ARCH CAPITAL GROUP LTD.
Form 10-Q
November 03, 2017
Table of Contents

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

FORM 10-Q

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

For the quarterly period ended September 30, 2017

Or

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

Commission file number: 001-16209

ARCH CAPITAL GROUP LTD.
(Exact name of registrant as specified in its charter)

Bermuda	Not applicable
(State or other jurisdiction of incorporation or organization)	(I.R.S. Employer Identification No.)
Waterloo House, Ground Floor 100 Pitts Bay Road, Pembroke HM 08, Bermuda	(441) 278-9250
(Address of principal executive offices)	(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 þ No o
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 þ No o
Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, or a smaller reporting company. See the definitions of "large accelerated filer," "accelerated filer," "smaller reporting company," and "emerging growth company" in Rule 12b-2 of the Exchange Act. Large accelerated Filer þ Accelerated Filer o Non-accelerated Filer o Smaller reporting company o Emerging growth company o
If an emerging growth company, indicate by check mark if the Registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards provided pursuant to Section 13(a) of the Exchange Act. o
Indicate by check mark whether the Registrant is a shell company (as defined in Rule 12b-2 of the Exchange Act). Yes o No þ

As of October 31, 2017, there were 130,874,024 common shares, $0.0033 par value per share, of the registrant outstanding.

Table of Contents

ARCH CAPITAL GROUP LTD.

INDEX TO FORM 10-Q

		Page No.
	PART I	
	Financial Information	2
Item 1.	Consolidated Financial Statements	4
Item 2.	Management's Discussion and Analysis of Financial Condition and Results of Operations	50
Item 3.	Quantitative and Qualitative Disclosures About Market Risk	75
Item 4.	Controls and Procedures	75
	PART II	
	Other Information	76
Item 1.	Legal Proceedings	76
Item 1A.	Risk Factors	76
Item 2.	Unregistered Sales of Equity Securities and Use of Proceeds	77
Item 5.	Other Information	77
Item 6.	Exhibits	78
	Signatures	79

Table of Contents

PART I. FINANCIAL INFORMATION

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" 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;
- the integration of United Guaranty and any other businesses we have acquired or may acquire into our existing operations;
- 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 (including alternative forms of capital), 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;
- 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, 2017;
- 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, reinsurance and mortgage businesses 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;

Table of Contents

- 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 for the year ended December 31, 2016, 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.

Table of Contents

ITEM 1. CONSOLIDATED FINANCIAL STATEMENTS

	Page No.
Report of Independent Registered Public Accounting Firm	5
Consolidated Balance Sheets September 30, 2017 (unaudited) and December 31, 2016	6
Consolidated Statements of Income For the three and nine month periods ended September 30, 2017 and 2016 (unaudited)	7
Consolidated Statements of Comprehensive Income For the three and nine month periods ended September 30, 2017 and 2016 (unaudited)	8
Consolidated Statements of Changes in Shareholders' Equity For the nine month periods ended September 30, 2017 and 2016 (unaudited)	9
Consolidated Statements of Cash Flows For the nine month periods ended September 30, 2017 and 2016 (unaudited)	10
Notes to Consolidated Financial Statements (unaudited)	
Note 1 - General	11
Note 2 - Recent Accounting Pronouncements	11
Note 3 - Variable Interest Entities and Noncontrolling Interests	12
Note 4 - Earnings (Loss) Per Common Share	15
Note 5 - Segment Information	16
Note 6 - Reserves for Losses and Loss Adjustment Expenses	21
Note 7 - Investment Information	24
Note 8 - Fair Value	30
Note 9 - Derivative Instruments	36
Note 10 - Commitments and Contingencies	37
Note 11 - Share Transactions	37
Note 12 - Other Comprehensive Income (Loss)	39
Note 13 - Guarantor Financial Information	40
Note 14 - Income Taxes	48
Note 15 - Legal Proceedings	48
Note 16 - Transactions With Related Parties	48
Note 17 - Acquisition	48
Note 18 - Subsequent Events	49

Table of Contents

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, 2017, and the related consolidated statements of income and comprehensive income for the three-month and nine-month periods ended September 30, 2017 and September 30, 2016 and the consolidated statements of changes in shareholders' equity and cash flows for the nine-month periods ended September 30, 2017 and September 30, 2016. 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, 2016, 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 March 1, 2017, we expressed an unqualified opinion on those consolidated financial statements. In our opinion, the information set forth in the accompanying consolidated balance sheet as of December 31, 2016, is fairly stated, in all material respects in relation to the consolidated balance sheet from which it has been derived.

/s/ PricewaterhouseCoopers LLP

November 3, 2017

Table of Contents

ARCH CAPITAL GROUP LTD. AND SUBSIDIARIES
CONSOLIDATED BALANCE SHEETS
(U.S. dollars in thousands, except share data)

