior notes	296,854	494,410	—	—	791,264
Revolving credit agreement borrowings	100,000	—	239,077	—	339,077
Due to subsidiaries and affiliates	14,080	35,000	441,976	(491,056 )	—
Other liabilities	19,918	49,904	2,134,460	(444,163 )	1,760,119
Total liabilities	430,852	579,314	22,244,701	(6,626,341 )	16,628,526
Redeemable noncontrolling interests	—	—	219,789	(14,700 )	205,089
<b>Shareholders’ Equity</b>					
Total shareholders’ equity available to Arch	6,162,815	1,292,524	7,002,314	(8,294,838 )	6,162,815
Non-redeemable noncontrolling interests	—	—	774,162	—	774,162
Total shareholders’ equity	6,162,815	1,292,524	7,776,476	(8,294,838 )	6,936,977
Total liabilities, noncontrolling interests and shareholders’ equity	\$6,593,667	\$1,871,838	\$30,240,966	\$(14,935,879)	\$23,770,592



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## ARCH CAPITAL GROUP LTD. AND SUBSIDIARIES

## NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (UNAUDITED)

Condensed Consolidating Balance Sheet	December 31, 2014				
	ACGL (Parent Guarantor)	Arch-U.S. (Subsidiary Issuer)	Other ACGL Subsidiaries	Consolidating Adjustments and Eliminations	ACGL Consolidated
<b>Assets</b>					
Total investments	\$ 107	\$ 62,867	\$ 15,257,796	\$—	\$ 15,320,770
Cash	3,218	2,787	479,697	—	485,702
Investments in subsidiaries	6,536,644	1,685,185	—	(8,221,829 )	—
Due from subsidiaries and affiliates	48	7,517	370,429	(377,994 )	—
Premiums receivable	—	—	1,331,511	(382,816 )	948,695
Reinsurance recoverable on unpaid and paid losses and loss adjustment expenses	—	—	5,584,973	(3,772,128 )	1,812,845
Contractholder receivables	—	—	1,309,192	—	1,309,192
Prepaid reinsurance premiums	—	—	1,373,008	(995,930 )	377,078
Deferred acquisition costs, net	—	—	414,525	—	414,525
Other assets	4,386	43,921	1,705,546	(416,579 )	1,337,274
Total assets	\$ 6,544,403	\$ 1,802,277	\$ 27,826,677	\$ (14,167,276)	\$ 22,006,081
<b>Liabilities</b>					
Reserve for losses and loss adjustment expenses	\$—	\$—	\$ 12,784,030	\$(3,747,582 )	\$ 9,036,448
Unearned premiums	—	—	3,227,508	(995,930 )	2,231,578
Reinsurance balances payable	—	—	589,289	(369,977 )	219,312
Contractholder payables	—	—	1,309,192	—	1,309,192
Collateral held for insured obligations	—	—	184,219	—	184,219
Deposit accounting liabilities	—	—	587,050	(259,666 )	327,384
Senior notes	296,796	494,345	—	—	791,141
Revolving credit agreement borrowings	100,000	—	—	—	100,000
Due to subsidiaries and affiliates	417	7,505	370,072	(377,994 )	—
Other liabilities	17,137	49,403	815,919	(194,298 )	688,161
Total liabilities	414,350	551,253	19,867,279	(5,945,447 )	14,887,435
Redeemable noncontrolling interests	—	—	219,512	—	219,512
<b>Shareholders' Equity</b>					
Total shareholders' equity available to Arch	6,130,053	1,251,024	6,970,805	(8,221,829 )	6,130,053
Non-redeemable noncontrolling interests	—	—	769,081	—	769,081
Total shareholders' equity	6,130,053	1,251,024	7,739,886	(8,221,829 )	6,899,134
Total liabilities, noncontrolling interests and shareholders' equity	\$ 6,544,403	\$ 1,802,277	\$ 27,826,677	\$ (14,167,276)	\$ 22,006,081





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## ARCH CAPITAL GROUP LTD. AND SUBSIDIARIES

## NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (UNAUDITED)

Condensed Consolidating Statement of Income and Comprehensive Income	Three Months Ended September 30, 2015				
	ACGL (Parent Guarantor)	Arch-U.S. (Subsidiary Issuer)	Other ACGL Subsidiaries	Consolidating Adjustments and Eliminations	ACGL Consolidated
<b>Revenues</b>					
Net premiums earned	\$—	\$—	\$936,683	\$—	\$936,683
Net investment income	—	764	92,773	(7,304)	86,233
Net realized gains (losses)	—	—	(89,698)	—	(89,698)
Net impairment losses recognized in earnings	—	—	(5,868)	—	(5,868)
Other underwriting income	—	—	7,623	—	7,623
Equity in net income (loss) of investment funds accounted for using the equity method	—	—	(2,118)	—	(2,118)
Other income (loss)	—	—	(265)	—	(265)
Total revenues	—	764	939,130	(7,304)	932,590
<b>Expenses</b>					
Losses and loss adjustment expenses	—	—	531,741	—	531,741
Acquisition expenses	—	—	171,566	—	171,566
Other operating expenses	10,536	720	145,703	—	156,959
Interest expense	5,863	6,689	7,734	(6,986)	13,300
Net foreign exchange (gains) losses	—	—	(11,762)	(2,918)	(14,680)
Total expenses	16,399	7,409	844,982	(9,904)	858,886
Income (loss) before income taxes	(16,399)	(6,645)	94,148	2,600	73,704
Income tax (expense) benefit	—	2,324	(12,028)	—	(9,704)
Income (loss) before equity in net income of subsidiaries	(16,399)	(4,321)	82,120	2,600	64,000
Equity in net income of subsidiaries	96,432	13,620	—	(110,052)	—
Net income	80,033	9,299	82,120	(107,452)	64,000
Amounts attributable to noncontrolling interests	—	—	15,712	321	16,033
Net income available to Arch	80,033	9,299	97,832	(107,131)	80,033
Preferred dividends	(5,484)	—	—	—	(5,484)
Net income available to Arch common shareholders	\$74,549	\$9,299	\$97,832	\$(107,131)	\$74,549
Comprehensive income (loss) available to Arch	\$23,401	\$15,705	\$44,127	\$(59,832)	\$23,401

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## ARCH CAPITAL GROUP LTD. AND SUBSIDIARIES

## NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (UNAUDITED)

Condensed Consolidating Statement of Income and Comprehensive Income	Three Months Ended September 30, 2014				
	ACGL (Parent Guarantor)	Arch-U.S. (Subsidiary Issuer)	Other ACGL Subsidiaries	Consolidating Adjustments and Eliminations	ACGL Consolidated
<b>Revenues</b>					
Net premiums earned	\$—	\$—	\$903,651	\$—	\$903,651
Net investment income	—	—	79,936	169	80,105
Net realized gains (losses)	—	—	18,515	—	18,515
Net impairment losses recognized in earnings	—	—	(8,593)	) —	(8,593)
Other underwriting income	—	—	1,702	—	1,702
Equity in net income (loss) of investment funds accounted for using the equity method	—	—	4,966	—	4,966
Other income (loss)	—	—	(7,815)	) —	(7,815)
Total revenues	—	—	992,362	169	992,531
<b>Expenses</b>					
Losses and loss adjustment expenses	—	—	501,673	—	501,673
Acquisition expenses	—	—	163,547	—	163,547
Other operating expenses	10,056	810	138,614	—	149,480
Interest expense	5,858	6,433	(8,308)	) 169	4,152
Net foreign exchange (gains) losses	—	—	(35,244)	) (20,787)	(56,031)
Total expenses	15,914	7,243	760,282	(20,618)	762,821
Income (loss) before income taxes	(15,914)	) (7,243)	) 232,080	20,787	229,710
Income tax (expense) benefit	—	2,097	(8,543)	) —	(6,446)
Income (loss) before equity in net income of subsidiaries	(15,914)	) (5,146)	) 223,537	20,787	223,264
Equity in net income of subsidiaries	244,589	10,459	—	(255,048)	) —
Net income	228,675	5,313	223,537	(234,261)	) 223,264
Amounts attributable to noncontrolling interests	—	—	5,411	—	5,411
Net income available to Arch	228,675	5,313	228,948	(234,261)	) 228,675
Preferred dividends	(5,484)	) —	—	—	(5,484)
Net income available to Arch common shareholders	\$223,191	\$5,313	\$228,948	\$ (234,261)	) \$223,191
Comprehensive income (loss) available to Arch	\$96,978	\$(10,614)	) \$104,501	\$ (93,887)	) \$96,978



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## ARCH CAPITAL GROUP LTD. AND SUBSIDIARIES

## NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (UNAUDITED)

Condensed Consolidating Statement of Income and Comprehensive Income	Nine Months Ended September 30, 2015				
	ACGL (Parent Guarantor)	Arch-U.S. (Subsidiary Issuer)	Other ACGL Subsidiaries	Consolidating Adjustments and Eliminations	ACGL Consolidated
<b>Revenues</b>					
Net premiums earned	\$—	\$—	\$2,790,385	\$—	\$2,790,385
Net investment income	—	1,569	265,937	(15,316 )	252,190
Net realized gains (losses)	—	1	(42,076 )	—	(42,075 )
Net impairment losses recognized in earnings	—	—	(12,780 )	—	(12,780 )
Other underwriting income	—	—	26,876	—	26,876
Equity in net income (loss) of investment funds accounted for using the equity method	—	—	19,938	—	19,938
Other income (loss)	—	—	52	—	52
Total revenues	—	1,570	3,048,332	(15,316 )	3,034,586
<b>Expenses</b>					
Losses and loss adjustment expenses	—	—	1,544,883	—	1,544,883
Acquisition expenses	—	—	510,067	—	510,067
Other operating expenses	36,068	2,991	444,390	—	483,449
Interest expense	17,581	19,824	7,476	(14,834 )	30,047
Net foreign exchange (gains) losses	—	—	(44,450 )	(17,148 )	(61,598 )
Total expenses	53,649	22,815	2,462,366	(31,982 )	2,506,848
Income (loss) before income taxes	(53,649 )	(21,245 )	585,966	16,666	527,738
Income tax (expense) benefit	—	7,434	(36,596 )	—	(29,162 )
Income (loss) before equity in net income of subsidiaries	(53,649 )	(13,811 )	549,370	16,666	498,576
Equity in net income of subsidiaries	532,808	42,192	—	(575,000 )	—
Net income	479,159	28,381	549,370	(558,334 )	498,576
Amounts attributable to noncontrolling interests	—	—	(19,902 )	485	(19,417 )
Net income available to Arch	479,159	28,381	529,468	(557,849 )	479,159
Preferred dividends	(16,453 )	—	—	—	(16,453 )
Net income available to Arch common shareholders	\$462,706	\$28,381	\$529,468	\$(557,849 )	\$462,706
Comprehensive income (loss) available to Arch	\$360,112	\$13,950	\$427,569	\$(441,519 )	\$360,112

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## ARCH CAPITAL GROUP LTD. AND SUBSIDIARIES

## NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (UNAUDITED)

Condensed Consolidating Statement of Income and Comprehensive Income	Nine Months Ended September 30, 2014				
	ACGL (Parent Guarantor)	Arch-U.S. (Subsidiary Issuer)	Other ACGL Subsidiaries	Consolidating Adjustments and Eliminations	ACGL Consolidated
<b>Revenues</b>					
Net premiums earned	\$—	\$—	\$2,670,583	\$—	\$2,670,583
Net investment income	—	—	237,317	(17,228 )	220,089
Net realized gains (losses)	—	—	92,356	—	92,356
Net impairment losses recognized in earnings	—	—	(26,313 )	—	(26,313 )
Other underwriting income	—	—	5,317	—	5,317
Equity in net income (loss) of investment funds accounted for using the equity method	—	—	17,459	—	17,459
Other income (loss)	—	—	(5,069 )	—	(5,069 )
Total revenues	—	—	2,991,650	(17,228 )	2,974,422
<b>Expenses</b>					
Losses and loss adjustment expenses	—	—	1,423,431	—	1,423,431
Acquisition expenses	—	—	482,047	—	482,047
Other operating expenses	35,613	2,281	413,735	—	451,629
Interest expense	17,565	19,395	13,158	(17,228 )	32,890
Net foreign exchange (gains) losses	—	—	(28,449 )	(18,725 )	(47,174 )
Total expenses	53,178	21,676	2,303,922	(35,953 )	2,342,823
Income (loss) before income taxes	(53,178 )	(21,676 )	687,728	18,725	631,599
Income tax (expense) benefit	—	8,179	(25,652 )	—	(17,473 )
Income (loss) before equity in net income of subsidiaries	(53,178 )	(13,497 )	662,076	18,725	614,126
Equity in net income of subsidiaries	672,369	41,945	—	(714,314 )	—
Net income	619,191	28,448	662,076	(695,589 )	614,126
Amounts attributable to noncontrolling interests	—	—	5,065	—	5,065
Net income available to Arch	619,191	28,448	667,141	(695,589 )	619,191
Preferred dividends	(16,453 )	—	—	—	(16,453 )
Net income available to Arch common shareholders	\$602,738	\$28,448	\$667,141	\$(695,589 )	\$602,738
Comprehensive income (loss) available to Arch	\$646,413	\$29,792	\$691,968	\$(721,760 )	\$646,413

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## ARCH CAPITAL GROUP LTD. AND SUBSIDIARIES

## NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (UNAUDITED)

Condensed Consolidating Statement of Cash Flows	Nine Months Ended September 30, 2015				
	ACGL (Parent Guarantor)	Arch-U.S. (Subsidiary Issuer)	Other ACGL Subsidiaries	Consolidating Adjustments and Eliminations	ACGL Consolidated
<b>Operating Activities</b>					
Net Cash Provided By (Used For) Operating Activities	\$ 382,329	\$ 10,622	\$ 859,525	\$(444,897 )	\$ 807,579
<b>Investing Activities</b>					
Purchases of fixed maturity investments	—	(3,505 )	(22,378,599 )	—	(22,382,104 )
Purchases of equity securities	(8,070 )	—	(477,456 )	—	(485,526 )
Purchases of other investments	—	—	(1,320,250 )	—	(1,320,250 )
Proceeds from the sales of fixed maturity investments	—	23,507	21,388,047	—	21,411,554
Proceeds from the sales of equity securities	—	—	509,008	—	509,008
Proceeds from the sales, redemptions and maturities of other investments	—	—	858,368	—	858,368
Proceeds from redemptions and maturities of fixed maturity investments	—	—	630,397	—	630,397
Net settlements of derivative instruments	—	—	81,114	—	81,114
Proceeds from investment in joint venture	—	—	40,000	—	40,000
Net (purchases) sales of short-term investments	73	(12,183 )	193,851	—	181,741
Change in cash collateral related to securities lending	—	—	28,685	—	28,685
Contributions to subsidiaries	—	—	(9,290 )	9,290	—
Intercompany loans issued	—	(39,500 )	(41,523 )	81,023	—
Purchase of business, net of cash acquired	—	—	818	—	818
Purchases of fixed assets	(53 )	—	(10,848 )	—	(10,901 )
Change in other assets	—	—	(43,654 )	—	(43,654 )
Net Cash Provided By (Used For) Investing Activities	(8,050 )	(31,681 )	(551,332 )	90,313	(500,750 )
<b>Financing Activities</b>					
Purchases of common shares under share repurchase program	(365,383 )	—	—	—	(365,383 )
Proceeds from common shares issued, net	697	—	9,290	(9,290 )	697
Proceeds from intercompany borrowings	14,023	27,500	39,500	(81,023 )	—
Proceeds from borrowings	—	—	239,077	—	239,077
Change in cash collateral related to securities lending	—	—	(28,685 )	—	(28,685 )
Dividends paid to redeemable noncontrolling interests	—	—	(14,447 )	637	(13,810 )
Dividends paid to parent	—	—	(444,260 )	444,260	—
Other	—	28	50,435	—	50,463

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Preferred dividends paid	(16,453	) —	—	—	(16,453	)
Net Cash Provided By (Used For) Financing Activities	(367,116	) 27,528	(149,090	) 354,584	(134,094	)
Effects of exchange rates changes on foreign currency cash	—	—	(8,658	) —	(8,658	)
Increase (decrease) in cash	7,163	6,469	150,445	—	164,077	
Cash beginning of year	3,218	2,787	479,697	—	485,702	
Cash end of period	\$10,381	\$9,256	\$630,142	\$—	\$649,779	

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## ARCH CAPITAL GROUP LTD. AND SUBSIDIARIES

## NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (UNAUDITED)

Condensed Consolidating Statement of Cash Flows	Nine Months Ended September 30, 2014				
	ACGL (Parent Guarantor)	Arch-U.S. (Subsidiary Issuer)	Other ACGL Subsidiaries	Consolidating Adjustments and Eliminations	ACGL Consolidated
<b>Operating Activities</b>					
Net Cash Provided By (Used For) Operating Activities	\$265,694	\$8,407	\$822,558	\$(297,000 )	\$799,659
<b>Investing Activities</b>					
Purchases of fixed maturity investments	—	(78,509 )	(21,952,353 )	—	(22,030,862 )
Purchases of equity securities	—	—	(366,578 )	—	(366,578 )
Purchases of other investments	—	—	(1,136,285 )	—	(1,136,285 )
Proceeds from the sales of fixed maturity investments	—	—	20,273,351	—	20,273,351
Proceeds from the sales of equity securities	—	—	305,034	—	305,034
Proceeds from the sales, redemptions and maturities of other investments	—	—	566,518	—	566,518
Proceeds from redemptions and maturities of fixed maturity investments	—	—	636,729	—	636,729
Net settlements of derivative instruments	—	—	15,495	—	15,495
Net (purchases) sales of short-term investments	2,396	408,760	267,232	—	678,388
Change in cash collateral related to securities lending	—	—	(2,737 )	—	(2,737 )
Contributions to subsidiaries	—	(313,207 )	(100,000 )	413,207	—
Intercompany loans issued	—	—	10,250	(10,250 )	—
Purchase of business, net of cash acquired	—	—	(235,578 )	—	(235,578 )
Purchases of fixed assets	(220 )	—	(14,355 )	—	(14,575 )
Change in other assets	—	—	—	—	—
Net Cash Provided By (Used For) Investing Activities	2,176	17,044	(1,733,277 )	402,957	(1,311,100 )
<b>Financing Activities</b>					
Purchases of common shares under share repurchase program	(251,919 )	—	—	—	(251,919 )
Proceeds from common shares issued, net	3,248	—	413,207	(413,207 )	3,248
Repayments of intercompany borrowings	—	(10,250 )	—	10,250	—
Change in cash collateral related to securities lending	—	—	2,737	—	2,737
Third party investment in non-redeemable noncontrolling interests	—	—	796,903	—	796,903
Third party investment in redeemable noncontrolling interests	—	—	219,233	—	219,233
Dividends paid to redeemable noncontrolling interests	—	—	(9,632 )	—	(9,632 )



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Dividends paid to parent	—	—	(297,000	) 297,000	—	
Other	—	—	6,559	—	6,559	
Preferred dividends paid	(16,453	) —	—	—	(16,453	)
Net Cash Provided By (Used For) Financing Activities	(265,124	) (10,250	) 1,132,007	(105,957	) 750,676	
Effects of exchange rates changes on foreign currency cash	—	—	(9,566	) —	(9,566	)
Increase (decrease) in cash	2,746	15,201	211,722	—	229,669	
Cash beginning of year	3,223	509	430,325	—	434,057	
Cash end of period	\$5,969	\$15,710	\$642,047	\$—	\$663,726	

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ARCH CAPITAL GROUP LTD. AND SUBSIDIARIES

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (UNAUDITED)

14. Legal Proceedings

The Company, in common with the insurance industry in general, is subject to litigation and arbitration in the normal course of its business. As of September 30, 2015, the Company was not a party to any litigation or arbitration which is expected by management to have a material adverse effect on the Company's results of operations and financial condition and liquidity.

15. Transactions with Related Parties

Kewsong Lee, a director of ACGL, is a Managing Director and Deputy Chief Investment Officer for Corporate Private Equity of The Carlyle Group ("Carlyle"). As part of its investment philosophy, the Company invests a portion of its investment portfolio in alternative investment funds. As of September 30, 2015, the Company had aggregate commitments of \$670.9 million to funds managed by Carlyle, of which \$462.4 million was unfunded. The Company may make additional commitments to funds managed by Carlyle from time to time. During the nine months ended September 30, 2015 and 2014, the Company made aggregate capital contributions to funds managed by Carlyle of \$97.7 million and \$55.5 million, respectively. During the nine months ended September 30, 2015 and 2014, the Company received aggregate cash distributions from funds managed by Carlyle of \$30.3 million and \$41.0 million, respectively, of which \$25.5 million and \$32.8 million, respectively, represented a return of capital.

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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. This should be read in conjunction with our consolidated financial statements included in Item 1 of this report and also our Management's Discussion and Analysis of Financial Condition and Results of Operations contained in our Annual Report on Form 10-K for the year ended December 31, 2014 ("2014 Form 10-K"). In addition, readers should review "Risk Factors" set forth in Item 1A of Part I of our 2014 Form 10-K. Tabular amounts are in U.S. Dollars in thousands, except share amounts, unless otherwise noted.

Arch Capital Group Ltd. ("ACGL" and, together with its subsidiaries, "we" or "us") is a Bermuda public limited liability company with approximately \$7.05 billion in capital at September 30, 2015 and, through operations in Bermuda, the United States, Europe and Canada, writes specialty lines of property and casualty insurance and reinsurance, as well as mortgage insurance and reinsurance, on a worldwide basis.

Current Outlook

The broad market environment continues to be competitive in our business reflecting a continuation of softening in pricing and broadening pressures on terms and conditions. This has been true in both our insurance and reinsurance property casualty segments and has led us to continue to reduce writings in certain lines in the 2015 third quarter. With the continued low interest rate environment, additional increases are needed in many lines in order for us to achieve our return requirements. Our underwriting teams continue to execute a disciplined strategy by emphasizing small and medium-sized accounts over large accounts.

Arch Mortgage Insurance Company ("Arch MI U.S.") continues to expand into the U.S. mortgage insurance marketplace. As of September 30, 2015, Arch MI U.S. reviewed and approved 835 master policy applications from banks, with 45 national accounts and the balance consisting of regional banks. In addition, Arch MI U.S. recently announced RateStar, a new risk-based pricing program expected to be implemented in the 2015 fourth quarter. RateStar uses a combination of loan characteristics and other risk factors to determine premium rates for each loan.

Our objective is to achieve an average operating return on average equity of 15% or greater over the insurance cycle, which we believe to be an attractive return to our common shareholders given the risks we assume. We continue to look for opportunities to find acceptable books of business to underwrite without sacrificing underwriting discipline and continue to write a portion of our overall book in catastrophe-exposed business which has the potential to increase the volatility of our operating results.

Changing economic conditions could have a material impact on the frequency and severity of claims and, therefore, could negatively impact our underwriting returns. In addition, volatility in the financial markets could continue to significantly affect our investment returns, reported results and shareholders' equity. We consider the potential impact of economic trends in the estimation process for establishing unpaid losses and loss adjustment expenses and in determining our investment strategies. In addition, weakness of the U.S., European countries and other key economies, projected budget deficits for the U.S., European countries and other governments and the consequences associated with potential downgrades of securities of the U.S., European countries and other governments by credit rating agencies is inherently unpredictable and could have a material adverse effect on financial markets and economic conditions in the U.S. and throughout the world. In turn, this could have a material adverse effect on our business, financial condition and results of operations and, in particular, this could have a material adverse effect on the value and liquidity of securities in our investment portfolio.

Natural Catastrophe Risk

We monitor our natural catastrophe risk globally for all perils and regions, in each case, where we believe there is significant exposure. Our models employ both proprietary and vendor-based systems and include cross-line correlations for property, marine, offshore energy, aviation, workers compensation and personal accident. Currently, we seek to limit our 1-in-250 year return period net probable maximum pre-tax loss from a severe catastrophic event in any geographic zone to approximately 25% of total shareholders' equity available to Arch. We reserve the right to change this threshold at any time. Based on in-force exposure estimated as of October 1, 2015, our modeled peak zone catastrophe exposure was a windstorm affecting the Northeastern U.S., with a net probable maximum pre-tax loss of \$509 million, followed by windstorms affecting the Gulf of Mexico and Florida Tri-County with net probable maximum pre-tax losses of \$473 million and \$414 million, respectively. Our exposures to other perils, such as U.S. earthquake and international events, were less than the exposures arising from U.S. windstorms and hurricanes in both periods. As of October 1, 2015, our modeled peak zone earthquake exposure (Los Angeles earthquake) represented approximately 58% of our peak zone catastrophe exposure, and our modeled

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peak zone international exposure (Japan earthquake) was substantially less than both our peak zone windstorm and earthquake exposures.

Net probable maximum pre-tax loss estimates are net of expected reinsurance recoveries, before income tax and before excess reinsurance reinstatement premiums. Loss estimates are reflective of the zone indicated and not the entire portfolio. Since hurricanes and windstorms can affect more than one zone and make multiple landfalls, our loss estimates include clash estimates from other zones. The loss estimates shown above do not represent our maximum exposures and it is highly likely that our actual incurred losses would vary materially from the modeled estimates. There can be no assurances that we will not suffer a net loss greater than 25% of total shareholders' equity available to Arch from one or more catastrophic events due to several factors, including the inherent uncertainties in estimating the frequency and severity of such events and the margin of error in making such determinations resulting from potential inaccuracies and inadequacies in the data provided by clients and brokers, the modeling techniques and the application of such techniques or as a result of a decision to change the percentage of shareholders' equity exposed to a single catastrophic event. Actual losses may also increase if our reinsurers fail to meet their obligations to us or the reinsurance protections purchased by us are exhausted or are otherwise unavailable. See "Risk Factors—Risk Relating to Our Industry" and "Management's Discussion and Analysis of Financial Condition and Results of Operations—Natural and Man-Made Catastrophic Events" in our 2014 Form 10-K.

## Financial Measures

Management uses the following three key financial indicators in evaluating our performance and measuring the overall growth in value generated for ACGL's common shareholders:

### Book Value per Common Share

Book value per common share represents total common shareholders' equity available to Arch divided by the number of common shares outstanding. Management uses growth in book value per common share as a key measure of the value generated for our common shareholders each period and believes that book value per common share is the key driver of ACGL's share price over time. Book value per common share is impacted by, among other factors, our underwriting results, investment returns and share repurchase activity, which has an accretive or dilutive impact on book value per common share depending on the purchase price. Book value per common share was \$47.68 at September 30, 2015, compared to \$47.49 at June 30, 2015 and \$44.04 at September 30, 2014. The 0.4% increase in the 2015 third quarter reflected underwriting returns substantially offset by negative return on investments, while the 8.3% increase over the trailing twelve months reflected strong investment and underwriting returns.

### Operating Return on Average Common Equity

Operating return on average common equity ("Operating ROAE") represents annualized after-tax operating income available to Arch common shareholders divided by the average of beginning and ending common shareholders' equity available to Arch during the period. After-tax operating income available to Arch common shareholders, a "non-GAAP measure" as defined in the SEC rules, represents net income available to Arch common shareholders, excluding net realized gains or losses, net impairment losses recognized in earnings, equity in net income or loss of investment funds accounted for using the equity method and net foreign exchange gains or losses, net of income taxes. Management uses Operating ROAE as a key measure of the return generated to common shareholders and has set an objective to achieve an average Operating ROAE of 15% or greater over the insurance cycle, which it believes to be an attractive return to common shareholders given the risks we assume. See "Comment on Non-GAAP Financial Measures." Our Operating ROAE was 8.6% for the 2015 third quarter, compared to 9.7% for the 2014 third quarter, and 9.7% for the nine months ended September 30, 2015, compared to 11.2% for the 2014 period. Operating ROAE for the 2015 periods primarily reflected a lower level of underwriting income, reflecting current market conditions and

changes in mix of business, compared to the 2014 periods.

#### Total Return on Investments

Total return on investments includes investment income, equity in net income or loss of investment funds accounted for using the equity method, net realized gains and losses and the change in unrealized gains and losses generated by Arch's investment portfolio. Total return is calculated on a pre-tax basis and before investment expenses, excluding amounts reflected in the 'other' segment, and reflects the effect of financial market conditions along with foreign currency fluctuations. Management uses total return on investments as a key measure of the return generated to Arch common shareholders on the capital held in the business, and compares the return generated by our investment portfolio against benchmark returns which we measured our portfolio against during the periods.

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The benchmark return index is a customized combination of indices intended to approximate a target portfolio by asset mix and average credit quality while also matching the approximate estimated duration and currency mix of our insurance and reinsurance liabilities. Although the estimated duration and average credit quality of this index will move as the duration and rating of its constituent securities change, generally we do not adjust the composition of the benchmark return index except to incorporate the currency mix as noted above. The benchmark return index should not be interpreted as expressing a preference for or aversion to any particular sector or sector weight. The index is intended solely to provide, unlike many master indices that change based on the size of their constituent indices, a relatively stable basket of investable indices.

At September 30, 2015, the benchmark return index had an average credit quality of “Aa2” by Moody’s Investors Service (“Moody’s”), an estimated duration of 3.49 years and included weightings to the following indices:

	Weighting	
The Bank of America Merrill Lynch 1-10 Year AA U.S. Corporate & Yankees Index	21.250	%
The Bank of America Merrill Lynch 1-5 Year U.S. Treasury Index	13.000	
The Bank of America Merrill Lynch U.S. Mortgage Backed Securities Index	11.875	
Barclays Capital CMBS, AAA Index	10.000	
The Bank of America Merrill Lynch 1-10 Year U.S. Municipal Securities Index	7.125	
The Bank of America Merrill Lynch 1-10 Year EMU Governments Index	5.500	
The Bank of America Merrill Lynch U.S. High Yield Constrained Index	5.500	
The Bank of America Merrill Lynch U.S. Bullet Agency Securities 1-10 Years Index	5.000	
MSCI All Country World Gross Total Return Index	5.000	
The Bank of America Merrill Lynch 0-3 Month U.S. Treasury Bill Index	5.000	
The Bank of America Merrill Lynch 5-10 Year U.S. Treasury Index	3.250	
The Bank of America Merrill Lynch 1-5 Year U.K. Gilt Index	3.000	
The Bank of America Merrill Lynch 1-10 Year Australian Governments Index	2.500	
The Bank of America Merrill Lynch 1-5 Year CAD Governments Index	2.000	
Total	100.000	%

The following table summarizes the pre-tax total return (before investment expenses) of investments managed by Arch compared to the benchmark return against which we measured our portfolio during the periods:

	Arch Portfolio		Benchmark Return	
Pre-tax total return (before investment expenses):				
2015 third quarter	(0.31	)%	(0.21	)%
2014 third quarter	(0.51	)%	(0.89	)%
Nine Months Ended September 30, 2015	0.76	%	(0.07	)%
Nine Months Ended September 30, 2014	2.32	%	2.17	%

Total return for the 2015 third quarter reflected the impact of the U.S. Dollar strengthening against the British Pound Sterling, Canadian Dollar and other major currencies on non-U.S. Dollar denominated investments. Excluding the effects of foreign exchange, total return was 0.04% for the 2015 third quarter, as investment-grade fixed income returns were substantially offset by negative returns on equities, high yield and alternative strategies.

## Comment on Non-GAAP Financial Measures

Throughout this filing, we present our operations in the way we believe will be the most meaningful and useful to investors, analysts, rating agencies and others who use our financial information in evaluating the performance of our company. This presentation includes the use of after-tax operating income available to Arch common shareholders, which is defined as net income available to Arch common shareholders, excluding net realized gains or losses, net impairment losses recognized in earnings, equity in net income or loss of investment funds accounted for using the equity method and net foreign exchange gains or losses, net of income taxes. The presentation of after-tax operating income available to Arch common shareholders is a “non-GAAP financial measure” as defined in Regulation G. The reconciliation of such measure to net income available to Arch common shareholders (the most directly comparable GAAP financial measure) in accordance with Regulation G is included under “Results of Operations” below.

We believe that net realized gains or losses, net impairment losses recognized in earnings, equity in net income or loss of investment funds accounted for using the equity method and net foreign exchange gains or losses in any particular period are not indicative of the performance of, or trends in, our business. Although net realized gains or losses, net impairment losses



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recognized in earnings, equity in net income or loss of investment funds accounted for using the equity method and net foreign exchange gains or losses are an integral part of our operations, the decision to realize investment gains or losses, the recognition of the change in the carrying value of investments accounted for using the fair value option in net realized gains or losses, the recognition of net impairment losses, the recognition of equity in net income or loss of investment funds accounted for using the equity method and the recognition of foreign exchange gains or losses are independent of the insurance underwriting process and result, in large part, from general economic and financial market conditions. Furthermore, certain users of our financial information believe that, for many companies, the timing of the realization of investment gains or losses is largely opportunistic. In addition, net impairment losses recognized in earnings on our investments represent other-than-temporary declines in expected recovery values on securities without actual realization. The use of the equity method on certain of our investments in certain funds that invest in fixed maturity securities is driven by the ownership structure of such funds (either limited partnerships or limited liability companies). In applying the equity method, these investments are initially recorded at cost and are subsequently adjusted based on our proportionate share of the net income or loss of the funds (which include changes in the market value of the underlying securities in the funds). This method of accounting is different from the way we account for our other fixed maturity securities and the timing of the recognition of equity in net income or loss of investment funds accounted for using the equity method may differ from gains or losses in the future upon sale or maturity of such investments. Due to these reasons, we exclude net realized gains or losses, net impairment losses recognized in earnings, equity in net income or loss of investment funds accounted for using the equity method and net foreign exchange gains or losses from the calculation of after-tax operating income available to Arch common shareholders.

We believe that showing net income available to Arch common shareholders exclusive of the items referred to above reflects the underlying fundamentals of our business since we evaluate the performance of and manage our business to produce an underwriting profit. In addition to presenting net income available to Arch common shareholders, we believe that this presentation enables investors and other users of our financial information to analyze our performance in a manner similar to how management analyzes performance. We also believe that this measure follows industry practice and, therefore, allows the users of financial information to compare our performance with our industry peer group. We believe that the equity analysts and certain rating agencies which follow us and the insurance industry as a whole generally exclude these items from their analyses for the same reasons.

**RESULTS OF OPERATIONS**

The following table summarizes, on an after-tax basis, our consolidated financial data, including a reconciliation of after-tax operating income available to Arch common shareholders to net income available to Arch common shareholders:

	Three Months Ended		Nine Months Ended	
	September 30,		September 30,	
	2015	2014	2015	2014
After-tax operating income available to Arch common shareholders	\$125,798	\$142,055	\$421,600	\$467,128
Net realized gains (losses), net of tax	(58,048	) 27,476	(24,188	) 96,016
Net impairment losses recognized in earnings, net of tax	(5,868	) (8,593	) (12,780	) (26,313
Equity in net income (loss) of investment funds accounted for using the equity method, net of tax	(2,373	) 4,765	19,272	16,983
Net foreign exchange gains (losses), net of tax	15,040	57,488	58,802	48,924
Net income available to Arch common shareholders	\$74,549	\$223,191	\$462,706	\$602,738

**Segment Information**

We classify our businesses into three underwriting segments — insurance, reinsurance and mortgage — and two other operating segments — ‘other’ and corporate (non-underwriting). Our insurance, reinsurance and mortgage segments each have managers who are responsible for the overall profitability of their respective segments and who are directly accountable to our chief operating decision makers, the Chairman, President and Chief Executive Officer of ACGL and the Chief Financial Officer of ACGL. The chief operating decision makers do not assess performance, measure return on equity or make resource allocation decisions on a line of business basis. Management measures segment performance for our three underwriting segments based on underwriting income or loss. We do not manage our assets by underwriting segment, with the exception of goodwill and intangible assets, and, accordingly, investment income is not allocated to each underwriting segment.

We determined our reportable segments using the management approach described in accounting guidance regarding disclosures about segments of an enterprise and related information. The accounting policies of the segments are the same as those used for the preparation of our consolidated financial statements. Intersegment business is allocated to the segment accountable for the underwriting results. The corporate (non-underwriting) segment results include net investment income,

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other income (loss), other expenses incurred by us, interest expense, net realized gains or losses, net impairment losses included in earnings, equity in net income or loss of investment funds accounted for using the equity method, net foreign exchange gains or losses, income taxes and items related to our non-cumulative preferred shares. Such amounts exclude the results of the ‘other’ segment.

The mortgage segment includes the results of Arch MI U.S. and Arch Mortgage Insurance Limited, leading providers of mortgage insurance products and services to the U.S. and European markets, respectively. Arch MI U.S. is approved as an eligible mortgage insurer by Federal National Mortgage Association (“Fannie Mae”) and Federal Home Loan Mortgage Corporation (“Freddie Mac”), each a government sponsored enterprise, or “GSE.” The mortgage segment also includes GSE credit risk-sharing transactions and mortgage reinsurance for the U.S. and Australian markets.

In March 2014, we invested \$100.0 million and acquired approximately 11% of Watford Holdings Ltd.’s common equity and a warrant to purchase additional common equity. Watford Holdings Ltd. is the parent of Watford Re Ltd., a multi-line Bermuda reinsurance company (together with Watford Holdings Ltd., “Watford Re”). Watford Re is considered a variable interest entity (“VIE”) and we concluded that we are the primary beneficiary of Watford Re. As such, the results of Watford Re are included in our consolidated financial statements. The ‘other’ segment includes the results of Watford Re. Watford Re has its own management and board of directors that is responsible for the overall profitability of its results. The portion of Watford Re’s earnings attributable to third party investors is recorded in the consolidated statements of income as ‘amounts attributable to noncontrolling interests.’ For the ‘other’ segment, performance is measured based on net income or loss.

**Insurance Segment**

The following table sets forth our insurance segment’s underwriting results:

	Three Months Ended September 30,			Nine Months Ended September 30,		
	2015	2014	% Change	2015	2014	% Change
Gross premiums written	\$752,438	\$726,683	3.5	\$2,263,401	\$2,309,560	(2.0 )
Premiums ceded	(209,443 )	(187,689 )		(669,336 )	(646,082 )	
Net premiums written	542,995	538,994	0.7	1,594,065	1,663,478	(4.2 )
Change in unearned premiums	(20,451 )	(19,607 )		(53,782 )	(158,878 )	
Net premiums earned	522,544	519,387	0.6	1,540,283	1,504,600	2.4
Other underwriting income	519	499		1,467	1,513	
Losses and loss adjustment expenses	(339,859 )	(338,319 )		(978,681 )	(936,615 )	
Acquisition expenses, net	(77,076 )	(81,775 )		(228,877 )	(235,156 )	
Other operating expenses	(84,620 )	(83,138 )		(261,793 )	(250,111 )	
Underwriting income	\$21,508	\$16,654	29.1	\$72,399	\$84,231	(14.0 )
<b>Underwriting Ratios</b>			<b>% Point Change</b>			<b>% Point Change</b>
Loss ratio	65.0	% 65.1	% (0.1 )	63.5	% 62.3	% 1.2
Acquisition expense ratio	14.8	% 15.7	% (0.9 )	14.9	% 15.6	% (0.7 )
Other operating expense ratio	16.2	% 16.0	% 0.2	17.0	% 16.6	% 0.4
Combined ratio	96.0	% 96.8	% (0.8 )	95.4	% 94.5	% 0.9

The insurance segment consists of our insurance underwriting units which offer specialty product lines on a worldwide basis. Product lines include:

Construction and national accounts: primary and excess casualty coverages to middle and large accounts in the construction industry and a wide range of products for middle and large national accounts, specializing in loss

sensitive primary casualty insurance programs (including large deductible, self-insured retention and retrospectively rated programs).

Excess and surplus casualty: primary and excess casualty insurance coverages, including middle market energy business, and contract binding, which primarily provides casualty coverage through a network of appointed agents to small and medium risks.

Lenders products: collateral protection, debt cancellation and service contract reimbursement products to banks, credit unions, automotive dealerships and original equipment manufacturers and other specialty programs that pertain to automotive lending and leasing.

Professional lines: directors' and officers' liability, errors and omissions liability, employment practices liability, fiduciary liability, crime, professional indemnity and other financial related coverages for corporate, private equity, venture capital,

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real estate investment trust, limited partnership, financial institution and not-for-profit clients of all sizes and medical professional and general liability insurance coverages for the healthcare industry. The business is predominately written on a claims-made basis.