	(Unaudited) September 30, 2017	December 31, 2016
Assets		
Investments:		
Fixed maturities available for sale, at fair value (amortized cost: $13,722,581 and $13,522,671)	$13,792,903	$13,426,577
Short-term investments available for sale, at fair value (amortized cost: $1,645,873 and $611,878)	1,646,036	612,005
Collateral received under securities lending, at fair value (amortized cost: $543,243 and $762,554)	543,252	762,565
Equity securities available for sale, at fair value (cost: $401,674 and $475,085)	477,143	518,041
Other investments available for sale, at fair value (cost: $205,828 and $149,077)	260,339	167,970
Investments accounted for using the fair value option	4,249,634	3,421,220
Investments accounted for using the equity method	962,574	811,273
Total investments	21,931,881	19,719,651
Cash	862,361	842,942
Accrued investment income	101,104	124,483
Securities pledged under securities lending, at fair value (amortized cost: $529,700 and $746,409)	528,212	744,980
Premiums receivable	1,269,678	1,072,435
Reinsurance recoverable on unpaid and paid losses and loss adjustment expenses	2,506,015	2,114,138
Contractholder receivables	1,864,348	1,717,436
Ceded unearned premiums	947,135	859,567
Deferred acquisition costs	531,196	447,560
Receivable for securities sold	385,952	58,284
Goodwill and intangible assets	684,405	781,553
Other assets	1,012,510	889,080
Total assets	$32,624,797	$29,372,109
Liabilities		
Reserve for losses and loss adjustment expenses	$11,351,267	$10,200,960
Unearned premiums	3,751,550	3,406,870
Reinsurance balances payable	352,006	300,407
Contractholder payables	1,864,348	1,717,436
Collateral held for insured obligations	345,726	301,406
Senior notes	1,732,726	1,732,258
Revolving credit agreement borrowings	826,242	756,650
Securities lending payable	543,243	762,554
Payable for securities purchased	1,091,464	76,183
Other liabilities	788,354	806,260
Total liabilities	22,646,926	20,060,984
Commitments and Contingencies		
Redeemable noncontrolling interests	205,829	205,553

Shareholders' Equity		
Non-cumulative preferred shares	772,555	772,555
Convertible non-voting common equivalent preferred shares	489,627	1,101,304
Common shares ($0.0033 par, shares issued: 182,924,882 and 174,644,101)	610	582
Additional paid-in capital	1,212,960	531,687
Retained earnings	8,359,354	7,996,701
Accumulated other comprehensive income (loss), net of deferred income tax	129,682	(114,541)
Common shares held in treasury, at cost (shares: 52,058,509 and 51,856,584)	(2,053,644)	(2,034,570)
Total shareholders' equity available to Arch	8,911,144	8,253,718
Non-redeemable noncontrolling interests	860,898	851,854
Total shareholders' equity	9,772,042	9,105,572
Total liabilities, noncontrolling interests and shareholders' equity	$32,624,797	$29,372,109

See Notes to Consolidated Financial Statements

Table of Contents

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,	
	2017	2016	2017	2016
Revenues				
Net premiums written	$1,325,403	$1,014,278	$3,850,358	$3,159,076
Change in unearned premiums	(63,517)	(55,875)	(230,581)	(243,109)
Net premiums earned	1,261,886	958,403	3,619,777	2,915,967
Net investment income	116,459	93,618	345,457	275,691
Net realized gains (losses)	66,275	125,105	122,163	230,647
Other-than-temporary impairment losses	(1,878)	(3,867)	(5,415)	(16,999)
Less investment impairments recognized in other comprehensive income, before taxes	—	—	—	150
Net impairment losses recognized in earnings	(1,878)	(3,867)	(5,415)	(16,849)
Other underwriting income	6,064	7,980	15,519	38,251
Equity in net income (loss) of investment funds accounted for using the equity method	31,090	16,662	111,884	32,054
Other income (loss)	(342)	(400)	(3,118)	(432)
Total revenues	1,479,554	1,197,501	4,206,267	3,475,329
Expenses				
Losses and loss adjustment expenses	1,046,141	524,183	2,288,571	1,631,724
Acquisition expenses	193,854	161,267	566,579	501,782
Other operating expenses	170,127	153,286	514,827	460,748
Corporate expenses	17,098	18,485	69,766	45,068
Amortization of intangible assets	31,824	4,865	93,942	14,493
Interest expense	29,510	15,943	86,935	47,713
Net foreign exchange losses (gains)	28,028	2,621	86,975	1,525
Total expenses	1,516,582	880,650	3,707,595	2,703,053
Income (loss) before income taxes	(37,028)	316,851	498,672	772,276
Income tax expense	(8,189)	(13,231)	(70,755)	(43,672)
Net income (loss)	$(45,217)	$303,620	$427,917	$728,604
Net (income) loss attributable to noncontrolling interests	11,561	(50,748)	(23,279)	(109,879)
Net income (loss) available to Arch	(33,656)	252,872	404,638	618,725
Preferred dividends	(12,369)	(5,484)	(34,936)	(16,453)
Loss on redemption of preferred shares	(6,735)	—	(6,735)	—
Net income (loss) available to Arch common shareholders	$(52,760)	$247,388	$362,967	$602,272
Net income (loss) per common share and common share equivalent				
Basic	$(0.39)	$2.05	$2.70	$4.99
Diluted	$(0.39)	$1.98	$2.61	$4.84

Weighted average common shares and common share equivalents outstanding				
Basic	134,885,451	120,938,916	134,472,129	120,656,420
Diluted	134,885,451	124,931,653	139,222,324	124,528,174