Programs: primarily package policies, underwriting workers' compensation and umbrella liability business in support of desirable package programs, targeting program managers with unique expertise and niche products offering general liability, commercial automobile, inland marine and property business with minimal catastrophe exposure.

Property, energy, marine and aviation: primary and excess general property insurance coverages, including catastrophe-exposed property coverage, for commercial clients. Coverages for marine include hull, war, specie and liability. Aviation and stand alone terrorism are also offered.

Travel, accident and health: specialty travel and accident and related insurance products for individual, group travelers, travel agents and suppliers, as well as accident and health, which provides accident, disability and medical plan insurance coverages for employer groups, medical plan members, students and other participant groups.

Other: includes alternative market risks (including captive insurance programs), excess workers' compensation and employer's liability insurance coverages for qualified self-insured groups, associations and trusts, and contract and commercial surety coverages, including contract bonds (payment and performance bonds) primarily for medium and large contractors and commercial surety bonds for Fortune 1,000 companies and smaller transaction business programs.

Premiums Written.

The following table sets forth our insurance segment's net premiums written by major line of business:

	Three Months Ended September 30,				Nine Months Ended September 30,			
	2015		2014		2015		2014	
	Amount	%	Amount	%	Amount	%	Amount	%
Programs	\$120,028	22.1	\$129,227	24.0	\$344,404	21.6	\$378,189	22.7
Professional lines	118,563	21.8	119,798	22.2	329,841	20.7	357,117	21.5
Construction and national accounts	60,320	11.1	55,342	10.3	233,919	14.7	230,010	13.8
Property, energy, marine and aviation	51,802	9.5	53,485	9.9	172,518	10.8	200,771	12.1
Excess and surplus casualty	51,170	9.4	50,552	9.4	154,511	9.7	153,281	9.2
Travel, accident and health	49,386	9.1	44,500	8.3	123,714	7.8	119,731	7.2
Lenders products	29,212	5.4	27,799	5.2	76,039	4.8	74,714	4.5
Other	62,514	11.5	58,291	10.8	159,119	10.0	149,665	9.0
Total	\$542,995	100.0	\$538,994	100.0	\$1,594,065	100.0	\$1,663,478	100.0

2015 Third Quarter versus 2014 Third Quarter. Gross premiums written by the insurance segment in the 2015 third quarter were 3.5% higher than in the 2014 third quarter, while net premiums written were 0.7% higher than in the 2014 third quarter. Changes in foreign currency rates resulted in a decrease in net premiums written in the 2015 third quarter of approximately \$11 million, or 2.1%, compared to the 2014 third quarter. The higher level of net premiums written reflected growth in construction, alternative markets and travel, accident and health business, partially offset by a reduction in program business. The growth in construction business primarily reflected an increase in new projects and audit premiums, while the increase in alternative markets primarily resulted from changes in renewal dates on business acquired as part of the renewal rights agreement entered into in the 2014 second quarter. The higher level of travel, accident and health business reflected growth in U.S. travel along with international medical small and medium accounts, while the reduction in program business reflected underwriting decisions.

Nine Months Ended September 30, 2015 versus 2014. Gross premiums written by the insurance segment for the nine months ended September 30, 2015 were 2.0% lower than in the 2014 period, while net premiums written were 4.2% lower than in the 2014 period. The differential in gross versus net premiums written primarily resulted from growth in alternative markets business which is subject to a high level of cessions, primarily to captives. The lower level of net premiums written reflected the impact of changes in foreign currency rates compared to the 2014 periods and reductions in programs, property, energy and marine business and professional lines. The decrease in program business reflected underwriting decisions while the reduction in property, energy and marine business reflected rate decreases and strategic reductions in certain lines. The decline in professional lines was primarily related to the timing of premiums on renewal accounts.

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## Net Premiums Earned.

The following table sets forth our insurance segment's net premiums earned by major line of business:

	Three Months Ended September 30,				Nine Months Ended September 30,			
	2015		2014		2015		2014	
	Amount	%	Amount	%	Amount	%	Amount	%
Programs	\$115,502	22.1	\$118,087	22.7	\$344,408	22.4	\$341,311	22.7
Professional lines	106,283	20.3	118,204	22.8	321,575	20.9	346,979	23.1
Construction and national accounts	75,256	14.4	68,229	13.1	219,066	14.2	209,282	13.9
Property, energy, marine and aviation	55,106	10.5	59,432	11.4	164,012	10.6	187,242	12.4
Excess and surplus casualty	53,366	10.2	48,716	9.4	157,422	10.2	131,423	8.7
Travel, accident and health	39,918	7.6	34,991	6.7	113,629	7.4	93,701	6.2
Lenders products	23,956	4.6	23,591	4.5	68,074	4.4	70,186	4.7
Other	53,157	10.2	48,137	9.3	152,097	9.9	124,476	8.3
Total	\$522,544	100.0	\$519,387	100.0	\$1,540,283	100.0	\$1,504,600	100.0

Net premiums written are primarily earned on a pro rata basis over the terms of the policies for all products, usually 12 months. Net premiums earned in the 2015 third quarter were 0.6% higher than in the 2014 third quarter and 2.4% higher for the nine months ended September 30, 2015 than in the 2014 period. Net premiums earned reflect changes in net premiums written over the previous five quarters.

## Losses and Loss Adjustment Expenses.

The table below shows the components of the insurance segment's loss ratio:

	Three Months Ended		Nine Months Ended	
	September 30,		September 30,	
	2015	2014	2015	2014
Current year	66.9	% 67.3	% 65.9	% 65.4
Prior period reserve development	(1.9)	)% (2.2)	)% (2.4)	)% (3.1)
Loss ratio	65.0	% 65.1	% 63.5	% 62.3

## Current Year Loss Ratio.

The insurance segment's current year loss ratio in the 2015 third quarter was 0.4 points lower than in the 2014 third quarter and 0.5 points higher for the nine months ended September 30, 2015 than in the 2014 period. The 2015 third quarter loss ratio reflected 1.6 points of current year catastrophic activity, compared to 0.4 points in the 2014 third quarter. The loss ratio for the nine months ended September 30, 2015 reflected 1.2 points of current year catastrophic activity, compared to 0.6 points for the 2014 period. The balance of the change in the 2015 periods primarily resulted from a lower level of attritional large loss activity relative to the 2014 periods and changes in the mix of business.

## Prior Period Reserve Development.

2015 Third Quarter: The insurance segment's net favorable development of \$9.9 million, or 1.9 points, consisted of \$12.9 million of net favorable development in medium-tailed and long-tailed lines, partially offset by \$3.0 million of net adverse development in short-tailed lines. Net favorable development in medium-tailed and long-tailed lines

reflected favorable development in professional lines of \$14.5 million, which included \$10.8 million of favorable development in executive assurance reserves primarily from the 2007 to 2012 accident years (i.e., the year in which a loss occurred) with the remainder in professional liability and healthcare reserves. Such amounts were partially offset by \$2.4 million of adverse development in programs, primarily from the 2014 accident year. Adverse development in short-tailed lines primarily resulted from travel, accident and health business in the 2014 accident year, partially offset by a reduction in property (including special risk other than marine) reserves from the 2012 to 2014 accident years. Development on the 2005 to 2014 named catastrophic events was adverse by \$0.6 million in the quarter.

2014 Third Quarter: The insurance segment's net favorable development of \$11.4 million, or 2.2 points, consisted of \$15.3 million of net favorable development in short-tailed lines and \$3.9 million of net adverse development in medium-tailed and long-tailed lines. Favorable development in short-tailed lines primarily consisted of reductions in property (including special risk other than marine) reserves from the 2011 to 2013 accident years, primarily due to varying levels of reported claims



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activity. Development on the 2005 to 2013 named catastrophic events was favorable by \$2.1 million in the quarter. Net adverse development in medium-tailed and long-tailed lines reflected increases in construction reserves of \$8.4 million, primarily resulting from higher reported losses in the 2009 to 2011 accident years, and increases in program reserves of \$7.5 million, reflecting higher reported losses in the 2011 and 2012 accident years. In addition, the insurance segment results reflected favorable development in professional lines of \$6.9 million and in marine and other of \$5.1 million.

Nine Months Ended September 30, 2015: The insurance segment's net favorable development of \$37.2 million, or 2.4 points, consisted of \$22.6 million of net favorable development in short-tailed lines and \$14.6 million of net favorable development in medium-tailed and long-tailed lines. Favorable development in short-tailed lines primarily consisted of reductions in property (including special risk other than marine) reserves from the 2011 to 2014 accident years, primarily due to varying levels of reported claims activity. Development on the 2005 to 2014 named catastrophic events was favorable by \$2.3 million for the 2015 period. Net favorable development in medium-tailed and long-tailed lines reflected favorable development in marine reserves, primarily from the 2010 to 2014 accident years, and in surety reserves, primarily from the 2013 to 2014 accident years. In addition, the insurance segment's results reflected net favorable development in professional lines of \$17.5 million, including favorable development in healthcare reserves, primarily from the 2005 to 2011 accident years, and in executive assurance reserves, primarily from the 2010 to 2012 accident years, partially offset by an increase in reserves on professional liability reserves, primarily in the 2011 and 2012 accident years. In addition, the insurance segment's results reflected net adverse development in programs of \$13.4 million, primarily from the 2014 accident year.

Nine Months Ended September 30, 2014: The insurance segment's net favorable development of \$46.4 million, or 3.1 points, consisted of \$56.0 million of net favorable development in short-tailed lines and \$9.6 million of net adverse development in medium-tailed and long-tailed lines. Favorable development in short-tailed lines primarily consisted of reductions in property (including special risk other than marine) reserves from the 2008 to 2013 accident years, primarily due to varying levels of reported claims activity. Development on the 2005 to 2013 named catastrophic events was favorable by \$8.3 million for the 2014 period. Net adverse development in medium-tailed and long-tailed lines reflected increases in construction reserves of \$22.4 million, reflecting higher reported losses in the 2009 to 2012 accident years, and in program reserves of \$21.3 million, reflecting higher reported losses in the 2011 to 2013 accident years. In addition, the insurance segment results reflected favorable development in professional lines of \$18.8 million and in marine and other of \$15.3 million.

## Underwriting Expenses.

2015 Third Quarter versus 2014 Third Quarter: The insurance segment's underwriting expense ratio was 31.0% in the 2015 third quarter, compared to 31.7% in the 2014 third quarter. The acquisition expense ratio was 14.8% in the 2015 third quarter, compared to 15.7% in the 2014 third quarter. The lower 2015 third quarter ratio primarily resulted from changes in the mix of business. The other operating expense ratio was 16.2% for the 2015 third quarter, compared to 16.0% for the 2014 third quarter.

Nine Months Ended September 30, 2015 versus 2014: The insurance segment's underwriting expense ratio was 31.9% for the nine months ended September 30, 2015, compared to 32.2% in the 2014 period. The acquisition expense ratio was 14.9% for the nine months ended September 30, 2015, compared to 15.6% in the 2014 period. The lower ratio for the nine months ended September 30, 2015 reflected an increase in ceding commission rates and changes in the mix of business. The other operating expense ratio was 17.0% for the nine months ended September 30, 2015, compared to 16.6% for the 2014 period, reflecting a higher level of aggregate expenses.



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## Reinsurance Segment

The following table sets forth our reinsurance segment's underwriting results:

	Three Months Ended September 30,			Nine Months Ended September 30,		
	2015	2014	% Change	2015	2014	% Change
Gross premiums written	\$329,327	\$345,747	(4.7 )	\$1,156,540	\$1,212,641	(4.6 )
Premiums ceded	(92,182 )	(83,502 )		(318,197 )	(215,623 )	
Net premiums written	237,145	262,245	(9.6 )	838,343	997,018	(15.9 )
Change in unearned premiums	23,286	34,303		(24,230 )	(23,495 )	
Net premiums earned	260,431	296,548	(12.2 )	814,113	973,523	(16.4 )
Other underwriting income	2,783	215		6,870	834	
Losses and loss adjustment expenses	(115,780 )	(123,784 )		(339,495 )	(413,745 )	
Acquisition expenses, net	(55,416 )	(60,205 )		(170,380 )	(199,673 )	
Other operating expenses	(37,131 )	(36,337 )		(114,182 )	(110,198 )	
Underwriting income	\$54,887	\$76,437	(28.2 )	\$196,926	\$250,741	(21.5 )
Underwriting Ratios			% Point Change			% Point Change
Loss ratio	44.5	% 41.7	% 2.8	41.7	% 42.5	% (0.8 )
Acquisition expense ratio	21.3	% 20.3	% 1.0	20.9	% 20.5	% 0.4
Other operating expense ratio	14.3	% 12.3	% 2.0	14.0	% 11.3	% 2.7
Combined ratio	80.1	% 74.3	% 5.8	76.6	% 74.3	% 2.3

The reinsurance segment consists of our reinsurance underwriting units which offer specialty product lines on a worldwide basis. Product lines include:

**Casualty:** provides coverage to ceding company clients on third party liability and workers' compensation exposures from ceding company clients, primarily on a treaty basis. Exposures include, among others, executive assurance, professional liability, workers' compensation, excess and umbrella liability, excess motor and healthcare business.

**Marine and aviation:** provides coverage for energy, hull, cargo, specie, liability and transit, and aviation business, including airline and general aviation risks. Business written may also include space business, which includes coverages for satellite assembly, launch and operation for commercial space programs.

**Other specialty:** provides coverage to ceding company clients for proportional motor and other lines including surety, accident and health, workers' compensation catastrophe, agriculture, trade credit and political risk.

**Property catastrophe:** provides protection for most catastrophic losses that are covered in the underlying policies written by reinsureds, including hurricane, earthquake, flood, tornado, hail and fire, and coverage for other perils on a case-by-case basis. Property catastrophe reinsurance provides coverage on an excess of loss basis when aggregate losses and loss adjustment expense from a single occurrence of a covered peril exceed the retention specified in the contract.

**Property excluding property catastrophe:** provides coverage for both personal lines and commercial property exposures and principally covers buildings, structures, equipment and contents. The primary perils in this business include fire, explosion, collapse, riot, vandalism, wind, tornado, flood and earthquake. Business is assumed on both a proportional and excess of loss basis. In addition, facultative business is written which focuses on commercial property risks on an excess of loss basis.

**Other.** includes life reinsurance business on both a proportional and non-proportional basis, casualty clash business and, in limited instances, non-traditional business which is intended to provide insurers with risk management solutions that complement traditional reinsurance.



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## Premiums Written.

The following table sets forth our reinsurance segment's net premiums written by major line of business:

	Three Months Ended September 30,				Nine Months Ended September 30,			
	2015		2014		2015		2014	
	Amount	%	Amount	%	Amount	%	Amount	%
Casualty	\$63,395	26.7	\$64,048	24.4	\$246,031	29.3	\$258,584	25.9
Other specialty	63,293	26.7	84,702	32.3	236,575	28.2	338,032	33.9
Property excluding property catastrophe	72,456	30.6	77,186	29.4	219,385	26.2	227,200	22.8
Property catastrophe	21,366	9.0	24,056	9.2	82,855	9.9	130,554	13.1
Marine and aviation	12,221	5.2	9,767	3.7	42,526	5.1	33,558	3.4
Other	4,414	1.9	2,486	0.9	10,971	1.3	9,090	0.9
Total	\$237,145	100.0	\$262,245	100.0	\$838,343	100.0	\$997,018	100.0
Pro rata	\$138,367	58.3	\$160,472	61.2	\$397,578	47.4	\$458,332	46.0
Excess of loss	98,778	41.7	101,773	38.8	440,765	52.6	538,686	54.0
Total	\$237,145	100.0	\$262,245	100.0	\$838,343	100.0	\$997,018	100.0

2015 Third Quarter versus 2014 Third Quarter. Gross premiums written by the reinsurance segment in the 2015 third quarter were 4.7% lower than in the 2014 third quarter, while net premiums written were 9.6% lower than in the 2014 third quarter. Changes in foreign currency rates resulted in a decrease in net premiums written in the 2015 third quarter of approximately \$9 million, or 3.4%, compared to the 2014 third quarter. The difference in gross versus net premiums written primarily reflects an increase in cessions to Watford Re in the 2015 third quarter compared to the 2014 third quarter. The lower level of net premiums written reflected decreases in other specialty and property lines. The decrease in other specialty reflected non-renewals and share decreases in response to current market conditions, primarily in proportional motor contracts. The lower level of property business reflected share decreases and timing of renewals.

Nine Months Ended September 30, 2015 versus 2014. Gross premiums written by the reinsurance segment for the nine months ended September 30, 2015 were 4.6% lower than in the 2014 period, while net premiums written were 15.9% lower than in the 2014 period. The differential in gross versus net premiums written primarily reflects an increase in cessions of premiums to Watford Re for the nine months ended September 30, 2015 compared to the 2014 period. The lower level of net premiums written reflected the impact of changes in foreign currency rates compared to the 2014 periods and decreases in other specialty and property catastrophe business. The decrease in other specialty reflected non-renewals and share decreases in response to current market conditions, primarily in proportional motor contracts. The lower level of property catastrophe business reflected non-renewals and share decreases, also in response to current market conditions.

## Net Premiums Earned.

The following table sets forth our reinsurance segment's net premiums earned by major line of business:

	Three Months Ended September 30,				Nine Months Ended September 30,			
	2015		2014		2015		2014	
	Amount	%	Amount	%	Amount	%	Amount	%
Casualty	\$75,061	28.8	\$79,477	26.8	\$231,628	28.5	\$248,399	25.5
Other specialty	72,337	27.8	97,337	32.8	236,391	29.0	330,779	34.0
Property excluding property catastrophe	72,267	27.7	71,663	24.2	221,631	27.2	216,209	22.2

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Property catastrophe	23,325	9.0	32,423	10.9	74,920	9.2	122,087	12.5
Marine and aviation	13,708	5.3	13,110	4.4	39,744	4.9	47,264	4.9
Other	3,733	1.4	2,538	0.9	9,799	1.2	8,785	0.9
Total	\$260,431	100.0	\$296,548	100.0	\$814,113	100.0	\$973,523	100.0
Pro rata	\$132,090	50.7	\$156,830	52.9	\$429,440	52.7	\$522,611	53.7
Excess of loss	128,341	49.3	139,718	47.1	384,673	47.3	450,912	46.3
Total	\$260,431	100.0	\$296,548	100.0	\$814,113	100.0	\$973,523	100.0

Net premiums written, irrespective of the class of business, are generally earned on a pro rata basis over the terms of the underlying policies or reinsurance contracts. Net premiums earned for the 2015 third quarter were 12.2% lower than in the 2014 third quarter and 16.4% lower for the nine months ended September 30, 2015 than in the 2014 period. Net premiums earned reflect changes in net premiums written over the previous five quarters.

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## Losses and Loss Adjustment Expenses.

The table below shows the components of the reinsurance segment's loss ratio:

	Three Months Ended September 30,		Nine Months Ended September 30,			
	2015	2014	2015	2014	2015	2014
Current year	63.7	% 62.3	% 62.1	% 63.1	%	%
Prior period reserve development	(19.2	)% (20.6	)% (20.4	)% (20.6	)%	)%
Loss ratio	44.5	% 41.7	% 41.7	% 42.5	%	%

## Current Year Loss Ratio.

The reinsurance segment's current year loss ratio in the 2015 third quarter was 1.4 points higher than in the 2014 third quarter and 1.0 points lower for the nine months ended September 30, 2015 than in the 2014 period. The 2015 third quarter loss ratio reflected 4.2 points of current year catastrophic activity, compared to 4.6 points in the 2014 third quarter. The loss ratio for the nine months ended September 30, 2015 reflected 2.8 points of current year catastrophic activity, compared to 3.2 points for the 2014 period. The current year loss ratio for the 2015 third quarter reflected a higher level of attritional large loss activity, while the current year loss ratio for both 2015 periods reflected changes in the mix of business earned due, in part, to a lower contribution from property catastrophe business.

## Prior Period Reserve Development.

2015 Third Quarter: The reinsurance segment's net favorable development of \$49.9 million, or 19.2 points, consisted of \$19.2 million from short-tailed lines and \$30.7 million from long-tailed and medium-tailed lines. Favorable development in short-tailed lines included \$15.6 million from property catastrophe and property other than property catastrophe reserves, primarily from the 2012 to 2014 underwriting years (i.e., all premiums and losses attributable to contracts having an inception or renewal date within the given twelve-month period). Development from the 2005 to 2014 named catastrophic events was negligible in the 2015 third quarter. The net reduction of loss estimates for the reinsurance segment's short-tailed lines primarily resulted from varying levels of reported and paid claims activity than previously anticipated which led to decreases in certain loss ratio selections during the period. Favorable development in long-tailed lines reflected reductions in casualty reserves of \$26.2 million based on varying levels of reported and paid claims activity, primarily from the 2003 to 2009 underwriting years.

2014 Third Quarter: The reinsurance segment's net favorable development of \$61.0 million, or 20.6 points, consisted of \$26.1 million from short-tailed lines and \$34.9 million from long-tailed and medium-tailed lines. Favorable development in short-tailed lines included \$18.5 million from property catastrophe and property other than property catastrophe reserves, primarily from the 2011 to 2013 underwriting years. Contained within this release was favorable development from the 2005 to 2013 named catastrophic events of \$3.5 million. The net reduction of loss estimates for the reinsurance segment's short-tailed lines primarily resulted from varying levels of reported and paid claims activity than previously anticipated which led to decreases in certain loss ratio selections during the period. Favorable development in long-tailed lines reflected reductions in casualty reserves of \$29.8 million, primarily from the 2005 to 2010 underwriting years based on varying levels of reported and paid claims activity, and a reduction of \$4.8 million in marine and aviation reserves, across all underwriting years.

Nine Months Ended September 30, 2015: The reinsurance segment's net favorable development of \$165.8 million, or 20.4 points, consisted of \$80.0 million from short-tailed lines and \$85.8 million from long-tailed and medium-tailed lines. Favorable development in short-tailed lines included \$61.5 million from property catastrophe and property other than property catastrophe reserves, primarily from the 2012 to 2014 underwriting years. Contained within this release was favorable development from the 2005 to 2014 named catastrophic events of \$10.3 million. The net reduction of loss estimates for the reinsurance segment's short-tailed lines primarily resulted from varying levels of reported and paid claims activity than previously anticipated which led to decreases in certain loss ratio selections during the period. Favorable development in long-tailed lines reflected reductions in casualty reserves of \$74.7 million, primarily from the 2003 to 2009 underwriting years based on varying levels of reported and paid claims activity, and a reduction of \$6.8 million in marine and aviation reserves, across most underwriting years.

Nine Months Ended September 30, 2014: The reinsurance segment's net favorable development of \$200.5 million, or 20.6 points, consisted of \$114.5 million from short-tailed lines and \$86.0 million from long-tailed and medium-tailed lines. Favorable development in short-tailed lines included \$86.5 million from property catastrophe and property other than property catastrophe reserves, primarily from the 2011 to 2013 underwriting years. Contained within this release was favorable



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development from the 2005 to 2013 named catastrophic events of \$12.2 million. The net reduction of loss estimates for the reinsurance segment's short-tailed lines primarily resulted from varying levels of reported and paid claims activity than previously anticipated which led to decreases in certain loss ratio selections during the period. Favorable development in long-tailed lines reflected reductions in casualty reserves of \$69.9 million, primarily from the 2003 to 2010 underwriting years based on varying levels of reported and paid claims activity, and a reduction of \$13.4 million in marine and aviation reserves, across all underwriting years.

## Underwriting Expenses.

2015 Third Quarter versus 2014 Third Quarter: The underwriting expense ratio for the reinsurance segment was 35.6% in the 2015 third quarter, compared to 32.6% in the 2014 third quarter. The acquisition expense ratio for the 2015 third quarter was 21.3%, compared to 20.3% for the 2014 third quarter. The comparison of the acquisition expense ratios in each period is influenced by, among other things, the mix and type of business written and earned, including a lower contribution from property catastrophe business than in the 2014 third quarter, and an increase in the level of ceding commissions. The operating expense ratio for the 2015 third quarter was 14.3%, compared to 12.3% in the 2014 third quarter, primarily reflecting the lower level of net premiums earned.

Nine Months Ended September 30, 2015 versus 2014: The underwriting expense ratio for the reinsurance segment was 34.9% for the nine months ended September 30, 2015, compared to 31.8% in the 2014 period. The acquisition expense ratio was 20.9% for the nine months ended September 30, 2015, compared to 20.5% in the 2014 period. The comparison of the acquisition expense ratios in each period is influenced by, among other things, the mix and type of business written and earned, including a lower contribution from property catastrophe business than in the 2014 period. The operating expense ratio for the nine months ended September 30, 2015 was 14.0%, compared to 11.3% in the 2014 period, primarily reflecting the lower level of net premiums earned.

## Mortgage Segment

The following table sets forth our mortgage segment's underwriting results:

	Three Months Ended September 30,			Nine Months Ended September 30,		
	2015	2014	% Change	2015	2014	% Change
Gross premiums written	\$74,657	\$66,389	12.5	\$203,770	\$169,772	20.0
Premiums ceded	(7,832 )	(7,904 )		(23,404 )	(17,622 )	
Net premiums written	66,825	58,485	14.3	180,366	152,150	18.5
Change in unearned premiums	(12,277 )	(5,539 )		(22,992 )	(9,606 )	
Net premiums earned	54,548	52,946	3.0	157,374	142,544	10.4
Other underwriting income	3,565	988		14,969	2,970	
Losses and loss adjustment expenses	(9,562 )	(15,987 )		(33,010 )	(39,938 )	
Acquisition expenses, net	(10,428 )	(11,958 )		(31,046 )	(32,593 )	
Other operating expenses	(21,048 )	(17,913 )		(61,096 )	(48,077 )	
Underwriting income	\$17,075	\$8,076	111.4	\$47,191	\$24,906	89.5

Underwriting Ratios	% Point Change			% Point Change		
Loss ratio	17.5	% 30.2	% (12.7 )	21.0	% 28.0	% (7.0 )
Acquisition expense ratio	19.1	% 22.6	% (3.5 )	19.7	% 22.9	% (3.2 )
Other operating expense ratio	38.6	% 33.8	% 4.8	38.8	% 33.7	% 5.1
Combined ratio	75.2	% 86.6	% (11.4 )	79.5	% 84.6	% (5.1 )



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## Premiums Written.

The following table sets forth our mortgage segment's net premiums written by client location and underwriting location (i.e., where the business is underwritten):

	Three Months Ended September 30,				Nine Months Ended September 30,			
	2015		2014		2015		2014	
	Amount	%	Amount	%	Amount	%	Amount	%
Net premiums written by client location:								
United States	\$48,611	72.7	\$54,639	93.4	141,893	78.7	137,306	90.2
Other	18,214	27.3	3,846	6.6	38,473	21.3	14,844	9.8
Total	\$66,825	100.0	\$58,485	100.0	\$180,366	100.0	\$152,150	100.0
Net premiums written by underwriting location:								
United States	\$33,298	49.8	\$32,229	55.1	\$91,843	50.9	\$73,554	48.3
Other	33,527	50.2	26,256	44.9	88,523	49.1	78,596	51.7
Total	\$66,825	100.0	\$58,485	100.0	\$180,366	100.0	\$152,150	100.0

2015 Third Quarter versus 2014 Third Quarter. Net premiums written for the 2015 third quarter were 14.3% higher than in the 2014 third quarter and included \$31.2 million of business underwritten by Arch MI U.S., compared to \$32.2 million in the 2014 third quarter. The 2015 third quarter amount reflected \$23.7 million from credit union clients and \$7.5 million from banks and other mortgage originators, compared to \$24.6 million from credit union clients and \$7.6 million from banks and other mortgage originators in the 2014 third quarter. Premiums written on reinsurance treaties were higher by \$9.4 million compared to the 2014 third quarter, primarily reflecting growth in single premium Australian business. The persistency rate, which represents the percentage of mortgage insurance in force at the beginning of a 12-month period that remains in force at the end of such period, of the Arch MI U.S. portfolio of mortgage loans was 76.0% at September 30, 2015, compared to 80.9% at December 31, 2014. The decline in persistency was due to policy terminations reflecting mortgage refinance activity and the continuing low interest rate environment.

Nine Months Ended September 30, 2015 versus 2014. Net premiums written for the nine months ended September 30, 2015 included \$89.7 million of business underwritten by Arch MI U.S., compared to \$73.6 million for the 2014 period. The 2015 amount reflected \$71.1 million from credit union clients and \$18.6 million from banks and other originators, compared to \$65.7 million from credit union clients and \$7.9 million from banks and other mortgage originators for the 2014 period. The 2014 period reflected eight months of activity for Arch MI U.S. due to the acquisition date of January 30, 2014.

Arch MI U.S. generated \$3.18 billion of new insurance written ("NIW") during the 2015 third quarter, of which approximately 57% was from banks and other non-credit union mortgage originators. NIW represents the original principal balance of all loans that received coverage during the period.

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The following table provides details on the NIW generated by Arch MI U.S.:

(U.S. Dollars in millions)	Three Months Ended								Nine Months Ended	
	September 30, 2015		June 30, 2015		March 31, 2015		December 31, 2014		September 30, 2015	
	Amount	%	Amount	%	Amount	%	Amount	%	Amount	%
Total new insurance written (NIW)	\$3,179		\$2,709		\$1,808		\$1,359		\$7,696	
Total NIW by credit quality (FICO score):										
>=740	\$1,973	62.1	\$1,723	63.6	\$1,064	58.8	\$730	53.7	\$4,760	61.9
680-739	976	30.7	842	31.1	602	33.3	480	35.3	2,420	31.4
620-679	230	7.2	143	5.3	142	7.9	149	11.0	515	6.7
<620	—	—	1	—	—	—	\$—	—	1	—
Total	\$3,179	100.0	\$2,709	100.0	\$1,808	100.0	\$1,359	100.0	\$7,696	100.0
Total NIW by LTV:										
95.01% and above	\$219	6.9	\$165	6.1	\$86	4.8	\$79	5.8	\$470	6.1
90.01% to 95.00%	1,458	45.9	1,227	45.3	682	37.7	620	45.6	3,367	43.8
85.01% to 90.00%	1,054	33.2	908	33.5	583	32.2	389	28.6	2,545	33.1
85.01% and below	448	14.1	409	15.1	457	25.3	271	19.9	1,314	17.1
Total	\$3,179	100.0	\$2,709	100.0	\$1,808	100.0	\$1,359	100.0	\$7,696	100.0
Total NIW purchase vs. refinance:										
Purchase	\$2,483	78.1	\$1,830	67.6	\$918	50.8	\$950	69.9	\$5,231	68.0
Refinance	696	21.9	879	32.4	890	49.2	409	30.1	2,465	32.0
Total	\$3,179	100.0	\$2,709	100.0	\$1,808	100.0	\$1,359	100.0	\$7,696	100.0

## Net Premiums Earned.

The following table sets forth our mortgage segment's net premiums earned by underwriting location:

	Three Months Ended September 30, 2015				Nine Months Ended September 30, 2014			
	2015		2014		2015		2014	
	Amount	%	Amount	%	Amount	%	Amount	%
Net premiums earned by underwriting location:								
United States	\$29,620	54.3	\$25,569	48.3	\$82,589	52.5	\$67,244	47.2
Other	24,928	45.7	27,377	51.7	74,785	47.5	75,300	52.8
Total	\$54,548	100.0	\$52,946	100.0	\$157,374	100.0	\$142,544	100.0

Net premiums earned for the 2015 periods were higher than in the 2014 periods, primarily due to the weighting of Arch MI U.S. business along with a higher earned contribution from the mortgage segment's quota share reinsurance business.

## Losses and Loss Adjustment Expenses.

The table below shows the components of the mortgage segment's loss ratio:

	Three Months Ended		Nine Months Ended	
	September 30,		September 30,	
	2015	2014	2015	2014
Current year	24.8	% 31.6	% 25.9	% 29.2
Prior period reserve development	(7.3	)% (1.4	)% (4.9	)% (1.2
Loss ratio	17.5	% 30.2	% 21.0	% 28.0

Unlike property and casualty business for which we estimate ultimate losses on premiums earned, losses on mortgage insurance business are only recorded at the time a borrower is delinquent on their mortgage, in accordance with mortgage insurance industry practice. Because our mortgage insurance reserving process does not take into account the impact of future losses from loans that are not in default, mortgage insurance loss reserves are not an estimate of ultimate losses. In addition to establishing loss reserves for loans in default, under GAAP, we are required to establish a premium deficiency reserve for our mortgage insurance products if the amount of expected future losses for a particular product and maintenance costs for such product exceeds expected future premiums, existing reserves and the anticipated investment income for such product. We evaluate whether a premium deficiency exists quarterly. No such reserve was established for the nine months ended September 30, 2015.

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The mortgage segment's current year loss ratio was 6.8 points lower in the 2015 third quarter compared to the 2014 third quarter and 3.3 points lower for the nine months ended September 30, 2015 than in the 2014 period. The current year loss ratio for the 2015 periods reflect changes in the mix of business earned, when compared to the 2014 periods, and the impact of a decrease in the number of delinquent loans and a lower claim rate on such loans. The mortgage segment's net favorable development for the 2015 third quarter of \$4.0 million, or 7.3 points, and \$7.7 million, or 4.9 points, for the nine months ended September 30, 2015 was spread across a number of origination years.

## Underwriting Expenses.

2015 Third Quarter versus 2014 Third Quarter. The underwriting expense ratio for the mortgage segment was 57.7% in the 2015 third quarter, compared to 56.4% in the 2014 third quarter. The acquisition expense ratio was 19.1% for the 2015 third quarter, compared to 22.6% for the 2014 third quarter. The operating expense ratio was 38.6% for the 2015 third quarter, compared to 33.8% in the 2014 third quarter. The underwriting expense ratio is expected to stay at an elevated rate until Arch MI U.S. reaches scale with respect to non-credit union clientele.

Nine Months Ended September 30, 2015 versus 2014. The underwriting expense ratio for the mortgage segment was 58.5% for the nine months ended September 30, 2015, compared to 56.6% for the 2014 period. The acquisition expense ratio was 19.7% for the nine months ended September 30, 2015, compared to 22.9% for the 2014 period. The operating expense ratio was 38.8% for the nine months ended September 30, 2015, compared to 33.7% in the 2014 period. The underwriting expense ratio is expected to stay at an elevated rate until Arch MI U.S. reaches scale with respect to non-credit union clientele.

## Other Segment

As noted earlier, the 'other' segment includes the results of Watford Re. See note 3, "Variable Interest Entity and Noncontrolling Interests" and note 5, "Segment Information," of the notes accompanying our consolidated financial statements for additional information. The following table sets forth the results of our 'other' segment:

	Three Months Ended		Nine Months Ended	
	September 30,		September 30,	
	2015	2014	2015	2014
Gross premiums written	\$131,165	\$103,483	\$387,752	\$190,239
Premiums ceded	(6,158 )	(3,668 )	(17,979 )	(6,428 )
Net premiums written	125,007	99,815	369,773	183,811
Change in unearned premiums	(25,847 )	(65,045 )	(91,158 )	(133,895 )
Net premiums earned	99,160	34,770	278,615	49,916
Other underwriting income	756	—	3,570	—
Losses and loss adjustment expenses	(66,540 )	(23,583 )	(193,697 )	(33,133 )
Acquisition expenses, net	(28,646 )	(9,609 )	(79,764 )	(14,625 )
Other operating expenses	(3,421 )	(1,658 )	(8,876 )	(4,402 )
Underwriting income (loss)	1,309	(80 )	(152 )	(2,244 )
Net investment income	18,982	7,866	47,480	8,399
Other expenses	—	—	—	(2,329 )
Net realized gains (losses)	(36,218 )	(12,896 )	(27,244 )	(9,718 )
Interest expense	(1,286 )	—	(1,286 )	—
Net foreign exchange gains (losses)	(1,376 )	(1,580 )	1,260	(1,017 )
Net income (loss)	(18,589 )	(6,690 )	20,058	(6,909 )
Dividends attributable to redeemable noncontrolling interests (1)	(4,588 )	(4,909 )	(14,239 )	(9,818 )

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Net income (loss) attributable to common interests	(23,177 )	(11,599 )	5,819	(16,727 )	
Amounts attributable to nonredeemable noncontrolling interests (1)	20,621	10,320	(5,178 )	14,883	
Net income (loss) available to Arch	\$(2,556 )	\$(1,279 )	\$641	\$(1,844 )	
Underwriting Ratios					
Loss ratio	67.1	% 67.8	% 69.5	% 66.4	%
Acquisition expense ratio	28.9	% 27.6	% 28.6	% 29.3	%
Other operating expense ratio	3.4	% 4.8	% 3.2	% 8.8	%
Combined ratio	99.4	% 100.2	% 101.3	% 104.5	%
Total investable assets	\$1,593,523	\$1,124,048			
Total assets	2,090,797	1,403,018			
Total liabilities	1,000,952	304,712			

(1) Recorded as 'amounts attributable to noncontrolling interests' in the consolidated statements of income.

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Other Income or Expense Items (excluding amounts related to the ‘other’ segment)

Net Investment Income. The components of net investment income were derived from the following sources:

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2015	2014	2015	2014
Fixed maturities	\$58,888	\$64,461	\$182,447	\$191,409
Term loan investments	4,810	5,717	13,651	16,619
Equity securities	3,807	2,779	9,228	8,971
Short-term investments	75	152	453	660
Other (1)	10,253	7,896	33,462	21,681
Gross investment income	77,833	81,005	239,241	239,340
Investment expenses (2)	(10,582)	(8,766)	(34,531)	(27,650)
Net investment income	\$67,251	\$72,239	\$204,710	211,690

(1) Amounts include dividends and interest distributions on investment funds and other items.

Investment expenses were approximately 0.31% of average invested assets for the 2015 third quarter, compared to (2)0.26% for the 2014 third quarter, and 0.36% for the nine months ended September 30, 2015, compared to 0.28% for the 2014 period.

The pre-tax investment income yield, calculated based on amortized cost and on an annualized basis, was 2.04% for the 2015 third quarter, compared to 2.05% for the 2014 third quarter, and 2.06% for the nine months ended September 30, 2015, compared to 2.07% for the 2014 period. The comparability of net investment income between the periods was influenced by our share repurchase program, as well as the effects of low prevailing interest rates available in the market. Yields in the future may vary based on financial market conditions, investment allocation decisions and other factors.

Other Income (Loss). We record income or loss from certain investments using the equity method on a three month lag basis based on the availability of their financial statements, including income or loss on our investment in Gulf Reinsurance Limited (“Gulf Re”) for the period prior to the closing of our acquisition of Gulf Re on May 14, 2015. In addition, other income (loss) from time to time includes certain non-recurring items. We recorded a loss of \$0.3 million in the 2015 third quarter and income of \$0.1 million for the nine months ended September 30, 2015. We recorded a loss of \$7.8 million for the 2014 third quarter and a loss of \$5.1 million for the nine months ended September 30, 2014. The 2014 amounts primarily related to Gulf Re.

Equity in Net Income (Loss) of Investment Funds Accounted for Using the Equity Method. We recorded \$2.1 million of equity in net loss related to investment funds accounted for using the equity method in the 2015 third quarter, compared to \$5.0 million of equity in net income for the 2014 third quarter, and \$19.9 million of equity in net income for the nine months ended September 30, 2015, compared to \$17.5 million of equity in net income for the 2014 period. We use the equity method on certain investment funds due to their ownership structure, which are typically structured as limited partnerships, where we do not have a controlling interest and are not the primary beneficiary. In applying the equity method, these investments are initially recorded at cost and are subsequently adjusted based on our proportionate share of the net income or loss of the funds (which include changes in the market value of the underlying securities in the funds). Such investments are generally recorded on a one to three month lag based on the availability of reports from the investment funds. Certain of these funds employ leverage to achieve a higher rate of return on their assets under management. While leverage presents opportunities for increasing the total return of such investments, it may increase losses as well. Fluctuations in the carrying value of the investment funds accounted for using the equity method may increase the volatility of our reported results of operations. Investment funds accounted



for using the equity method totaled \$589.3 million at September 30, 2015, compared to \$349.0 million at December 31, 2014.