See Notes to Consolidated Financial Statements

Table of Contents

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

	(Unaudited) Three Months Ended September 30,		(Unaudited) Nine Months Ended September 30,	
	2017	2016	2017	2016
Comprehensive Income				
Net income (loss)	$(45,217)	$303,620	$427,917	$728,604
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	66,462	16,281	260,223	251,722
Portion of other-than-temporary impairment losses recognized in other comprehensive income, net of deferred income tax	—	—	—	(150)
Reclassification of net realized (gains) losses, net of income taxes, included in net income (loss)	(23,912)	(54,992)	(46,180)	(109,309)
Foreign currency translation adjustments	8,280	(5,312)	29,701	(6,150)
Comprehensive income	5,613	259,597	671,661	864,717
Net (income) loss attributable to noncontrolling interests	11,561	(50,748)	(23,279)	(109,879)
Foreign currency translation adjustments attributable to noncontrolling interests	411	(59)	479	141
Comprehensive income available to Arch	$17,585	$208,790	$648,861	$754,979

See Notes to Consolidated Financial Statements

Table of Contents

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

	(Unaudited) Nine Months Ended September 30,	
	2017	2016
Non-cumulative preferred shares		
Balance at beginning of year	$772,555	$325,000
Preferred shares issued	230,000	450,000
Preferred shares redeemed	(230,000)	—
Balance at end of period	772,555	775,000
Convertible non-voting common equivalent preferred shares		
Balance at beginning of year	1,101,304	—
Preferred shares converted to common shares	(611,677)	—
Balance at end of period	489,627	—
Common shares		
Balance at beginning of year	582	577
Common shares issued, net	28	5
Balance at end of period	610	582
Additional paid-in capital		
Balance at beginning of year	531,687	467,339
Preferred shares converted to common shares	611,653	—
Issue costs on preferred shares	(7,946)	(15,101)
Reversal of original issue costs on redeemed preferred shares	6,735	—
All other	70,831	63,966
Balance at end of period	1,212,960	516,204
Retained earnings		
Balance at beginning of year	7,996,701	7,332,032
Cumulative effect of an accounting change	(314)	—
Balance at beginning of year, as adjusted	7,996,387	7,332,032
Net income	427,917	728,604
Net (income) loss attributable to noncontrolling interests	(23,279)	(109,879)
Preferred share dividends	(34,936)	(16,453)
Loss on redemption of preferred shares	(6,735)	—
Balance at end of period	8,359,354	7,934,304
Accumulated other comprehensive income (loss), net of deferred income tax		
Balance at beginning of year	(114,541)	(16,502)
Unrealized appreciation (decline) in value of available-for-sale investments, net of deferred income tax:		
Balance at beginning of year	(27,641)	50,085
Unrealized holding gains (losses) arising during period, net of reclassification adjustment	214,043	142,413
Portion of other-than-temporary impairment losses recognized in other comprehensive income, net of deferred income tax	—	(150)

Balance at end of period	186,402	192,348
Foreign currency translation adjustments:		
Balance at beginning of year	(86,900)	(66,587)
Foreign currency translation adjustments	29,701	(6,150)
Foreign currency translation adjustments attributable to noncontrolling interests	479	141
Balance at end of period	(56,720)	(72,596)
Balance at end of period	129,682	119,752
Common shares held in treasury, at cost		
Balance at beginning of year	(2,034,570)	(1,941,904)
Shares repurchased for treasury	(19,074)	(89,955)
Balance at end of period	(2,053,644)	(2,031,859)
Total shareholders' equity available to Arch	8,911,144	7,313,983
Non-redeemable noncontrolling interests	860,898	834,808
Total shareholders' equity	$9,772,042	$8,148,791

See Notes to Consolidated Financial Statements

Table of Contents

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

	(Unaudited) Nine Months Ended September 30,	
	2017	2016
Operating Activities		
Net income	$427,917	$728,604
Adjustments to reconcile net income to net cash provided by operating activities:		
Net realized (gains) losses	(141,944)	(262,112)
Net impairment losses recognized in earnings	5,415	16,849
Equity in net income or loss of investment funds accounted for using the equity method and other income or loss	(63,784)	8,157
Amortization of intangible assets	93,942	14,493
Share-based compensation	58,308	46,311
Changes in:		
Reserve for losses and loss adjustment expenses, net of unpaid losses and loss adjustment expenses recoverable	602,652	277,277
Unearned premiums, net of ceded unearned premiums	230,581	243,109
Premiums receivable	(167,143)	(198,909)
Deferred acquisition costs	(73,631)	(40,906)
Reinsurance balances payable	37,528	49,198
Other items, net	71,293	155,068
Net Cash Provided By Operating Activities	1,081,134	1,037,139
Investing Activities		
Purchases of fixed maturity investments	(28,079,129)	(27,840,555)
Purchases of equity securities	(667,135)	(377,767)
Purchases of other investments	(1,406,528)	(1,008,774)
Proceeds from sales of fixed maturity investments	27,629,474	26,731,924
Proceeds from sales of equity securities	751,873	464,904
Proceeds from sales, redemptions and maturities of other investments	938,581	879,330
Proceeds from redemptions and maturities of fixed maturity investments	747,621	540,823
Net settlements of derivative instruments	(20,952)	23,396
Net (purchases) sales of short-term investments	(964,653)	(604,162)
Change in cash collateral related to securities lending	148,692	(27,935)
Acquisitions, net of cash	(27,709)	(20,911)
Purchases of fixed assets	(16,862)	(11,565)
Other	86,145	(3,816)
Net Cash Provided By (Used For) Investing Activities	(880,582)	(1,255,108)
Financing Activities		
Proceeds from issuance of preferred shares, net	222,054	434,899
Redemption of preferred shares	(230,000)	—
Purchases of common shares under share repurchase program	—	(75,256)
Proceeds from common shares issued, net	(7,484)	(3,785)
Proceeds from borrowings	238,915	46,000
Repayments of borrowings	(172,000)	(179,171)
Change in cash collateral related to securities lending	(148,692)	27,935
Dividends paid to redeemable noncontrolling interests	(13,491)	(13,491)

Other	(49,280)	33,113
Preferred dividends paid	(34,936)	(16,453)
Net Cash Provided By (Used For) Financing Activities	(194,914)	253,791
Effects of exchange rate changes on foreign currency cash	13,781	(10,332)
Increase (decrease) in cash	19,419	25,490
Cash beginning of year	842,942	553,326
Cash end of period	$862,361	$578,816
Income taxes paid	$47,907	$40,742
Interest paid	$64,613	$35,234

See Notes to Consolidated Financial Statements

Table of Contents
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, reinsurance and mortgage insurance on a worldwide basis through its wholly-owned subsidiaries. As used herein, the "Company" means ACGL and its subsidiaries. The Company's consolidated financial statements include the results of Watford Holdings Ltd. and its wholly owned subsidiaries. See Note 3.

On December 31, 2016, the Company completed the acquisition of United Guaranty Corporation, a North Carolina corporation ("UGC") pursuant to a stock purchase agreement with American International Group, Inc. ("AIG"). The acquisition of UGC ("UGC acquisition") expanded the scale of Arch's existing mortgage insurance businesses by combining UGC's position as the market leader in the U.S. private mortgage insurance industry with Arch's financial strength and history of innovation, further diversifying the Company's business profile and customer base.

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, 2016 ("2016 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, including the presentation of 'amortization of intangible assets' on its consolidated statements of income to split out such item

(previously reflected in acquisition expenses and/or other operating expenses). 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.

2. Recent Accounting Pronouncements

Recently Issued Accounting Standards Adopted

The Company adopted Financial Accounting Standards Board ("FASB") Accounting Standard Update ("ASU") 2016-09, "Compensation - Stock Compensation (Topic 718) - Improvements to Employee Share-Based Payment Accounting," effective January 1, 2017. This ASU was issued in the 2016 first quarter to improve and simplify the accounting for employee share-based payment transactions. This ASU provides simplifications with respect to income tax consequences, classification of awards as either equity or liabilities, and classification on the statement of cash flows for these types of transactions. With respect to the forfeiture accounting policy election, the Company has elected to account for forfeitures as they occur, which did not result in a material cumulative effect adjustment. With respect to the change in presentation in the statement of cash flows related to excess tax benefits, the Company has applied the guidance prospectively and prior periods have not been adjusted.

Recently Issued Accounting Standards Not Yet Adopted

ASU 2014-09, “Revenue from Contracts with Customers (Topic 606),” was issued in the 2014 second quarter and updated through various ASUs in 2016. This ASU (and as updated in 2016) creates a new comprehensive revenue recognition standard that will serve as a single source of revenue guidance for all companies in all industries. The guidance applies to all companies that either enter into contracts with customers to transfer goods or services or enter into contracts for the transfer of non-financial assets, unless those contracts are within the scope of other standards, such as insurance contracts or financial instruments.The ASU also requires enhanced disclosures about revenue. The ASU is effective in the 2018 first quarter and the Company intends on adopting the ASU using the modified retrospective method, whereby the cumulative effect of adoption will be recognized as an adjustment to retained earnings at the date of initial application. The adoption of this ASU will not impact the Company's insurance premium revenues or revenues from its investment portfolio, which represent a substantial portion of consolidated revenues, but may have an impact on the Company's other revenues. Based on the Company’s evaluation of the impacted revenue streams, the ASU is not expected to have a material effect on the Company’s consolidated financial statements and the cumulative effect adjustment to retained earnings at the date of initial application is not expected to be material.

Table of Contents
ARCH CAPITAL GROUP LTD. AND SUBSIDIARIES
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (UNAUDITED)

ASU 2016-01, “Financial Instruments - Overall (Subtopic 825-10) - Recognition and Measurement of Financial Assets and Financial Liabilities,” was issued in the 2016 first quarter to enhance the reporting model for financial instruments and to provide improved financial information to readers of the financial statements. Among other provisions focused on improving the recognition and measurement of financial instruments, the ASU requires that equity investments be measured at fair value on the balance sheet with changes in fair value reported in the income statement and that an exit price notion be used when measuring the fair value of financial instruments for disclosure purposes. The ASU is effective in the 2018 first quarter and, aside from limited situations, cannot be early adopted. The Company is currently assessing the impact the implementation of this ASU will have on its consolidated financial statements. The adoption of this ASU is not expected to have a material impact on the Company's financial position, cash flows, or total comprehensive income, but will have a material impact on the Company's results of operations as changes in fair value of equity instruments will be presented in net income rather than other comprehensive income.

ASU 2016-18, "Statement of Cash Flows (Topic 230) - Restricted Cash " was issued in the 2016 fourth quarter. The ASU requires that restricted cash and restricted cash equivalents be included with cash and cash equivalents in the reconciliation of beginning and ending cash on the statements of cash flows. As a result, transfers between cash and cash equivalents and restricted cash and restricted cash equivalents will no longer be presented on the statement of cash flows. The ASU is effective, with retrospective adoption, for interim and annual periods beginning after December 15, 2017, with early adoption permitted. The Company is currently assessing the impact the implementation of this ASU will have on its consolidated financial statements. The adoption of this ASU is not expected to have a material effect on the Company’s results of operations, financial position, comprehensive income or net cash provided from operating activities.