**Net Realized Gains or Losses.** We recorded net realized losses of \$53.5 million for the 2015 third quarter, compared to net realized gains of \$31.4 million for the 2014 third quarter, and net realized losses of \$14.8 million for the nine months ended September 30, 2015, compared to net realized gains of \$102.1 million for the 2014 period. Currently, our portfolio is actively managed to maximize total return within certain guidelines. In assessing returns under this approach, we include net investment income, net realized gains and losses and the change in unrealized gains and losses generated by our investment portfolio. The effect of financial market movements on the investment portfolio will directly impact net realized gains and losses as the portfolio is adjusted and rebalanced. Net realized gains or losses from the sale of fixed maturities primarily resulted from our decisions to reduce credit exposure, to change duration targets, to rebalance our portfolios or due to relative value determinations. Net realized gains or losses also included realized and unrealized contract gains and losses on our derivative instruments, changes in the fair value of assets and liabilities accounted for using the fair value option along with re-

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measurement of contingent consideration liability amounts. See note 6, “Investment Information—Net Realized Gains (Losses),” of the notes accompanying our consolidated financial statements for additional information.

**Net Impairment Losses Recognized in Earnings.** On a quarterly basis, we perform reviews of our available for sale investments to determine whether declines in fair value below the cost basis are considered other-than-temporary in accordance with applicable accounting guidance regarding the recognition and presentation of other-than-temporary impairments. We recorded \$5.9 million of impairment losses for the 2015 third quarter, compared to \$8.6 million for the 2014 third quarter, and \$12.8 million for the nine months ended September 30, 2015, compared to \$26.3 million for the 2014 period. The impairment losses recorded for the 2015 third quarter primarily related to corporate bonds based on information received from external investment managers and foreign currency fluctuations on non-U.S. Dollar denominated investments based on the remaining time to maturity, and on equity securities. For the nine months ended September 30, 2015, impairment losses were also recorded on a short-term investment due to foreign currency fluctuations and the remaining time to maturity, on corporate bonds based on information received from external investment managers, to reduce the carrying value of a fund investment and on structured securities based on changes in expected recovery values. See note 6, “Investment Information—Other-Than-Temporary Impairments,” of the notes accompanying our consolidated financial statements for additional information.

**Other Expenses.** Other expenses, which are included in our other operating expenses and part of corporate and other (non-underwriting), were \$10.7 million for the 2015 third quarter, compared to \$10.4 million for the 2014 third quarter, and \$37.5 million for the nine months ended September 30, 2015, compared to \$36.5 million for the 2014 period. Such amounts primarily represent certain holding company costs necessary to support our worldwide insurance, reinsurance and mortgage operations, share based compensation expense and costs associated with operating as a publicly traded company.

**Interest expense.** Interest expense was \$12.0 million for the 2015 third quarter, compared to \$4.2 million for the 2014 third quarter, and \$28.8 million for the nine months ended September 30, 2015, compared to \$32.9 million for the 2014 period. Interest expense includes periodic reassessments of a deposit accounting liability (i.e., a contract that, in accordance with GAAP, does not pass risk transfer). In the 2015 second quarter, we recorded an \$8.4 reduction in interest expense, compared to \$8.2 million in the 2014 third quarter. Both reductions resulted from reassessments of the estimated ultimate liability due to a determination that paid losses were expected to be lower than previously anticipated.

**Net Foreign Exchange Gains or Losses.** Net foreign exchange gains for the 2015 third quarter were \$16.1 million, compared to net foreign exchange gains for the 2014 third quarter of \$57.6 million. Net foreign exchange gains for the nine months ended September 30, 2015 were \$60.3 million, compared to net foreign exchange gains for the 2014 period of \$48.2 million. Amounts in all periods were primarily unrealized and resulted from the effects of revaluing our net insurance liabilities required to be settled in foreign currencies at each balance sheet date. Changes in the value of investments held in foreign currencies due to foreign currency rate movements are reflected as a direct increase or decrease to shareholders’ equity and are not included in the consolidated statements of income. We have not matched a portion of our projected liabilities in foreign currencies with investments in the same currencies and may not match such amounts in future periods, which could increase our exposure to foreign currency fluctuations and increase the volatility of our shareholders’ equity.

**Income tax expense.** Our income tax provision on income before income taxes resulted in an expense of 13.2% for the 2015 third quarter, compared to 2.8% for the 2014 third quarter, and 5.5% for the nine months ended September 30, 2015, compared to 2.8% for the 2014 period. Our effective tax rate, which is based upon the expected annual effective tax rate, may fluctuate from period to period based on the relative mix of income or loss reported by jurisdiction and the varying tax rates in each jurisdiction.

CRITICAL ACCOUNTING POLICIES, ESTIMATES AND RECENT ACCOUNTING PRONOUNCEMENTS

Critical accounting policies, estimates and recent accounting pronouncements are discussed in Management's Discussion and Analysis of Financial Condition and Results of Operations contained in our 2014 Form 10-K, updated where applicable in the notes accompanying our consolidated financial statements.

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## FINANCIAL CONDITION, LIQUIDITY AND CAPITAL RESOURCES

## Financial Condition

## Investable Assets

At September 30, 2015, total investable assets of \$16.33 billion included \$14.73 billion managed by Arch and \$1.59 billion included in the 'other' segment (i.e., attributable to Watford Re).

## Investable Assets Managed by Arch

The finance and investment committee of our board of directors establishes our investment policies and sets the parameters for creating guidelines for our investment managers. The finance and investment committee reviews the implementation of the investment strategy on a regular basis. Our current approach stresses preservation of capital, market liquidity and diversification of risk. While maintaining our emphasis on preservation of capital and liquidity, we expect our portfolio to become more diversified and, as a result, we may expand into areas which are not currently part of our investment strategy. Our Chief Investment Officer administers the investment portfolio, oversees our investment managers, formulates investment strategy in conjunction with our finance and investment committee and directly manages certain portions of our fixed income and equity portfolios.

The following table summarizes the fair value of the investable assets managed by Arch:

	September 30, 2015		December 31, 2014	
	Amount	% of Total	Amount	% of Total
Investable assets (1) (2):				
Fixed maturities available for sale, at fair value	\$10,560,635	71.7	\$10,750,770	73.6
Fixed maturities, at fair value (3)	341,131	2.3	377,053	2.6
Fixed maturities pledged under securities lending agreements, at fair value	285,632	1.9	50,802	0.4
Total fixed maturities	11,187,398	75.9	11,178,625	76.6
Short-term investments available for sale, at fair value	708,428	4.8	797,226	5.5
Cash	521,137	3.5	474,247	3.2
Equity securities available for sale, at fair value	606,259	4.1	658,182	4.5
Equity securities, at fair value (3)	78	—	—	—
Other investments available for sale, at fair value	281,014	1.9	296,224	2.0
Other investments, at fair value (3)	891,484	6.1	878,774	6.0
Investments accounted for using the equity method (4)	589,277	4.0	349,014	2.4
Securities transactions entered into but not settled at the balance sheet date	(51,343 )	(0.3 )	(32,802 )	(0.2 )
Total investable assets managed by Arch	\$14,733,732	100.0	\$14,599,490	100.0

(1) The table above excludes investable assets attributable to the 'other' segment. See "Investable Assets in the 'Other' Segment."

In securities lending transactions, we receive collateral in excess of the fair value of the securities pledged. For (2) purposes of this table, we have excluded the collateral received under securities lending, at fair value and included the securities pledged under securities lending, at fair value.

Represents investments which are carried at fair value under the fair value option and reflected as "investments (3) accounted for using the fair value option" on our balance sheet. Changes in the carrying value of such investments are recorded in net realized gains or losses.

Changes in the carrying value of investment funds accounted for using the equity method are recorded as “equity in (4) net income (loss) of investment funds accounted for using the equity method” rather than as an unrealized gain or loss component of accumulated other comprehensive income.

At September 30, 2015, our fixed income portfolio, which includes fixed maturity securities and short-term investments, had average credit quality ratings from Standard & Poor’s Rating Services (“S&P”)/Moody’s of “AA/Aa2” and an average yield to maturity (embedded book yield), before investment expenses, of 2.10%. At December 31, 2014, our fixed income portfolio had average credit quality ratings from S&P/Moody’s of “AA/Aa2” and an average yield to maturity of 2.18%. Our investment portfolio had an average effective duration of 3.42 years at September 30, 2015, compared to 3.34 years at December 31, 2014. At September 30, 2015, approximately \$10.03 billion, or 68%, of total investable assets managed by Arch were internally managed, compared to \$9.87 billion, or 68%, at December 31, 2014.

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The following table summarizes our fixed maturities and fixed maturities pledged under securities lending agreements (“Fixed Maturities”) by type:

	Estimated Fair Value	Gross Unrealized Gains	Gross Unrealized Losses	Cost or Amortized Cost
September 30, 2015				
Corporate bonds	\$3,007,311	\$28,418	\$(54,489)	) \$3,033,382
Mortgage backed securities	869,311	13,155	(2,998)	) 859,154
Municipal bonds	1,830,987	27,600	(2,771)	) 1,806,158
Commercial mortgage backed securities	810,973	10,058	(2,594)	) 803,509
U.S. government and government agencies	2,338,724	14,352	(2,138)	) 2,326,510
Non-U.S. government securities	957,543	13,070	(36,488)	) 980,961
Asset backed securities	1,372,549	9,032	(4,850)	) 1,368,367
Total	\$11,187,398	\$115,685	\$(106,328)	) \$11,178,041
December 31, 2014				
Corporate bonds	\$3,379,139	\$37,928	\$(38,974)	) \$3,380,185
Mortgage backed securities	965,533	18,843	(3,842)	) 950,532
Municipal bonds	1,494,122	31,227	(1,044)	) 1,463,939
Commercial mortgage backed securities	1,114,528	14,594	(3,822)	) 1,103,756
U.S. government and government agencies	1,447,972	8,345	(1,760)	) 1,441,387
Non-U.S. government securities	1,099,390	21,311	(37,203)	) 1,115,282
Asset backed securities	1,677,941	8,425	(6,089)	) 1,675,605
Total	\$11,178,625	\$140,673	\$(92,734)	) \$11,130,686

The following table provides the credit quality distribution of our Fixed Maturities:

Rating (1)	September 30, 2015		December 31, 2014	
	Estimated Fair Value	% of Total	Estimated Fair Value	% of Total
U.S. government and government agencies (2)	\$2,997,450	26.8	\$2,245,489	20.1
AAA	3,815,981	34.1	4,299,060	38.5
AA	1,978,961	17.7	1,917,392	17.2
A	1,474,976	13.2	1,739,922	15.6
BBB	335,514	3.0	339,395	3.0
BB	195,888	1.8	157,232	1.4
B	137,324	1.2	184,869	1.7
Lower than B	132,107	1.2	154,823	1.4
Not rated	119,197	1.1	140,443	1.3
Total	\$11,187,398	100.0	\$11,178,625	100.0

(1) For individual fixed maturities, S&P ratings are used. In the absence of an S&P ratings, ratings from Moody’s are used, followed by ratings from Fitch Ratings.

(2) Includes U.S. government-sponsored agency mortgage backed securities and agency commercial mortgage backed securities.

At September 30, 2015, below-investment grade securities comprised approximately 5% of our Fixed Maturities, compared to 6% at December 31, 2014. In accordance with our investment strategy, we invest in high yield fixed income securities which are included in “Corporate bonds.” Upon issuance, these securities are typically rated below

investment grade (i.e., rating assigned by the major rating agencies of “BB+” or less). At September 30, 2015, corporate bonds represented 74% of the total below investment grade securities at fair value, mortgage backed securities represented 14% of the total and 12% were in other classes. At December 31, 2014, corporate bonds represented 69% of the total below investment grade securities at fair value, mortgage backed securities represented 22% of the total and 9% were in other classes. Unrealized losses include the impact of foreign exchange movements on certain securities denominated in foreign currencies and, as such, the amount of securities in an unrealized loss position fluctuates due to foreign currency movements.

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The following table provides information on the severity of the unrealized loss position as a percentage of amortized cost for all Fixed Maturities which were in an unrealized loss position:

Severity of Unrealized Loss	September 30, 2015			December 31, 2014		
	Estimated Fair Value	Gross Unrealized Losses	% of Total Gross Unrealized Losses	Estimated Fair Value	Gross Unrealized Losses	% of Total Gross Unrealized Losses
0-10%	\$3,204,973	\$(46,816 )	44.0	\$4,181,313	\$(55,498 )	59.8
10-20%	182,130	(31,844 )	29.9	239,158	(33,111 )	35.7
20-30%	73,404	(22,235 )	20.9	5,618	(1,990 )	2.1
Greater than 30%	6,883	(5,433 )	5.1	3,437	(2,135 )	2.3
Total	\$3,467,390	\$(106,328 )	100.0	\$4,429,526	\$(92,734 )	100.0

The following table provides information on the severity of the unrealized loss position as a percentage of amortized cost for non-investment grade Fixed Maturities which were in an unrealized loss position:

Severity of Unrealized Loss	September 30, 2015			December 31, 2014		
	Estimated Fair Value	Gross Unrealized Losses	% of Total Gross Unrealized Losses	Estimated Fair Value	Gross Unrealized Losses	% of Total Gross Unrealized Losses
0-10%	\$179,174	\$(5,116 )	4.8	\$141,986	\$(3,728 )	4.0
10-20%	25,593	(4,073 )	3.8	20,127	(3,530 )	3.8
20-30%	13,231	(4,217 )	4.0	5,618	(1,990 )	2.1
Greater than 30%	6,883	(5,433 )	5.1	3,434	(2,133 )	2.3
Total	\$224,881	\$(18,839 )	17.7	\$171,165	\$(11,381 )	12.3

We determine estimated recovery values for our Fixed Maturities following a review of the business prospects, credit ratings, estimated loss given default factors and information received from asset managers and rating agencies for each security. For structured securities, we utilize underlying data, where available, for each security provided by asset managers and additional information from credit agencies in order to determine an expected recovery value for each security. The analysis provided by the asset managers includes expected cash flow projections under base case and stress case scenarios which modify expected default expectations and loss severities and slow down prepayment assumptions.

The following table summarizes our top ten exposures to fixed income corporate issuers by fair value at September 30, 2015, excluding guaranteed amounts and covered bonds:

	Estimated Fair Value	Credit Rating (1)
Exxon Mobil Corp.	\$75,178	AAA/Aaa
Apple Inc.	74,000	AA+/Aa1
General Electric Co.	71,244	AA+/A1
International Business Machines Corp.	67,295	AA-/Aa3
Microsoft Corporation	61,809	AAA/Aaa
Chevron Corp.	52,266	AA/Aa1
Oracle Corporation	50,791	AA-/A1
Daimler AG	47,301	A-/A3
Toyota Motor Corporation	46,066	AA-/Aa3
Wells Fargo & Company	46,011	A+/A2
Total	\$591,961	



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(1) Average credit ratings as assigned by S&P and Moody's, respectively.

Our portfolio includes investments, such as mortgage-backed securities, which are subject to prepayment risk. At September 30, 2015, our investments in residential mortgage-backed securities ("MBS") amounted to approximately \$869.3 million, or 5.9% of total investable assets managed by Arch, compared to \$965.5 million, or 6.6%, at December 31, 2014. As with other fixed income investments, the fair value of these securities fluctuates depending on market and other general economic conditions and the interest rate environment. Changes in interest rates can expose us to changes in the prepayment rate on these investments. In periods of declining interest rates, mortgage prepayments generally increase and MBS are prepaid more quickly, requiring us to reinvest the proceeds at the then current market rates. Conversely, in periods of rising rates, mortgage prepayments generally fall, preventing us from taking full advantage of the higher level of rates. However, economic conditions may curtail prepayment activity if refinancing becomes more difficult, thus limiting prepayments on MBS. Our portfolio also includes commercial mortgage backed securities ("CMBS"). At September 30, 2015, CMBS constituted

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approximately \$811.0 million, or 5.5% of total investable assets managed by Arch, compared to \$1.11 billion, or 7.6%, at December 31, 2014.

Delinquencies and losses with respect to residential mortgage loans from certain vintage years have increased since 2007 and may continue to increase, particularly in the sub-prime sector. In addition, during this period, residential property values in many states have declined or remained stable, after extended periods during which those values appreciated. A continued decline or an extended flattening in those values may result in additional increases in delinquencies and losses on residential mortgage loans generally, especially with respect to second homes and investment properties, and with respect to any residential mortgage loans where the aggregate loan amounts (including any subordinated loans) are close to or greater than the related property values. These developments may have a significant adverse effect on the prices of loans and securities, including those in our investment portfolio. The situation continues to have wide ranging consequences, including downward pressure on economic growth and the potential for increased insurance and reinsurance exposures, which could have an adverse impact on our results of operations, financial condition, business and operations. In addition, the commercial real estate market has experienced price deterioration, which could lead to increased delinquencies and defaults on commercial real estate mortgages.

The following table provides information on our MBS and CMBS at September 30, 2015, excluding amounts guaranteed by the U.S. government:

	Issuance Year	Amortized Cost	Average Credit Quality	Estimated Fair Value		% of Investable Assets Managed by Arch	
				Total	% of Amortized Cost		
Non-agency MBS:	2003-2008	\$112,836	CC	\$121,005	107.2	% 0.8	%
	2009	20,983	AAA	20,785	99.1	% 0.1	%
	2010	15,300	AA	14,985	97.9	% 0.1	%
	2013	26,811	AAA	27,016	100.8	% 0.2	%
	2014	42,516	AA	42,483	99.9	% 0.3	%
	2015	49,109	AA+	48,967	99.7	% 0.3	%
Total non-agency MBS		\$267,555	BBB-	\$275,241	102.9	% 1.9	%
Non-agency CMBS:	2002-2008	31,806	BBB+	32,333	101.7	% 0.2	%
	2009	362	BBB+	365	100.8	% —	%
	2010	9,923	AAA	10,151	102.3	% 0.1	%
	2011	29,406	AAA	29,437	100.1	% 0.2	%
	2012	64,819	AAA	66,268	102.2	% 0.4	%
	2013	115,569	AA+	118,990	103.0	% 0.8	%
	2014	245,542	AAA	247,996	101.0	% 1.7	%
	2015	241,393	AAA	240,777	99.7	% 1.6	%
Total non-agency CMBS		\$738,820	AA+	\$746,317	101.0	% 5.1	%
Additional Statistics:				Non-Agency MBS		Non-Agency CMBS (1)	
Weighted average loan age (months)				83		23	
Weighted average life (months) (2)				43		57	
Weighted average loan-to-value % (3)				63.1	%	54.0	%
Total delinquencies (4)				9.0	%	0.4	%
Current credit support % (5)				11.8	%	40.3	%

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- (1) Loans defeased with government/agency obligations were not material to the collateral underlying our CMBS holdings.
  - (2) The weighted average life for MBS is based on the interest rates in effect at September 30, 2015. The weighted average life for CMBS reflects the average life of the collateral underlying our CMBS holdings.
  - (3) The range of loan-to-values is 38% to 100% on MBS and 25% to 199% on CMBS.
  - (4) Total delinquencies includes 60 days and over.
  - (5) Current credit support % represents the % for a collateralized mortgage obligation (“CMO”) or CMBS class/tranche from other subordinate classes in the same CMO or CMBS deal.

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The following table provides information on our asset backed securities (“ABS”) at September 30, 2015:

	Amortized Cost	Average Credit Quality	Weighted Average Credit Support	Estimated Fair Value		
				Total	% of Amortized Cost	% of Investable Assets Managed by Arch
Sector:						
Credit cards	\$486,897	AAA	16	% \$489,646	100.6	% 3.3
Autos	340,844	AAA	25	% 342,869	100.6	% 2.3
Loans	275,215	AA-	11	% 274,075	99.6	% 1.9
Equipment	154,656	AA-	10	% 154,026	99.6	% 1.0
Other (1)	110,755	A+	16	% 111,933	101.1	% 0.8
Total ABS (2)	\$1,368,367	AA+		\$1,372,549	100.3	% 9.3

(1) Including rate reduction bonds, commodities, home equity, U.K. securitized and other.

(2) The effective duration of the total ABS was 1.7 years at September 30, 2015.

At September 30, 2015, our fixed income portfolio included \$43.7 million par value in sub-prime securities with a fair value of \$35.0 million and average credit quality ratings from S&P/Moody’s of “CCC-/Caa3.” At December 31, 2014, our fixed income portfolio included \$16.9 million par value in sub-prime securities with a fair value of \$8.5 million and average credit quality ratings from S&P/Moody’s of “CCC/Caa3.” Such amounts were primarily in the home equity sector of our ABS, with the balance in other ABS, MBS and CMBS sectors. We define sub-prime mortgage-backed securities as investments in which the underlying loans primarily exhibit one or more of the following characteristics: low FICO scores, above-prime interest rates, high loan-to-value ratios or high debt-to-income ratios. In addition, the portfolio of collateral backing our securities lending program contained \$5.4 million fair value of sub-prime securities with average credit quality ratings from S&P/Moody’s of “CCC/Ca” at September 30, 2015, compared to \$5.8 million and “CCC/Ca” at December 31, 2014.