ASU 2017-08, “Receivables - Nonrefundable Fees and Other Costs (Subtopic 310-20): Premium Amortization on Purchased Callable Debt Securities,” was issued in the 2017 first quarter. The ASU amends the amortization period for certain purchased callable debt securities held at a premium by shortening the amortization period for the premium to the earliest call date. The ASU will be effective for the Company on January 1, 2019 and is required to be applied using a modified retrospective approach through a cumulative-effect adjustment to retained earnings as of the beginning of the first reporting period in which the guidance is effective. The Company is currently assessing the impact the implementation of this ASU will have on its consolidated financial statements. The adoption of this

ASU is not expected to have a material effect on the Company’s results of operations, financial position or cash flows.

ASU 2017-09, “Compensation - Stock Compensation (Topic 718) - Scope of Modification Accounting” was issued in the 2017 second quarter. The ASU provides updated guidance to clarify when to account for a change to the terms or conditions of a share-based payment award as a modification. Under the new guidance, modification accounting is required only if the fair value, the vesting conditions, or the classification of the award (as equity or liability) changes as a result of the change in terms or conditions. The ASU is effective prospectively for all companies for annual periods beginning on or after December 15, 2017, with early adoption permitted. The adoption of this ASU is not expected to have a material effect on the Company’s results of operations, financial position or cash flows.

3. Variable Interest Entities and Noncontrolling Interests

A variable interest entity (“VIE”) refers to an entity that has characteristics such as (i) insufficient equity at risk to allow the entity to finance its activities without additional financial support or (ii) instances where the equity investors, as a group, do not have characteristics of a controlling financial interest. The primary beneficiary of a VIE is defined as the variable interest holder that is determined to have the controlling financial interest as a result of having both (i) the

power to direct the activities of a VIE that most significantly impact the economic performance of the VIE and (ii) the obligation to absorb losses or right to receive benefits from the VIE that could potentially be significant to the VIE. If a company is determined to be the primary beneficiary, it is required to consolidate the VIE in its financial statements.

Watford Holdings Ltd.

In March 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 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 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 reinsurance transactions.

Table of Contents
ARCH CAPITAL GROUP LTD. AND SUBSIDIARIES
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (UNAUDITED)

The following table provides the carrying amount and balance sheet caption in which the assets and liabilities of Watford Re are reported:

	September 30, 2017	December 31, 2016
Assets		
Investments accounted for using the fair value option	$2,457,365	$1,857,623
Cash	57,151	74,893
Accrued investment income	13,718	17,017
Premiums receivable	209,985	189,911
Reinsurance recoverable on unpaid and paid losses and LAE	37,575	24,420
Ceded unearned premiums	23,538	12,145
Deferred acquisition costs	87,692	86,379
Receivable for securities sold	74,051	1,326
Goodwill and intangible assets	7,650	7,650
Other assets	132,796	111,386
Total assets of consolidated VIE	$3,101,521	$2,382,750
Liabilities		
Reserves for losses and loss adjustment expenses	$735,132	$510,809
Unearned premiums	344,060	293,480
Reinsurance balances payable	22,487	12,289
Revolving credit agreement borrowings	426,242	256,650
Payable for securities purchased	211,065	42,922
Other liabilities	174,472	88,976
Total liabilities of consolidated VIE	$1,913,458	$1,205,126
Redeemable noncontrolling interests	$220,529	$220,253

For the nine months ended September 30, 2017, Watford Re generated $221.9 million of cash provided by operating activities, $394.4 million of cash used for investing activities and $152.5 million of cash provided by financing activities, compared to $207.0 million of cash provided by operating activities, $124.0 million of cash used for investing activities and $119.6 million of cash used for financing activities for the nine months ended September 30, 2016.

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, 2017. The portion of Watford Re's income or loss attributable to third party investors is recorded in the consolidated statements of income in 'net (income) loss attributable to noncontrolling interests.'

The following table sets forth activity in the non-redeemable noncontrolling interests:

	September 30,	
	2017	2016
Three Months Ended		
Balance, beginning of period	$877,456	$788,589
Amounts attributable to noncontrolling interests	(16,147)	46,160
Foreign currency translation adjustments attributable to noncontrolling interests	(411)	59

Balance, end of period	$860,898	$834,808
Nine Months Ended		
Balance, beginning of year	$851,854	$738,831
Amounts attributable to noncontrolling interests	9,523	96,118
Foreign currency translation adjustments attributable to noncontrolling interests	(479)	(141)
Balance, end of period	$860,898	$834,808

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 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 'net (income) loss attributable to noncontrolling interests' in the Company's consolidated statements of income.

The following table sets forth activity in the redeemable non-controlling interests:

	September 30,	
	2017	2016
Three Months Ended		
Balance, beginning of period	$205,736	$205,366
Accretion of preference share issuance costs	93	93
Balance, end of period	$205,829	$205,459
Nine Months Ended		
Balance, beginning of year	$205,553	$205,182
Accretion of preference share issuance costs	276	277
Balance, end of period	$205,829	$205,459

Table of Contents
ARCH CAPITAL GROUP LTD. AND SUBSIDIARIES
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (UNAUDITED)

The portion of Watford Re's income or loss attributable to third party investors, recorded in the Company's consolidated statements of income in 'net (income) loss attributable to noncontrolling interests,' are summarized in the table below:

	September 30,	
	2017	2016
Three Months Ended		
Amounts attributable to non-redeemable noncontrolling interests	$16,147	$(46,160)
Dividends attributable to redeemable noncontrolling interests	(4,586)	(4,588)
Net (income) loss attributable to noncontrolling interests	$11,561	$(50,748)
Nine Months Ended		
Amounts attributable to non-redeemable noncontrolling interests	$(9,523)	$(96,118)
Dividends attributable to redeemable noncontrolling interests	(13,756)	(13,761)
Net (income) loss attributable to noncontrolling interests	$(23,279)	$(109,879)

Bellemeade Re I and II

Upon closing of the UGC acquisition, the Company acquired the rights and obligations related to aggregate excess of loss reinsurance agreements with Bellemeade Re I Ltd. ("Bellemeade I"), entered into in July 2015, and with Bellemeade Re II Ltd. ("Bellemeade II"), entered into in May 2016 (the "Bellemeade Agreements"). Bellemeade I and Bellemeade II are special purpose reinsurance companies domiciled in Bermuda, each of which provided for up to approximately $300 million of aggregate excess of loss reinsurance coverage at inception for new delinquencies on portfolios of in-force policies issued.

As a result of the evaluation of the Bellemeade Agreements, the Company concluded that both Bellemeade I and Bellemeade II are VIEs. However, given that the ceding insurers do not have the unilateral power to direct those activities that are significant to the economic performance of Bellemeade I and Bellemeade II, the Company does not consolidate Bellemeade I and Bellemeade II in its consolidated financial statements.

The following table presents total assets of Bellemeade I and Bellemeade II as well as the Company's maximum exposure to loss associated with these VIEs:

		Maximum Exposure to Loss		
	Total VIE Assets	On-Balance Sheet	Off-Balance Sheet	Total
Bellemeade I	$112,090	$533	$ 1,009	$1,542
Bellemeade II	191,387	(53)	746	693
Total	$303,477	$480	$ 1,755	$2,235

See note 18, "Subsequent Event."

Irving Partners Limited Partnership

Upon closing of the UGC acquisition, the Company acquired a limited partnership interest in Irving Partners Limited Partnership ("Irving Partners"), which owns and operates an office building in Greensboro, North Carolina in which the Company is the main tenant. The Company concluded that Irving Partners is a VIE but that it is not the primary beneficiary. During the 2017 third quarter, the Company's ownership in Irving Partners was sold to a third party for approximately $14.5 million.

Table of Contents
ARCH CAPITAL GROUP LTD. AND SUBSIDIARIES
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (UNAUDITED)

4. Earnings (Loss) Per Common Share

Due to the net loss recorded in the 2017 third quarter, diluted weighted average common shares and common share equivalents outstanding for the 2017 third quarter do not include the effect of 4.7 million otherwise dilutive securities since the inclusion of such securities is anti-dilutive to per share results. Since the Company reported net income for the other periods presented, the computation of diluted average shares outstanding includes dilutive securities for such periods.

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

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2017	2016	2017	2016
Numerator:				
Net income (loss)	$(45,217)	$ 303,620	$427,917	$ 728,604
Amounts attributable to noncontrolling interests	11,561	(50,748)	(23,279)	(109,879)
Net income (loss) available to Arch	(33,656)	252,872	404,638	618,725
Preferred dividends	(12,369)	(5,484)	(34,936)	(16,453)
Loss on redemption of preferred shares	(6,735)	—	(6,735)	—
Net income (loss) available to Arch common shareholders	$(52,760)	$ 247,388	$362,967	$ 602,272
Denominator:				
Weighted average common shares outstanding	129,211,251	120,938,916	124,526,611	120,656,420
Series D preferred shares (1)	5,674,200	—	9,945,518	—
Weighted average common shares and common share equivalents outstanding — basic	134,885,451	120,938,916	134,472,129	120,656,420
Effect of dilutive common share equivalents:				
Nonvested restricted shares	—	1,313,025	1,459,879	1,295,825
Stock options (2)	—	2,679,712	3,290,316	2,575,929
Weighted average common shares and common share equivalents outstanding — diluted (3)	134,885,451	124,931,653	139,222,324	124,528,174
Earnings (loss) per common share:				
Basic	$(0.39)	$ 2.05	$2.70	$ 4.99
Diluted	$(0.39)	$ 1.98	$2.61	$ 4.84

(1) Such shares are convertible non-voting common equivalent preferred shares issued in connection with the UGC acquisition.

(2) 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, exceeded the average market price and would have been anti-dilutive. For the 2017 third quarter and 2016 third quarter, the number of stock options excluded were nil and 334,203, respectively. For the nine months ended September 30, 2017 and 2016, the number of stock options excluded were 838,868 and 842,105, respectively.

Table of Contents
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 and Chief Executive Officer, the President and Chief Operating Officer, 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 Company's U.S. and international mortgage insurance and reinsurance operations as well as government sponsored enterprise ("GSE") credit-risk sharing transactions. Arch Mortgage Insurance Company, United Guaranty Residential Insurance Company and United Guaranty Mortgage Indemnity Company (combined "Arch MI U.S.") are approved as eligible mortgage insurers by Federal National Mortgage Association ("Fannie Mae") and Federal Home Loan Mortgage Corporation ("Freddie Mac"), each a GSE.

The corporate (non-underwriting) segment results include net investment income, other income (loss), corporate expenses, UGC transaction costs and other, interest expense, items related to the Company's non-cumulative preferred shares, 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 and income taxes. 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.

Table of Contents
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, 2017					
	Insurance	Reinsurance	Mortgage	Sub-Total	Other	Total
Gross premiums written (1)	$787,447	$422,083	$347,951	$1,557,179	$166,198	$1,648,246
Premiums ceded	(222,516)	(105,389)	(57,900)	(385,503)	(12,471)	(322,843)
Net premiums written	564,931	316,694	290,051	1,171,676	153,727	1,325,403
Change in unearned premiums	(29,766)	6,879	(15,533)	(38,420)	(25,097)	(63,517)
Net premiums earned	535,165	323,573	274,518	1,133,256	128,630	1,261,886
Other underwriting income (loss)	—	1,728	3,599	5,327	737	6,064
Losses and loss adjustment expenses	(568,795)	(318,609)	(35,156)	(922,560)	(123,581)	(1,046,141)
Acquisition expenses	(82,638)	(57,340)	(21,803)	(161,781)	(32,073)	(193,854)
Other operating expenses	(90,875)	(36,214)	(34,770)	(161,859)	(8,268)	(170,127)
Underwriting income (loss)	$(207,143)	$(86,862)	$186,388	(107,617)	(34,555)	(142,172)
Net investment income				94,127	22,332	116,459
Net realized gains (losses)				64,104	2,171	66,275
Net impairment losses recognized in earnings				(1,878)	—	(1,878)
Equity in net income (loss) of investment funds accounted for using the equity method				31,090	—	31,090
Other income (loss)				(342)	—	(342)
Corporate expenses (2)				(14,108)	—	(14,108)
UGC transaction costs and other (2)				(2,990)	—	(2,990)
Amortization of intangible assets				(31,824)	—	(31,824)
Interest expense				(26,264)	(3,246)	(29,510)
Net foreign exchange gains (losses)				(27,785)	(243)	(28,028)
Income (loss) before income taxes				(23,487)	(13,541)	(37,028)
Income tax (expense) benefit				(8,168)	(21)	(8,189)
Net income (loss)				(31,655)	(13,562)	(45,217)
Dividends attributable to redeemable noncontrolling interests				—	(4,586)	(4,586)
Amounts attributable to nonredeemable noncontrolling interests				—	16,147	16,147
Net income (loss) available to Arch				(31,655)	(2,001)	(33,656)
Preferred dividends				(12,369)	—	(12,369)
Loss on redemption of preferred shares				(6,735)	—	(6,735)
Net income (loss) available to Arch common shareholders				$(50,759)	$(2,001)	$(52,760)

Underwriting Ratios

Loss ratio	106.3	%	98.5	%	12.8	%	81.4	%	96.1	%	82.9	%
Acquisition expense ratio	15.4	%	17.7	%	7.9	%	14.3	%	24.9	%	15.4	%
Other operating expense ratio	17.0	%	11.2	%	12.7	%	14.3	%	6.4	%	13.5	%
Combined ratio	138.7	%	127.4	%	33.4	%	110.0	%	127.4	%	111.8	%
Goodwill and intangible assets	$23,445		$417		$652,893		$676,755		$7,650		$684,405	

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.

(2) Certain expenses have been excluded from ‘corporate expenses’ and reflected in ‘UGC transaction costs and other.’

Table of Contents

ARCH CAPITAL GROUP LTD. AND SUBSIDIARIES
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (UNAUDITED)

	Three Months Ended September 30, 2016					
	Insurance	Reinsurance	Mortgage	Sub-Total	Other	Total
Gross premiums written (1)	$758,934	$324,361	$131,726	$1,214,765	$163,736	$1,278,765
Premiums ceded	(217,446)	(89,551)	(51,182)	(357,923)	(6,300)	(264,487)
Net premiums written	541,488	234,810	80,544	856,842	157,436	1,014,278
Change in unearned premiums	(22,410)	17,117	(3,582)	(8,875)	(47,000)	(55,875)
Net premiums earned	519,078	251,927	76,962	847,967	110,436	958,403
Other underwriting income (loss)	—	2,216	4,740	6,956	1,024	7,980
Losses and loss adjustment expenses	(332,845)	(105,924)	(11,107)	(449,876)	(74,307)	(524,183)
Acquisition expenses	(77,146)	(50,192)	(5,190)	(132,528)	(28,739)	(161,267)
Other operating expenses	(86,613)	(35,389)	(24,249)	(146,251)	(7,035)	(153,286)
Underwriting income (loss)	$22,474	$62,638	$41,156	126,268	1,379	127,647
Net investment income				66,282	27,336	93,618
Net realized gains (losses)				95,946	29,159	125,105
Net impairment losses recognized in earnings				(3,867)	—	(3,867)
Equity in net income (loss) of investment funds accounted for using the equity method				16,662	—	16,662
Other income (loss)				(400)	—	(400)
Corporate expenses (2)				(11,343)	—	(11,343)
UGC transaction costs and other (2)				(7,142)	—	(7,142)
Amortization of intangible assets				(4,865)	—	(4,865)
Interest expense				(12,924)	(3,019)	(15,943)
Net foreign exchange gains (losses)				(4,232)	1,611	(2,621)
Income (loss) before income taxes				260,385	56,466	316,851
Income tax (expense) benefit				(13,232)	1	(13,231)
Net income (loss)				247,153	56,467	303,620
Dividends attributable to redeemable noncontrolling interests				—	(4,588)	(4,588)
Amounts attributable to nonredeemable noncontrolling interests				—	(46,160)	(46,160)
Net income (loss) available to Arch				247,153	5,719	252,872
Preferred dividends				(5,484)	—	(5,484)
Net income (loss) available to Arch common shareholders				$241,669	$5,719	$247,388
Underwriting Ratios						
Loss ratio	64.1%	42.0%	14.4%	53.1%	67.3%	54.7%
Acquisition expense ratio	14.9%	19.9%	6.7%	15.6%	26.0%	16.8%
Other operating expense ratio	16.7%	14.0%	31.5%	17.2%	6.4%	16.0%
Combined ratio	95.7%	75.9%	52.6%	85.9%	99.7%	87.5%

Goodwill and intangible assets	$26,367	$1,228	$55,696	$83,291	$7,650	$90,941

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.