The following table provides information on the fair value of our Eurozone investments at September 30, 2015:

	Sovereign (2)	Financial Corporates	Other Corporates	Bank Loans (3)	Equities and Other	Total
Country (1)						
Netherlands	\$175,691	\$8,676	\$45,445	\$13,398	\$—	\$243,210
Germany	104,229	—	23,489	26,298	—	154,016
Luxembourg	—	—	25,824	7,219	—	33,043
Supranational (4)	28,541	—	—	—	—	28,541
France	1,997	1,695	5,012	4,223	3,129	16,056
Belgium	6,376	—	—	—	—	6,376
Ireland	—	—	2,925	117	—	3,042
Slovenia	1,746	—	—	—	—	1,746
Austria	903	—	—	—	—	903
Italy	—	—	264	460	—	724
Spain	—	—	303	—	—	303
Greece	166	—	—	—	—	166
Total	\$319,649	\$10,371	\$103,262	\$51,715	\$3,129	\$488,126

(1) The country allocations set forth in the table are based on various assumptions made by us in assessing the country in which the underlying credit risk resides, including a review of the jurisdiction of organization, business operations and other factors. Based on such analysis, we do not believe that we have any other Eurozone

investments at September 30, 2015.

- (2) Sovereign includes securities issued and/or guaranteed by Eurozone governments.
- (3) Included in “investments accounted for using the fair value option.”
- (4) Includes World Bank, European Investment Bank, International Finance Corp. and European Bank for Reconstruction and Development.

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At September 30, 2015, our equity portfolio included \$606.3 million of equity securities, compared to \$658.2 million at December 31, 2014. Our equity portfolio includes publicly traded common stocks in the natural resources, energy, consumer staples and other sectors. The following table provides information on the severity of the unrealized loss position as a percentage of cost for all equity securities classified as available for sale which were in an unrealized loss position:

Severity of Unrealized Loss	September 30, 2015			December 31, 2014		
	Estimated Fair Value	Gross Unrealized Losses	% of Total Gross Unrealized Losses	Estimated Fair Value	Gross Unrealized Losses	% of Total Gross Unrealized Losses
0-10%	\$192,007	\$(9,275)	) 24.7	\$127,467	\$(4,973)	) 37.2
10-20%	83,148	(14,121)	) 37.6	47,880	(6,546)	) 49.0
20-30%	25,353	(7,926)	) 21.1	5,328	(1,695)	) 12.7
Greater than 30%	11,100	(6,205)	) 16.5	327	(150)	) 1.1
Total	\$311,608	\$(37,527)	) 100.0	\$181,002	\$(13,364)	) 100.0

On a quarterly basis, we evaluate the unrealized losses of our equity securities by issuer and forecast a reasonable period of time by which the fair value of the securities would increase and we would recover the cost basis. All of the unrealized losses on equity securities were on holdings which have been in a continual unrealized loss position for less than 12 months at September 30, 2015. We believe that a reasonable period of time exists to allow for recovery of the cost basis of our equity securities that are in an unrealized loss position at September 30, 2015.

The following table summarizes our other investments:

	September 30, 2015	December 31, 2014
Available for sale:		
Asian and emerging markets	\$210,680	\$236,586
Investment grade fixed income	31,429	59,638
Credit related funds	13,722	—
Other	25,183	—
Total available for sale	281,014	296,224
Fair value option:		
Term loan investments (par value: \$339,902 and \$415,462)	341,283	410,995
Mezzanine debt funds	112,782	121,341
Credit related funds	194,957	114,436
Investment grade fixed income	58,204	69,108
Asian and emerging markets	59,667	25,800
Other (1)	124,591	137,094
Total fair value option	891,484	878,774
Total	\$1,172,498	\$1,174,998

(1) Includes fund investments with strategies in mortgage servicing rights, transportation and infrastructure assets and other.

Certain of our other investments are in investment funds for which we have the option to redeem at agreed upon values as described in each investment fund's subscription agreement. Depending on the terms of the various subscription agreements, investments in investment funds may be redeemed daily, monthly, quarterly or on other terms. Two common redemption restrictions which may impact our ability to redeem these investment funds are gates and lockups. A gate is a suspension of redemptions which may be implemented by the general partner or investment

manager of the fund in order to defer, in whole or in part, the redemption request in the event the aggregate amount of redemption requests exceeds a predetermined percentage of the investment fund's net assets which may otherwise hinder the general partner or investment manager's ability to liquidate holdings in an orderly fashion in order to generate the cash necessary to fund extraordinarily large redemption payouts. A lockup period is the initial amount of time an investor is contractually required to hold the security before having the ability to redeem. If our investment is eligible to be redeemed, the time to redeem such investment can take weeks or months following the notification.

Certain of our investment managers may use leverage to achieve a higher rate of return on their assets under management, primarily those included in "other investments available for sale, at fair value," "investments accounted for using the fair value option" and "investments accounted for using the equity method" on our balance sheet. While leverage presents opportunities for increasing the total return of such investments, it may increase losses as well. Accordingly, any event that adversely affects the value of the underlying holdings would be magnified to the extent leverage is used and our potential losses would be

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magnified. In addition, the structures used to generate leverage may lead to such investments being required to meet covenants based on market valuations and asset coverage. Market valuation declines could force the sale of investments into a depressed market, which may result in significant additional losses. Alternatively, the levered investments may attempt to delever by raising additional equity or potentially changing the terms of the established financing arrangements. We may choose to participate in the additional funding of such investments.

Our investment strategy allows for the use of derivative instruments. We utilize various derivative instruments such as futures contracts to enhance investment performance, replicate investment positions or manage market exposures and duration risk that would be allowed under our investment guidelines if implemented in other ways. See note 8, "Derivative Instruments," of the notes accompanying our consolidated financial statements for additional disclosures concerning derivatives.

Accounting guidance regarding fair value measurements addresses how companies should measure fair value when they are required to use a fair value measure for recognition or disclosure purposes under GAAP and provides a common definition of fair value to be used throughout GAAP. See note 7, "Fair Value," of the notes accompanying our consolidated financial statements for a summary of our financial assets and liabilities measured at fair value at September 30, 2015 and December 31, 2014 segregated by level in the fair value hierarchy.

## Investable Assets in the 'Other' Segment

Investable assets in the 'other' segment are managed by Watford Re. The board of directors of Watford Re establishes their investment policies and guidelines. Watford Re's investments are accounted for using the fair value option with changes in the carrying value of such investments recorded in net realized gains or losses. The following table summarizes investable assets in the 'other' segment:

	September 30, 2015	December 31, 2014
Cash	\$ 128,642	\$ 11,455
Investments accounted for using the fair value option:		
Term loan investments (par value: \$848,314 and \$678,875)	811,410	662,654
Fixed maturities	585,458	254,971
Short-term investments	153,604	251,601
Total investments accounted for using the fair value option	1,550,472	1,169,226
Securities sold but not yet purchased	(25,384	) —
Securities transactions entered into but not settled at the balance sheet date	(60,207	) (17,441
Total investable assets included in 'other' segment	\$ 1,593,523	\$ 1,163,240

## Premiums Receivable and Reinsurance Recoverables

At September 30, 2015, 83.5% of premiums receivable of \$1.07 billion represented amounts not yet due, while amounts in excess of 90 days overdue were 4.8% of the total. At December 31, 2014, 80.9% of premiums receivable of \$948.7 million represented amounts not yet due, while amounts in excess of 90 days overdue were 5.4% of the total. Approximately 4.4% of the \$26.5 million of paid losses and loss adjustment expenses recoverable at September 30, 2015 were more than 90 days overdue, while 1.0% of the \$34.5 million of paid losses and loss adjustment expenses recoverable at December 31, 2014 were more than 90 days overdue. Our reserves for doubtful accounts were approximately \$14.9 million at September 30, 2015, compared to \$13.4 million at December 31, 2014.

At September 30, 2015, approximately 80.2% of reinsurance recoverables on paid and unpaid losses (not including prepaid reinsurance premiums) of \$1.83 billion were due from carriers which had an A.M. Best rating of "A-" or better



and the largest reinsurance recoverables from any one carrier was approximately 3.6% of total shareholders' equity available to Arch. At December 31, 2014, approximately 83.0% of reinsurance recoverables on paid and unpaid losses (not including prepaid reinsurance premiums) of \$1.81 billion were due from carriers which had an A.M. Best rating of "A-" or better and the largest reinsurance recoverables from any one carrier was approximately 3.7% of total shareholders' equity available to Arch.

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The effects of reinsurance on written and earned premiums and losses and loss adjustment expenses with unaffiliated reinsurers were as follows:

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2015	2014	2015	2014
<b>Premiums Written</b>				
Direct	\$786,248	\$757,636	\$2,357,677	\$2,378,759
Assumed	402,944	402,271	1,372,746	1,348,045
Ceded	(217,220 )	(200,368 )	(747,876 )	(730,347 )
Net	\$971,972	\$959,539	\$2,982,547	\$2,996,457
<b>Premiums Earned</b>				
Direct	\$762,794	\$750,323	\$2,243,848	\$2,166,233
Assumed	403,982	381,736	1,229,487	1,160,192
Ceded	(230,093 )	(228,408 )	(682,950 )	(655,842 )
Net	\$936,683	\$903,651	\$2,790,385	\$2,670,583
<b>Losses and Loss Adjustment Expenses</b>				
Direct	\$482,150	\$487,543	\$1,375,958	\$1,309,121
Assumed	177,614	145,428	551,262	455,063
Ceded	(128,023 )	(131,298 )	(382,337 )	(340,753 )
Net	\$531,741	\$501,673	\$1,544,883	\$1,423,431

**Reserves for Losses and Loss Adjustment Expenses**

We establish reserves for losses and loss adjustment expenses (“Loss Reserves”) which represent estimates involving actuarial and statistical projections, at a given point in time, of our expectations of the ultimate settlement and administration costs of losses incurred. Estimating Loss Reserves is inherently difficult, which is exacerbated by the fact that we have relatively limited historical experience upon which to base such estimates. We utilize actuarial models as well as available historical insurance industry loss ratio experience and loss development patterns to assist in the establishment of Loss Reserves. Actual losses and loss adjustment expenses paid will deviate, perhaps substantially, from the reserve estimates reflected in our financial statements.

At September 30, 2015 and December 31, 2014, our Loss Reserves, net of unpaid losses and loss adjustment expenses recoverable, by type and by operating segment were as follows:

	September 30, 2015	December 31, 2014
<b>Insurance segment:</b>		
Case reserves	\$1,447,261	\$1,459,040
IBNR reserves	3,080,235	3,066,962
Total net reserves	4,527,496	4,526,002
<b>Reinsurance segment:</b>		
Case reserves	709,777	794,838
Additional case reserves	92,452	97,413
IBNR reserves	1,622,229	1,658,468
Total net reserves	2,424,458	2,550,719
<b>Mortgage segment:</b>		
Case reserves	89,393	96,092
IBNR reserves	22,248	21,709

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Total net reserves	111,641	117,801
Other segment:		
Case reserves	48,943	12,010
IBNR reserves	166,418	51,613
Total net reserves	215,361	63,623
Total:		
Case reserves	2,295,374	2,361,980
Additional case reserves	92,452	97,413
IBNR reserves	4,891,130	4,798,752
Total net reserves	\$7,278,956	\$7,258,145

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At September 30, 2015 and December 31, 2014, the insurance segment's Loss Reserves by major line of business, net of unpaid losses and loss adjustment expenses recoverable, were as follows:

	September 30, 2015	December 31, 2014
Insurance segment:		
Professional lines (1)	\$1,375,154	\$1,453,770
Construction and national accounts	857,770	806,007
Programs	689,447	669,601
Excess and surplus casualty (2)	681,986	683,305
Property, energy, marine and aviation	354,501	407,730
Travel, accident and health	63,088	60,888
Lenders products	42,567	40,579
Other (3)	462,983	404,122
Total net reserves	\$4,527,496	\$4,526,002

(1)Includes professional liability, executive assurance and healthcare business.

(2)Includes casualty and contract binding business.

(3)Includes alternative markets, excess workers' compensation and surety business.

At September 30, 2015 and December 31, 2014, the reinsurance segment's Loss Reserves by major line of business, net of unpaid losses and loss adjustment expenses recoverable, were as follows:

	September 30, 2015	December 31, 2014
Reinsurance segment:		
Casualty (1)	\$1,392,239	\$1,432,203
Other specialty (2)	424,771	448,418
Property excluding property catastrophe (3)	318,963	346,610
Marine and aviation	146,459	139,318
Property catastrophe	88,630	128,436
Other (4)	53,397	55,734
Total net reserves	\$2,424,459	\$2,550,719

(1)Includes executive assurance, professional liability, workers' compensation, excess motor, healthcare and other.

(2)Includes non-excess motor, surety, accident and health, workers' compensation catastrophe, agriculture, trade credit and other.

(3)Includes facultative business.

(4)Includes life, casualty clash and other.

#### Mortgage Operations Supplemental Information

The mortgage segment's insurance in force ("IIF") and risk in force ("RIF") were as follows for the last four quarters:

(U.S. Dollars in millions)	September 30, 2015		June 30, 2015		March 31, 2015		December 31, 2014	
	Amount	% of Total	Amount	% of Total	Amount	% of Total	Amount	% of Total
Insurance In Force (IIF)								
(1):								
U.S. mortgage insurance	\$25,697	39.8	\$24,175	41.6	\$22,984	40.9	\$22,402	47.1
Mortgage reinsurance	19,550	30.3	19,245	33.1	20,262	36.1	20,772	43.7
Other (3)	19,357	30.0	14,734	25.3	12,944	23.0	4,400	9.2

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Total	\$64,604	100.0	\$58,154	100.0	\$56,190	100.0	\$47,574	100.0
Risk In Force (RIF) (2):								
U.S. mortgage insurance	\$6,467	63.0	\$6,053	63.7	\$5,733	61.7	\$5,600	64.1
Mortgage reinsurance	3,008	29.3	2,776	29.2	2,936	31.6	3,008	34.4
Other (3)	796	7.7	679	7.1	616	6.6	135	1.5
Total	\$10,271	100.0	\$9,508	100.0	\$9,285	100.0	\$8,743	100.0
Ending number of policies in force								
	143,335		137,724		133,079		131,111	

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(1) Represents the aggregate dollar amount of each insured mortgage loan's original principal balance.

Represents the aggregate dollar amount of each insured mortgage loan's current principal balance multiplied by the (2) insurance coverage percentage specified in the policy for insurance policies issued and after contract limits and/or loss ratio caps for credit risk-sharing or reinsurance transactions.

(3) Includes GSE credit risk-sharing products and international insurance business.

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The following table provides supplemental disclosures for our mortgage segment's U.S. mortgage insurance operations related to RIF:

(U.S. Dollars in millions)	September 30, 2015		June 30, 2015		March 31, 2015		December 31, 2014	
	Amount	% of Total	Amount	% of Total	Amount	% of Total	Amount	% of Total
Total RIF by credit quality (FICO):								
>=740	\$3,532	54.6	\$3,238	53.5	\$3,009	52.5	\$2,917	52.1
680-739	2,114	32.7	1,994	32.9	1,895	33.1	1,846	33.0
620-679	705	10.9	696	11.5	698	12.2	700	12.5
<620	116	1.8	125	2.1	131	2.3	137	2.4
Total	\$6,467	100.0	\$6,053	100.0	\$5,733	100.0	\$5,600	100.0
Weighted average FICO score	737		735		734		733	
Total RIF by Loan-To-Value (LTV):								
95.01% and above	\$1,045	16.2	\$1,093	18.1	\$1,102	19.2	\$1,123	20.1
90.01% to 95.00%	3,252	50.3	2,959	48.9	2,742	47.8	2,652	47.4
85.01% to 90.00%	1,831	28.3	1,685	27.8	1,590	27.7	1,552	27.7
85.00% and below	339	5.2	316	5.2	299	5.2	273	4.9
Total	\$6,467	100.0	\$6,053	100.0	\$5,733	100.0	\$5,600	100.0
Weighted average LTV	93.2	%	93.2	%	93.3	%	93.4	%
Total RIF by State:								
Wisconsin	\$574	8.9	\$554	9.2	\$536	9.3	\$538	9.6
California	570	8.8	527	8.7	492	8.6	480	8.6
Texas	355	5.5	325	5.4	307	5.4	302	5.4
Florida	310	4.8	297	4.9	280	4.9	273	4.9
Minnesota	306	4.7	291	4.8	278	4.8	274	4.9
Washington	247	3.8	243	4.0	234	4.1	232	4.1
Massachusetts	235	3.6	217	3.6	213	3.7	210	3.8
Michigan	220	3.4	200	3.3	186	3.2	181	3.2
Virginia	213	3.3	215	3.6	206	3.6	200	3.6
Alaska	205	3.2	208	3.4	209	3.6	209	3.7
Others	3,232	50.0	2,976	49.2	2,792	48.7	2,701	48.2
Total	\$6,467	100.0	\$6,053	100.0	\$5,733	100.0	\$5,600	100.0
Weighted average coverage (1)	25.2	%	25.0	%	24.9	%	25.0	%
Analysts' persistency (2)	76.0	%	78.2	%	79.6	%	80.9	%
Risk-to-capital ratio (3)	10.2:1		9.7:1		9.3:1		9.5:1	

(1) Represents the end of period RIF divided by end of period IIF.

(2) Represents the percentage of IIF at the beginning of a 12-month period that remained in force at the end of the period.

(3) Represents total current (non-delinquent) RIF, net of reinsurance, divided by total statutory capital. Ratio calculated for Arch MI U.S. only (estimate for September 30, 2015).

The following table provides supplemental disclosures for our mortgage segment's U.S. mortgage insurance operations related to insured loans and loss metrics:

(U.S. Dollars in thousands, except loan count)	Three Months Ended				Nine Months Ended
	September 30, 2015	June 30, 2015	March 31, 2015	December 31, 2014	September 30, 2015
Rollforward of insured loans in default:					
Beginning delinquent number of loans	2,850	3,006	3,474	3,625	3,474
Plus: new notices	1,196	1,145	1,190	1,402	3,531
Less: cures	(1,057)	(1,011)	(1,376)	(1,202)	(3,444)
Less: paid claims	(233)	(292)	(288)	(351)	(813)
Less: delinquent rescissions and denials	1	2	6	—	9
Ending delinquent number of loans	2,757	2,850	3,006	3,474	2,757
Ending percentage of loans in default	1.9	% 2.1	% 2.3	% 2.6	%
Losses:					
Number of claims paid	233	292	288	351	813
Total paid claims	\$9,036	\$12,672	\$12,180	\$15,358	\$33,888
Average per claim	\$38.8	\$43.4	\$42.3	\$43.8	\$41.7
Severity (1)	91.7	% 97.0	% 97.1	% 99.2	% 95.6
Average reserve per default	\$30.6	\$32.9	\$33.1	\$27.5	

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(1) Represents total paid claims divided by RIF of loans for which claims were paid.

## Shareholders' Equity and Book Value per Common Share

Total shareholders' equity available to Arch was \$6.16 billion at September 30, 2015, compared to \$6.13 billion at December 31, 2014. The increase was primarily attributable to net income, reflecting contributions from both underwriting and investing activities, largely offset by share purchases.

The following table presents the calculation of book value per common share:

(U.S. dollars in thousands, except share data)	September 30, 2015	December 31, 2014
Calculation of book value per common share:		
Total shareholders' equity available to Arch	\$6,162,815	\$6,130,053
Less preferred shareholders' equity	325,000	325,000
Common shareholders' equity available to Arch	\$5,837,815	\$5,805,053
Common shares outstanding, net of treasury shares (1)	122,438,554	127,367,934
Book value per common share	\$47.68	\$45.58

(1) Excludes the effects of 7,681,882 and 7,804,033 stock options and 415,084 and 447,073 restricted stock units outstanding at September 30, 2015 and December 31, 2014, respectively.

## Liquidity and Capital Resources

ACGL is a holding company whose assets primarily consist of the shares in its subsidiaries. Generally, ACGL depends on its available cash resources, liquid investments and dividends or other distributions from its subsidiaries to make payments, including the payment of debt service obligations and operating expenses it may incur and any dividends or liquidation amounts with respect to the non-cumulative preferred shares and common shares. ACGL's readily available cash, short-term investments and marketable securities, excluding amounts held by our regulated insurance and reinsurance subsidiaries, totaled \$10.4 million at September 30, 2015, compared to \$3.3 million at December 31, 2014. During 2015, ACGL received dividends of \$419.3 million from Arch Reinsurance Ltd. ("Arch Re Bermuda"), our Bermuda-based reinsurer and insurer.

The ability of our regulated insurance and reinsurance subsidiaries to pay dividends or make distributions or other payments to us is dependent on their ability to meet applicable regulatory standards. Under Bermuda law, Arch Re Bermuda is required to maintain statutory capital (i.e., the amount by which the value of its statutory assets exceed its statutory liabilities) equal to or in excess of its minimum solvency margin equal to the greatest of (1) \$100.0 million, (2) 50% of net premiums written (being gross premiums written less any premiums ceded by Arch Re Bermuda, but Arch Re Bermuda may not deduct more than 25% of gross premiums when computing net premiums written), (3) 15% of net aggregated losses and loss expense provisions and other insurance reserves and (4) 25% of its enhanced capital requirement ("ECR") as reported at the end of the relevant year. Arch Re Bermuda is prohibited from declaring or paying any dividends during any financial year if it is not in compliance with its ECR, minimum solvency margin or minimum liquidity ratio. In addition, Arch Re Bermuda is prohibited from declaring or paying in any financial year dividends of more than 25% of its total statutory capital and surplus (as shown on its previous financial year's statutory balance sheet) unless it files, at least seven days before payment of such dividends, with the Bermuda Monetary Authority ("BMA") an affidavit stating that it will continue to meet the required margins. In addition, Arch Re Bermuda is prohibited, without prior approval of the BMA, from reducing by 15% or more its total statutory capital, as set out in its previous year's statutory financial statements. As a Class 4 insurer, Arch Re Bermuda is required to maintain available statutory capital and surplus pertaining to its general business at a level equal to or in excess of its ECR which is established by reference to either the BSCR model ("BSCR") or an approved internal capital model. At



December 31, 2014, as determined under Bermuda law, Arch Re Bermuda had statutory capital of \$2.40 billion (\$2.36 billion at December 31, 2013) and statutory capital and surplus of \$5.42 billion (\$5.42 billion at December 31, 2013), which amounts were in compliance with Arch Re Bermuda's ECR at such date. Such amounts include ownership interests in U.S. insurance and reinsurance subsidiaries. Accordingly, Arch Re Bermuda can pay approximately \$936.5 million to ACGL during the remainder of 2015 without providing an affidavit to the BMA, as discussed above. Under BMA guidelines, the value of the assets of our insurance group (i.e., the group of companies that conducts exclusively, or mainly, insurance business) must exceed the amount of the group's liabilities by the aggregate minimum margin of solvency of each qualifying member of the group (the "Group MSM"). A member is a qualifying member of the insurance group if it is subject to solvency requirements in the jurisdiction in which it is registered. We were in compliance with the Group MSM at December 31, 2014.

Our U.S. insurance and reinsurance subsidiaries are subject to insurance laws and regulations in the jurisdictions in which they operate. The ability of our regulated insurance subsidiaries to pay dividends or make distributions is dependent on their

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ability to meet applicable regulatory standards. These regulations include restrictions that limit the amount of dividends or other distributions, such as loans or cash advances, available to shareholders without prior approval of the insurance regulatory authorities. Dividends or distributions, if any, made by Arch Re U.S. would result in an increase in available capital at Arch Capital Group (U.S.) Inc. (“Arch-U.S.”), a wholly-owned subsidiary of ACGL. During 2015, Arch-U.S. received dividends of \$25 million from Arch Re U.S. Arch Re U.S. can declare a maximum of approximately \$85 million of dividends during the remainder of 2015 subject to the approval of the Commissioner of the Delaware Department of Insurance (“Commissioner”). In addition, with respect to dividends in excess of the \$85 million (extraordinary dividend), no payment can be made until (1) 30 days after the Commissioner has received notice of the declaration thereof and has not within such period disapproved such payment; or (2) the Commissioner shall have approved the payment within the 30-day period. Delaware insurance laws also require that the statutory surplus of Arch Re U.S. following any dividend or distribution be reasonable in relation to its outstanding liabilities and adequate to its financial needs.

Arch MI U.S. is currently approved by the GSEs as an eligible mortgage insurer. In addition to existing eligibility requirements applicable to all eligible mortgage insurers, the GSEs imposed conditions in connection with their approvals of Arch MI U.S. as a qualified mortgage insurer. These conditions require, among other things, that Arch MI U.S.: (i) maintain minimum capital funding of \$400 million which may consist of statutory capital (policyholders’ surplus plus contingency reserves), dedicated reinsurance trust assets for any primary business reinsured and a value for purchased technology assets; (ii) maintain minimum statutory capital (defined as policyholders’ surplus plus contingency reserves) of no less than \$260 million; (iii) maintain a risk-to-capital ratio of no greater than 18 to 1; and (iv) refrain from paying dividends to affiliates for three years commencing February 2014.

On December 31, 2015, these requirements will be superceded by the GSEs’ revised Private Mortgage Insurer Eligibility Requirements (“PMIERS”). The revised PMIERS establish new standards that mortgage insurers must meet in order to insure loans sold to or guaranteed by the GSEs. The PMIERS’ financial requirements are based in part on a risk-based, required assets model and employ a grid approach based upon a number of factors, including vintage (origination year), original loan-to-value and original credit score of performing loans and the delinquency status of non-performing loans. No later than March 1, 2016, mortgage insurers must certify to the GSEs that they meet all of the requirements of the PMIERS or identify specific requirements that they do not meet. If a mortgage insurer is unable to meet the financial requirements of the PMIERS, it must submit by March 31, 2016 a transition plan to the GSEs for their review and approval. Mortgage insurers that have not met the financial requirements of the PMIERS by June 30, 2017 will be subject to remediation actions by the GSEs. The available assets required to satisfy the revised financial requirements of the PMIERS at any point in time will be affected by many factors, including macro-economic conditions, the size and composition of Arch MI U.S.’s mortgage insurance portfolio at the applicable point in time, and the amount of ceded risk that may be deducted by Arch MI U.S. in its calculation of “minimum required assets.” Based upon our interpretation of the revised PMIERS and Arch MI U.S.’s mortgage insurance portfolio and balance sheet as of September 30, 2015, we believe that Arch MI U.S. currently satisfies the PMIERS’ financial requirements.

In addition to meeting applicable regulatory standards, the ability of our insurance and reinsurance subsidiaries to pay dividends to intermediate parent companies owned by Arch Re Bermuda is also constrained by our dependence on the financial strength ratings of our insurance and reinsurance subsidiaries from independent rating agencies. The ratings from these agencies depend to a large extent on the capitalization levels of our insurance and reinsurance subsidiaries. We believe that ACGL has sufficient cash resources and available dividend capacity to service its indebtedness and other current outstanding obligations.

Our insurance and reinsurance subsidiaries are required to maintain assets on deposit, which primarily consist of fixed maturities, with various regulatory authorities to support their operations. The assets on deposit are available to settle insurance and reinsurance liabilities to third parties. Our insurance and reinsurance subsidiaries maintain assets in trust accounts as collateral for insurance and reinsurance transactions with affiliated companies and also have investments in segregated portfolios primarily to provide collateral or guarantees for letters of credit to third parties. At September

30, 2015 and December 31, 2014, such amounts approximated \$5.36 billion and \$5.52 billion, respectively.

Our non-U.S. operations account for a significant percentage of our net premiums written. In general, the business written by our non-U.S. operations, which is heavily weighted towards reinsurance business, has been more profitable than the business written in our U.S. operations, which is weighted more towards insurance business. In general, our reinsurance segment has operated at a higher margin than our insurance segment, which is due to prevailing market conditions and the mix and type of business written. Historically, the most profitable line of business has been catastrophe-exposed property reinsurance, which is written primarily in our non-U.S. operations. Additionally, a significant component of our pre-tax income is generated through our investment performance. We hold a substantial amount of our investable assets in our non-U.S. operations and, accordingly, a large portion of our investment income is produced in our non-U.S. operations. In addition, ACGL, through its subsidiaries, provides financial support to certain of its insurance subsidiaries and affiliates, through certain reinsurance arrangements

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beneficial to the ratings of such subsidiaries. Our U.S.-based insurance and reinsurance groups enter into separate reinsurance arrangements with Arch Re Bermuda covering individual lines of business. For the 2014 calendar year, the U.S. groups ceded business to Arch Re Bermuda at an aggregate net cession rate (i.e., net of third party reinsurance) of approximately 53%, compared to 55% for 2013. All of the above factors have resulted in the non-U.S. group providing a higher contribution to our overall pre-tax income in the current period than the percentage of net premiums written would indicate.

Except as described in the above paragraph, or where express reinsurance, guarantee or other financial support contractual arrangements are in place, each of ACGL's subsidiaries or affiliates is solely responsible for its own liabilities and commitments (and no other ACGL subsidiary or affiliate is so responsible). Any reinsurance arrangements, guarantees or other financial support contractual arrangements that are in place are solely for the benefit of the ACGL subsidiary or affiliate involved and third parties (creditors or insureds of such entity) are not express beneficiaries of such arrangements.

The following table summarizes our cash flows from operating, investing and financing activities, excluding amounts related to the 'other' segment:

	Nine Months Ended September 30,	
	2015	2014
Total cash provided by (used for):		
Operating activities	\$606,607	\$770,867
Investing activities	(146,219 )	(354,780 )
Financing activities	(402,406 )	(354,538 )
Effects of exchange rate changes on foreign currency cash	(7,773 )	(9,255 )
Increase (decrease) in cash	\$50,209	\$52,294

Cash provided by operating activities for the nine months ended September 30, 2015 was lower than in the 2014 period, reflecting increases in outflows related to claim payments, including amounts which are reimbursable from insureds, reinsurers and others, and a lower level of premiums collected, primarily reflecting a higher level of outflows to reinsurers, including to Watford Re on affiliated transactions.

Cash used for investing activities for the nine months ended September 30, 2015 was lower than in the 2014 period. Activity for the nine months ended September 30, 2015 reflected a higher amount of proceeds from sales of investments to fund our share repurchase program compared to the 2014 period, while the 2014 period also included a \$235.6 million payment in connection with our acquisition of Arch MI U.S.

Cash used for financing activities for the nine months ended September 30, 2015 included \$365.4 million of repurchases under our share repurchase program, compared to \$251.9 million for the 2014 period, and a reduction in cash collateral related to securities lending.

Our insurance and reinsurance operations provide liquidity in that premiums are received in advance, sometimes substantially in advance, of the time losses are paid. The period of time from the occurrence of a claim through the settlement of the liability may extend many years into the future. Sources of liquidity include cash flows from operations, financing arrangements or routine sales of investments.

As part of Arch's investment strategy, we seek to establish a level of cash and highly liquid short-term and intermediate-term securities which, combined with expected cash flow, is believed by us to be adequate to meet our foreseeable payment obligations. However, due to the nature of our operations, cash flows are affected by claim payments that may comprise large payments on a limited number of claims and which can fluctuate from year to year.

We believe that our liquid investments and cash flow will provide us with sufficient liquidity in order to meet our claim payment obligations. However, the timing and amounts of actual claim payments related to recorded Loss Reserves vary based on many factors, including large individual losses, changes in the legal environment, as well as general market conditions. The ultimate amount of the claim payments could differ materially from our estimated amounts. Certain lines of business written by us, such as excess casualty, have loss experience characterized as low frequency and high severity. The foregoing may result in significant variability in loss payment patterns. The impact of this variability can be exacerbated by the fact that the timing of the receipt of reinsurance recoverables owed to us may be slower than anticipated by us. Therefore, the irregular timing of claim payments can create significant variations in cash flows from operations between periods and may require us to utilize other sources of liquidity to make these payments, which may include the sale of investments or utilization of existing or new credit facilities or capital market transactions. If the source of liquidity is the sale of investments, we may be forced to sell such investments at a loss, which may be material.

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Our investments in certain securities, including certain fixed income and structured securities, investments in funds accounted for using the equity method, other investments and our investments in Watford Re may be illiquid due to contractual provisions or investment market conditions. If we require significant amounts of cash on short notice in excess of anticipated cash requirements, then we may have difficulty selling these investments in a timely manner or may be forced to sell or terminate them at unfavorable values.

At September 30, 2015, total investable assets of \$16.33 billion included \$14.73 billion managed by Arch and \$1.59 billion included in the 'other' segment (i.e., attributable to Watford Re). The primary goals of our asset liability management process are to satisfy the insurance liabilities, manage the interest rate risk embedded in those insurance liabilities and maintain sufficient liquidity to cover fluctuations in projected liability cash flows, including debt service obligations. Generally, the expected principal and interest payments produced by our fixed income portfolio adequately fund the estimated runoff of our insurance reserves. Although this is not an exact cash flow match in each period, the substantial degree by which the fair value of the fixed income portfolio exceeds the expected present value of the net insurance liabilities, as well as the positive cash flow from newly sold policies and the large amount of high quality liquid bonds, provide assurance of our ability to fund the payment of claims and to service our outstanding debt without having to sell securities at distressed prices or access credit facilities. Our unfunded investment commitments totaled approximately \$1.23 billion at September 30, 2015.

Changes in general economic conditions, including new or continued sovereign debt concerns in Eurozone countries or downgrades of U.S. securities by credit rating agencies, could have a material adverse effect on financial markets and economic conditions in the U.S. and throughout the world. In turn, this could have a material adverse effect on our business, financial condition and results of operations and, in particular, this could have a material adverse effect on the value and liquidity of securities in our investment portfolio. Our investment portfolio as of September 30, 2015 included \$319.6 million of securities issued and/or guaranteed by Eurozone governments at fair value, \$2.34 billion of obligations of the U.S. government and government agencies at fair value and \$1.83 billion of municipal bonds at fair value. Please refer to Item 1A "Risk Factors" of our 2014 Form 10-K for a discussion of other risks relating to our business and investment portfolio.

We expect that our liquidity needs, including our anticipated insurance obligations and operating and capital expenditure needs, for the next twelve months, at a minimum, will be met by funds generated from underwriting activities and investment income, as well as by our balance of cash, short-term investments, proceeds on the sale or maturity of our investments, and our credit facilities.

We monitor our capital adequacy on a regular basis and will seek to adjust our capital base (up or down) according to the needs of our business. The future capital requirements of our business will depend on many factors, including our ability to write new business successfully and to establish premium rates and reserves at levels sufficient to cover losses. Our ability to underwrite is largely dependent upon the quality of our claims paying and financial strength ratings as evaluated by independent rating agencies. In particular, we require (1) sufficient capital to maintain our financial strength ratings, as issued by several ratings agencies, at a level considered necessary by management to enable our key operating subsidiaries to compete; (2) sufficient capital to enable our underwriting subsidiaries to meet the capital adequacy tests performed by statutory agencies in the U.S. and other key markets; and (3) letters of credit and other forms of collateral that are necessary for our non-U.S. operating companies because they are "non-admitted" under U.S. state insurance regulations.

In December 2013, Arch-U.S., a wholly-owned subsidiary of ACGL, completed a public offering of \$500.0 million principal amount of 5.144% senior notes issued at par and due November 1, 2043 ("Arch-U.S. Senior Notes"), fully and unconditionally guaranteed by ACGL (the "Guarantee"). The Arch-U.S. Senior Notes and the Guarantee are unsecured and unsubordinated obligations of Arch-U.S. and ACGL, respectively, and rank equally and ratably with the other

unsecured and unsubordinated indebtedness of Arch-U.S. and ACGL, respectively. A portion of the proceeds from the offering were used to fund the acquisition of the mortgage operations noted below. In addition, the proceeds are available for other corporate purposes.

Pursuant to our 2014 acquisition of CMG Mortgage Insurance Company and its affiliated mortgage insurance companies (the "CMG Entities"), we are required to make contingent consideration payments based on the closing book value of the pre-closing portfolio of the CMG Entities as re-calculated over an earn-out period and payable at the third, fifth and sixth anniversaries after closing (subject to a one time extension period of one to three years at the sellers' discretion). The maximum amount of contingent consideration payments is \$136.9 million over the earn-out period (or 150% of the closing book value of the CMG Entities less amounts paid at closing). To the extent that the adjusted book value of the CMG Entities drops below the cumulative amount paid by us, no additional payments would be due.

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As part of our capital management program, we may seek to raise additional capital or may seek to return capital to our shareholders through share repurchases, cash dividends or other methods (or a combination of such methods). Any such determination will be at the discretion of our board of directors and will be dependent upon our profits, financial requirements and other factors, including legal restrictions, rating agency requirements and such other factors as our board of directors deems relevant.

The board of directors of ACGL has authorized the investment in ACGL's common shares through a share repurchase program. Since the inception of the share repurchase program through September 30, 2015, ACGL has repurchased 124.1 million common shares for an aggregate purchase price of \$3.61 billion. At September 30, 2015, approximately \$521.8 million of share repurchases were available under the program. Repurchases under this authorization may be effected from time to time in open market or privately negotiated transactions through December 31, 2016. The timing and amount of the repurchase transactions under this program will depend on a variety of factors, including market conditions and corporate and regulatory considerations. We will continue to monitor our share price and, depending upon results of operations, market conditions and the development of the economy, as well as other factors, we will consider share repurchases on an opportunistic basis.

To the extent that our existing capital is insufficient to fund our future operating requirements or maintain such ratings, we may need to raise additional funds through financings or limit our growth. We can provide no assurance that, if needed, we would be able to obtain additional funds through financing on satisfactory terms or at all. Adverse developments in the financial markets, such as disruptions, uncertainty or volatility in the capital and credit markets, may result in realized and unrealized capital losses that could have a material adverse effect on our results of operations, financial position and our businesses, and may also limit our access to capital required to operate our business.

If we are not able to obtain adequate capital, our business, results of operations and financial condition could be adversely affected, which could include, among other things, the following possible outcomes: (1) potential downgrades in the financial strength ratings assigned by ratings agencies to our operating subsidiaries, which could place those operating subsidiaries at a competitive disadvantage compared to higher-rated competitors; (2) reductions in the amount of business that our operating subsidiaries are able to write in order to meet capital adequacy-based tests enforced by statutory agencies; and (3) any resultant ratings downgrades could, among other things, affect our ability to write business and increase the cost of bank credit and letters of credit. In addition, under certain of the reinsurance agreements assumed by our reinsurance operations, upon the occurrence of a ratings downgrade or other specified triggering event with respect to our reinsurance operations, such as a reduction in surplus by specified amounts during specified periods, our ceding company clients may be provided with certain rights, including, among other things, the right to terminate the subject reinsurance agreement and/or to require that our reinsurance operations post additional collateral.

In addition to common share capital, we depend on external sources of finance to support our underwriting activities, which can be in the form (or any combination) of debt securities, preference shares, common equity and bank credit facilities providing loans and/or letters of credit. As noted above, equity or debt financing, if available at all, may be on terms that are unfavorable to us. In the case of equity financings, dilution to our shareholders could result, and, in any case, such securities may have rights, preferences and privileges that are senior to those of our outstanding securities.

In June 2014, we entered into a five-year agreement for a \$300 million unsecured revolving loan and letter of credit facility and a \$500 million secured letter of credit facility. Under the terms of the agreement, Arch Re U.S. and Arch Re Bermuda are limited to issuing \$100 million of unsecured letters of credit as part of the unsecured revolving loan. In addition, we have access to secured letter of credit facilities of approximately \$228.6 million, which are available on a limited basis and for limited purposes. Refer to note 9, "Commitments and Contingencies—Letter of Credit and



Revolving Credit Facilities,” of the notes accompanying our consolidated financial statements for a discussion of our available facilities, applicable covenants on such facilities and available capacity.

In March 2015, ACGL and Arch-U.S. filed a universal shelf registration statement with the SEC. This registration statement allows for the possible future offer and sale by us of various types of securities, including unsecured debt securities, preference shares, common shares, warrants, share purchase contracts and units and depositary shares. The shelf registration statement enables us to efficiently access the public debt and/or equity capital markets in order to meet our future capital needs. The shelf registration statement also allows selling shareholders to resell common shares that they own in one or more offerings from time to time. We will not receive any proceeds from any shares offered by the selling shareholders. This report is not an offer to sell or the solicitation of an offer to buy nor shall there be any sale of these securities in any state in which such offer, solicitation or sale would be unlawful prior to registration or qualification under the securities laws of any such state.

At September 30, 2015, total capital available to Arch of \$7.05 billion consisted of \$791.3 million of senior notes, representing 11.2% of the total, \$100.0 million of revolving credit agreement borrowings due in June 2019, representing 1.4%

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of the total, \$325.0 million of preferred shares, representing 4.6% of the total, and common shareholders' equity of \$5.84 billion, representing 82.8% of the total. At December 31, 2014, total capital available to Arch of \$7.02 billion consisted of \$791.1 million of senior notes, representing 11.3% of the total, \$100.0 million of revolving credit agreement borrowings due in August 2014, representing 1.4% of the total, \$325.0 million of preferred shares, representing 4.6% of the total, and common shareholders' equity of \$5.81 billion, representing 82.7% of the total.

## Off-Balance Sheet Arrangements

Off-balance sheet arrangements are discussed in Management's Discussion and Analysis of Financial Condition and Results of Operations contained in our 2014 Form 10-K.

## Market Sensitive Instruments and Risk Management

In accordance with the SEC's Financial Reporting Release No. 48, we performed a sensitivity analysis to determine the effects that market risk exposures could have on the future earnings, fair values or cash flows of our financial instruments as of September 30, 2015. Market risk represents the risk of changes in the fair value of a financial instrument and is comprised of several components, including liquidity, basis and price risks. An analysis of material changes in market risk exposures at September 30, 2015 that affect the quantitative and qualitative disclosures presented in our 2014 Form 10-K (see section captioned "Management's Discussion and Analysis of Financial Condition and Results of Operations—Market Sensitive Instruments and Risk Management") were as follows:

## Investment Market Risk

**Fixed Income Securities.** We invest in interest rate sensitive securities, primarily debt securities. We consider the effect of interest rate movements on the fair value of our fixed maturities, fixed maturities pledged under securities lending agreements, short-term investments and certain of our other investments which invest in fixed income securities and the corresponding change in unrealized appreciation. As interest rates rise, the fair value of our interest rate sensitive securities falls, and the converse is also true. Based on historical observations, there is a low probability that all interest rate yield curves would shift in the same direction at the same time. Accordingly, the actual effect of interest rate movements may differ materially from the amounts set forth in the following tables.

The following table summarizes the effect that an immediate, parallel shift in the interest rate yield curve would have had on our fixed income securities (including amounts attributable to the 'other' segment):

(U.S. dollars in millions)	Interest Rate Shift in Basis Points				
	-100	-50	—	+50	+100
September 30, 2015					
Total fair value	\$15,593.7	\$15,340.2	\$15,071.1	\$14,811.2	\$14,550.8
Change from base	3.47	% 1.79	%	(1.72 )%	(3.45 )%
Change in unrealized value	\$522.6	\$269.1		\$(259.9 )	\$(520.3 )
December 31, 2014					
Total fair value	\$14,753.8	\$14,523.4	\$14,292.1	\$14,067.5	\$13,850.4
Change from base	3.23	% 1.62	%	(1.57 )%	(3.09 )%
Change in unrealized value	\$461.7	\$231.3		\$(224.6 )	\$(441.7 )

In addition, we consider the effect of credit spread movements on the fair value of our fixed maturities, fixed maturities pledged under securities lending agreements, short-term investments and certain of our other investments and investment funds accounted for using the equity method which invest in fixed income securities and the corresponding change in unrealized appreciation. As credit spreads widen, the fair value of our fixed income securities

falls, and the converse is also true.

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The following table summarizes the effect that an immediate, parallel shift in credit spreads in a static interest rate environment would have had on our fixed income securities (including amounts attributable to the ‘other’ segment):

(U.S. dollars in millions)	Credit Spread Shift in Basis Points				
	-100	-50	—	+50	+100
September 30, 2015					
Total fair value	\$15,557.8	\$15,317.6	\$15,071.1	\$14,829.8	\$14,585.6
Change from base	3.23	% 1.64	%	(1.60)	)% (3.22)
Change in unrealized value	\$486.7	\$246.5		\$(241.3)	\$(485.5)
December 31, 2014					
Total fair value	\$14,572.5	\$14,446.9	\$14,292.1	\$14,151.2	\$14,012.8
Change from base	1.96	% 1.08	%	(0.99)	)% (1.95)
Change in unrealized value	\$280.4	\$154.8		\$(140.9)	\$(279.3)

Another method that attempts to measure portfolio risk is Value-at-Risk (“VaR”). VaR attempts to take into account a broad cross-section of risks facing a portfolio by utilizing relevant securities volatility data skewed towards the most recent months and quarters. VaR measures the amount of a portfolio at risk for outcomes 1.65 standard deviations from the mean based on normal market conditions over a one year time horizon and is expressed as a percentage of the portfolio’s initial value. In other words, 95% of the time, should the risks taken into account in the VaR model perform per their historical tendencies, the portfolio’s loss in any one year period is expected to be less than or equal to the calculated VaR, stated as a percentage of the measured portfolio’s initial value. As of September 30, 2015, our portfolio’s VaR was estimated to be 2.80%, compared to an estimated 2.86% at December 31, 2014.

**Certain Other Investments and Equity Securities.** Our investment portfolio includes certain other investments which do not invest in fixed income securities along with equity holdings. At September 30, 2015 and December 31, 2014, the fair value of such investments totaled \$606.3 million and \$658.2 million, respectively. These investments are exposed to price risk, which is the potential loss arising from decreases in fair value. An immediate hypothetical 10% decline in the value of each position would reduce the fair value of such investments by approximately \$60.6 million and \$65.8 million at September 30, 2015 and December 31, 2014, respectively, and would have decreased book value per common share by approximately \$0.50 and \$0.52, respectively. An immediate hypothetical 10% increase in the value of each position would increase the fair value of such investments by approximately \$60.6 million and \$65.8 million at September 30, 2015 and December 31, 2014, respectively, and would have increased book value per common share by approximately \$0.50 and \$0.52, respectively.

**Investment-Related Derivatives.** Derivative instruments may be used to enhance investment performance, replicate investment positions or manage market exposures and duration risk that would be allowed under our investment guidelines if implemented in other ways. The fair values of those derivatives are based on quoted market prices. See note 8, “Derivative Instruments,” of the notes accompanying our consolidated financial statements for additional disclosures concerning derivatives. At September 30, 2015, the notional value of all derivative instruments (excluding to-be-announced mortgage backed securities which are included in the fixed income securities analysis above and foreign currency forward contracts which are included in the foreign currency exchange risk analysis below) was \$2.54 billion, compared to \$3.28 billion at December 31, 2014. If the underlying exposure of each investment-related derivative held at September 30, 2015 depreciated by 100 basis points, it would have resulted in a reduction in net income of approximately \$25.4 million, and a decrease in book value per common share of approximately \$0.21 per share, compared to \$32.8 million and \$0.26 per share, respectively, on investment-related derivatives held at December 31, 2014. If the underlying exposure of each investment-related derivative held at September 30, 2015 appreciated by 100 basis points, it would have resulted in an increase in net income of approximately \$25.4 million, and an increase in book value per common share of approximately \$0.21 per share, compared to \$32.8 million and \$0.26 per share, respectively, on investment-related derivatives held at December 31, 2014.

For further discussion on investment activity, please refer to “—Financial Condition, Liquidity and Capital Resources—Financial Condition—Investable Assets.”

#### Foreign Currency Exchange Risk

Foreign currency rate risk is the potential change in value, income and cash flow arising from adverse changes in foreign currency exchange rates. Through our subsidiaries and branches located in various foreign countries, we conduct our insurance and reinsurance operations in a variety of local currencies other than the U.S. Dollar. We generally hold investments in foreign currencies which are intended to mitigate our exposure to foreign currency fluctuations in our net insurance liabilities. We may also utilize foreign currency forward contracts and currency options as part of our investment strategy. See note 8, “Derivative Instruments,” of the notes accompanying our consolidated financial statements for additional information.

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The following table provides a summary of our net foreign currency exchange exposures, as well as foreign currency derivatives in place to manage these exposures:

(U.S. dollars in thousands, except per share data)	September 30, 2015	December 31, 2014
Net assets (liabilities), denominated in foreign currencies, excluding shareholders' equity and derivatives	\$ (121,337 )	\$ 35,372
Shareholders' equity denominated in foreign currencies (1)	344,040	336,565
Net foreign currency forward contracts outstanding (2)	(46,613 )	(308,149 )
Net exposures denominated in foreign currencies	\$ 176,090	\$ 63,788
Pre-tax impact of a hypothetical 10% appreciation of the U.S. Dollar against foreign currencies:		
Shareholders' equity	\$ (17,609 )	\$ (6,379 )
Book value per common share	\$ (0.14 )	\$ (0.05 )
Pre-tax impact of a hypothetical 10% decline of the U.S. Dollar against foreign currencies:		
Shareholders' equity	\$ 17,609	\$ 6,379
Book value per common share	\$ 0.14	\$ 0.05

(1) Represents capital contributions held in the foreign currencies of our operating units.

(2) Represents the net notional value of outstanding foreign currency forward contracts.

As a result of the current financial and economic environment as well as the potential for additional investment returns, we may not match a portion of our projected liabilities in foreign currencies with investments in the same currencies, which would increase our exposure to foreign currency fluctuations and increase the volatility in our results of operations. Historical observations indicate a low probability that all foreign currency exchange rates would shift against the U.S. Dollar in the same direction and at the same time and, accordingly, the actual effect of foreign currency rate movements may differ materially from the amounts set forth above. For further discussion on foreign exchange activity, please refer to “—Results of Operations.”

#### Cautionary Note Regarding Forward-Looking Statements

The Private Securities Litigation Reform Act of 1995 (“PSLRA”) provides a “safe harbor” for forward-looking statements. This release or any other written or oral statements made by or on behalf of us may include forward-looking statements, which reflect our current views with respect to future events and financial performance. All statements other than statements of historical fact included in or incorporated by reference in this release are forward-looking statements. Forward-looking statements, for purposes of the PSLRA or otherwise, can generally be identified by the use of forward-looking terminology such as “may,” “will,” “expect,” “intend,” “estimate,” “anticipate,” “believe” or “continue” or similar statements of a future or forward-looking nature or their negative or variations or similar terminology.

Forward-looking statements involve our current assessment of risks and uncertainties. Actual events and results may differ materially from those expressed or implied in these statements. Important factors that could cause actual events or results to differ materially from those indicated in such statements are discussed below and elsewhere in this release and in our periodic reports filed with the Securities and Exchange Commission (the “SEC”), and include:

- our ability to successfully implement our business strategy during “soft” as well as “hard” markets;

acceptance of our business strategy, security and financial condition by rating agencies and regulators, as well as by brokers and our insureds and reinsureds;

our ability to maintain or improve our ratings, which may be affected by our ability to raise additional equity or debt financings, by ratings agencies' existing or new policies and practices, as well as other factors described herein;

general economic and market conditions (including inflation, interest rates, foreign currency exchange rates, prevailing credit terms and the depth and duration of a recession) and conditions specific to the reinsurance and insurance markets (including the length and magnitude of the current "soft" market) in which we operate;

competition, including increased competition, on the basis of pricing, capacity, coverage terms or other factors;

developments in the world's financial and capital markets and our access to such markets;

our ability to successfully enhance, integrate and maintain operating procedures (including information technology) to effectively support our current and new business;

the loss of key personnel;

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the integration of businesses we have acquired or may acquire into our existing operations;  
accuracy of those estimates and judgments utilized in the preparation of our financial statements, including those related to revenue recognition, insurance and other reserves, reinsurance recoverables, investment valuations, intangible assets, bad debts, income taxes, contingencies and litigation, and any determination to use the deposit method of accounting, which for a relatively new insurance and reinsurance company, like our company, are even more difficult to make than those made in a mature company since relatively limited historical information has been reported to us through September 30, 2015;  
greater than expected loss ratios on business written by us and adverse development on claim and/or claim expense liabilities related to business written by our insurance and reinsurance subsidiaries;  
severity and/or frequency of losses;  
claims for natural or man-made catastrophic events in our insurance or reinsurance business could cause large losses and substantial volatility in our results of operations;  
acts of terrorism, political unrest and other hostilities or other unforecasted and unpredictable events;  
availability to us of reinsurance to manage our gross and net exposures and the cost of such reinsurance;  
the failure of reinsurers, managing general agents, third party administrators or others to meet their obligations to us;  
the timing of loss payments being faster or the receipt of reinsurance recoverables being slower than anticipated by us;  
our investment performance, including legislative or regulatory developments that may adversely affect the fair value of our investments;  
changes in general economic conditions, including new or continued sovereign debt concerns in Eurozone countries or downgrades of U.S. securities by credit rating agencies, which could affect our business, financial condition and results of operations;  
the volatility of our shareholders' equity from foreign currency fluctuations, which could increase due to us not matching portions of our projected liabilities in foreign currencies with investments in the same currencies;  
losses relating to aviation business and business produced by a certain managing underwriting agency for which we may be liable to the purchaser of our prior reinsurance business or to others in connection with the May 5, 2000 asset sale described in our periodic reports filed with the SEC;  
changes in accounting principles or policies or in our application of such accounting principles or policies;  
changes in the political environment of certain countries in which we operate or underwrite business;  
statutory or regulatory developments, including as to tax policy and matters and insurance and other regulatory matters such as the adoption of proposed legislation that would affect Bermuda-headquartered companies and/or Bermuda-based insurers or reinsurers and/or changes in regulations or tax laws applicable to us, our subsidiaries, brokers or customers; and  
the other matters set forth under Item 1A "Risk Factors", Item 7 "Management's Discussion and Analysis of Financial Condition and Results of Operations" and other sections of our Annual Report on Form 10-K, as well as the other factors set forth in our other documents on file with the SEC, and management's response to any of the aforementioned factors.

All subsequent written and oral forward-looking statements attributable to us or persons acting on our behalf are expressly qualified in their entirety by these cautionary statements. The foregoing review of important factors should not be construed as exhaustive and should be read in conjunction with other cautionary statements that are included herein or elsewhere. We undertake no obligation to publicly update or revise any forward-looking statement, whether as a result of new information, future events or otherwise.

Other Financial Information

The consolidated financial statements as of September 30, 2015 and for the three month and nine month periods ended September 30, 2015 and 2014 have been reviewed by PricewaterhouseCoopers LLP, an independent registered public accounting firm. Their report (dated November 9, 2015) is included on page 2. The report of PricewaterhouseCoopers LLP states that they did not audit and they do not express an opinion on that unaudited financial information.



Accordingly, the degree of reliance on their report on such information should be restricted in light of the limited nature of the review procedures applied. PricewaterhouseCoopers LLP is not subject to the liability provisions of Section 11 of the Securities Act of 1933 for

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their report on the unaudited financial information because that report is not a “report” or a “part” of the registration statement prepared or certified by PricewaterhouseCoopers LLP within the meaning of Sections 7 and 11 of the Securities Act of 1933.

### ITEM 3. QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK

Reference is made to the information appearing above under the subheading “Market Sensitive Instruments and Risk Management” under the caption “Management’s Discussion and Analysis of Financial Condition and Results of Operations,” which information is hereby incorporated by reference.

### ITEM 4. CONTROLS AND PROCEDURES

#### Evaluation of Disclosure Controls and Procedures

In connection with the filing of this Form 10-Q, our management, including the Chief Executive Officer and Chief Financial Officer, conducted an evaluation of the effectiveness of disclosure controls and procedures pursuant to applicable Exchange Act Rules as of the end of the period covered by this report. Based on that evaluation, the Chief Executive Officer and Chief Financial Officer concluded that the disclosure controls and procedures were effective as of the end of and during the period covered by this report with respect to information being recorded, processed, summarized and reported within time periods specified in the SEC’s rules and forms and with respect to timely communication to them and other members of management responsible for preparing periodic reports of all material information required to be disclosed in this report as it relates to ACGL and its consolidated subsidiaries.

We continue to enhance our operating procedures and internal controls to effectively support our business and our regulatory and reporting requirements. 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 controls and procedures are met.

#### Changes in Internal Controls Over Financial Reporting

There have been no changes in internal control over financial reporting that occurred during the fiscal quarter ended September 30, 2015 that have materially affected, or are reasonably likely to materially affect, internal control over financial reporting.

## PART II. OTHER INFORMATION

### Item 1. Legal Proceedings

We, in common with the insurance industry in general, are subject to litigation and arbitration in the normal course of our business. As of September 30, 2015, we were not a party to any litigation or arbitration which is expected by management to have a material adverse effect on our results of operations and financial condition and liquidity.

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## Item 2. Unregistered Sales of Equity Securities and Use of Proceeds

The following table summarizes our purchases of our common shares for the 2015 third quarter:

Period	Issuer Purchases of Equity Securities		Total Number of Shares Purchased as Part of Publicly Announced Plans or Programs	Approximate Dollar Value of Shares that May Yet be Purchased Under the Plan or Programs (2)
	Total Number of Shares Purchased (1)	Average Price Paid per Share		
7/1/2015 - 7/31/2015	18,201	\$70.49	—	\$525,263
8/1/2015 - 8/31/2015	56,842	67.17	52,402	\$521,757
9/1/2015 - 9/30/2015	13,240	70.26	—	\$521,757
Total	88,283	\$68.32	52,402	\$521,757

(1) Includes repurchases by ACGL of shares, from time to time, from employees in order to facilitate the payment of withholding taxes on restricted shares granted and the exercise of stock appreciation rights. We purchased these shares at their fair value, as determined by reference to the closing price of our common shares on the day the restricted shares vested or the stock appreciation rights were exercised.

(2) Remaining amount available at September 30, 2015 under ACGL's share repurchase authorization, under which repurchases may be effected from time to time in open market or privately negotiated transactions through December 31, 2016.

## Item 5. Other Information

In accordance with Section 10a(i)(2) of the Securities Exchange Act of 1934, as amended, we are responsible for disclosing non-audit services to be provided by our independent auditor, PricewaterhouseCoopers LLP, which are approved by the Audit Committee of our board of directors. During the 2015 third quarter, the Audit Committee approved engagements of PricewaterhouseCoopers LLP for permitted non-audit services, which consisted of tax consulting services, tax compliance services and other accounting consulting services.

## Item 6. Exhibits

Exhibit No.	Description
15	Accountants' Awareness Letter (regarding unaudited interim financial information)
31.1	Certification of Chief Executive Officer pursuant to Section 302 of the Sarbanes-Oxley Act of 2002
31.2	Certification of Chief Financial Officer pursuant to Section 302 of the Sarbanes-Oxley Act of 2002
32.1	Certification of Chief Executive Officer pursuant to Section 906 of the Sarbanes-Oxley Act of 2002
32.2	Certification of Chief Financial Officer pursuant to Section 906 of the Sarbanes-Oxley Act of 2002
101	The following financial information from Arch Capital Group Ltd.'s Quarterly Report for the quarter ended September 30, 2015 formatted in XBRL: (i) Consolidated Balance Sheets at September 30, 2015 and December 31, 2014; (ii) Consolidated Statements of Income for the three and nine month periods ended September 30, 2015 and 2014; (iii) Consolidated Statements of Comprehensive Income for the three and nine month periods ended September 30, 2015 and 2014; (iv) Consolidated Statements of Changes in Shareholders' Equity for the nine month periods ended September 30, 2015 and 2014; (v) Consolidated Statements of Cash Flows for the nine month periods ended September 30, 2015 and 2014; and (vi) Notes to Consolidated Financial Statements.



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SIGNATURES

Pursuant to the requirements 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.

ARCH CAPITAL GROUP LTD.  
(REGISTRANT)

Date: November 9, 2015

/s/ Constantine Iordanou  
Constantine Iordanou  
President and Chief Executive Officer  
(Principal Executive Officer) and Chairman of the Board  
of Directors

Date: November 9, 2015

/s/ Mark D. Lyons  
Mark D. Lyons  
Executive Vice President, Chief Financial Officer and  
Treasurer (Principal Financial and Accounting Officer)

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EXHIBIT INDEX

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