(2) Certain expenses have been excluded from ‘corporate expenses’ and reflected in ‘UGC transaction costs and other.’

Table of Contents

ARCH CAPITAL GROUP LTD. AND SUBSIDIARIES
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (UNAUDITED)

	Nine Months Ended September 30, 2017					
	Insurance	Reinsurance	Mortgage	Sub-Total	Other	Total
Gross premiums written (1)	$2,313,630	$1,351,051	$1,032,800	$4,697,007	$473,131	$4,915,895
Premiums ceded	(704,057)	(386,743)	(194,139)	(1,284,465)	(35,315)	(1,065,537)
Net premiums written	1,609,573	964,308	838,661	3,412,542	437,816	3,850,358
Change in unearned premiums	(51,188)	(81,182)	(61,776)	(194,146)	(36,435)	(230,581)
Net premiums earned	1,558,385	883,126	776,885	3,218,396	401,381	3,619,777
Other underwriting income (loss)	—	1,143	11,999	13,142	2,377	15,519
Losses and loss adjustment expenses	(1,252,375)	(631,669)	(84,915)	(1,968,959)	(319,612)	(2,288,571)
Acquisition expenses	(236,378)	(154,638)	(76,235)	(467,251)	(99,328)	(566,579)
Other operating expenses	(271,268)	(110,458)	(108,790)	(490,516)	(24,311)	(514,827)
Underwriting income (loss)	$(201,636)	$(12,496)	$518,944	304,812	(39,493)	265,319
Net investment income				282,459	62,998	345,457
Net realized gains (losses)				110,662	11,501	122,163
Net impairment losses recognized in earnings				(5,415)	—	(5,415)
Equity in net income (loss) of investment funds accounted for using the equity method				111,884	—	111,884
Other income (loss)				(3,118)	—	(3,118)
Corporate expenses (2)				(48,517)	—	(48,517)
UGC transaction costs and other (2)				(21,249)	—	(21,249)
Amortization of intangible assets				(93,942)	—	(93,942)
Interest expense				(77,932)	(9,003)	(86,935)
Net foreign exchange gains (losses)				(85,451)	(1,524)	(86,975)
Income (loss) before income taxes				474,193	24,479	498,672
Income tax (expense) benefit				(70,734)	(21)	(70,755)
Net income (loss)				403,459	24,458	427,917
Dividends attributable to redeemable noncontrolling interests				—	(13,756)	(13,756)
Amounts attributable to nonredeemable noncontrolling interests				—	(9,523)	(9,523)
Net income (loss) available to Arch				403,459	1,179	404,638
Preferred dividends				(34,936)	—	(34,936)
				(6,735)	—	(6,735)

Loss on redemption of preferred shares							
Net income (loss) available to Arch common shareholders				$361,788	$1,179	$362,967	
Underwriting Ratios							
Loss ratio	80.4	% 71.5	% 10.9	% 61.2	% 79.6	% 63.2	%
Acquisition expense ratio	15.2	% 17.5	% 9.8	% 14.5	% 24.7	% 15.7	%
Other operating expense ratio	17.4	% 12.5	% 14.0	% 15.2	% 6.1	% 14.2	%
Combined ratio	113.0	% 101.5	% 34.7	% 90.9	% 110.4	% 93.1	%

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.
(2) Certain expenses have been excluded from ‘corporate expenses’ and reflected in ‘UGC transaction costs and other.’

Table of Contents

ARCH CAPITAL GROUP LTD. AND SUBSIDIARIES
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (UNAUDITED)

	Nine Months Ended September 30, 2016					
	Insurance	Reinsurance	Mortgage	Sub-Total	Other	Total
Gross premiums written (1)	$2,319,530	$1,217,804	$361,440	$3,898,025	$421,627	$4,046,667
Premiums ceded	(713,110)	(370,068)	(62,918)	(1,145,347)	(15,229)	(887,591)
Net premiums written	1,606,420	847,736	298,522	2,752,678	406,398	3,159,076
Change in unearned premiums	(46,603)	(43,345)	(93,283)	(183,231)	(59,878)	(243,109)
Net premiums earned	1,559,817	804,391	205,239	2,569,447	346,520	2,915,967
Other underwriting income (loss)	—	22,659	12,670	35,329	2,922	38,251
Losses and loss adjustment expenses	(1,011,087)	(363,613)	(20,102)	(1,394,802)	(236,922)	(1,631,724)
Acquisition expenses	(228,806)	(160,706)	(16,947)	(406,459)	(95,323)	(501,782)
Other operating expenses	(263,111)	(108,561)	(70,590)	(442,262)	(18,486)	(460,748)
Underwriting income (loss)	$56,813	$194,170	$110,270	361,253	(1,289)	359,964
Net investment income				207,088	68,603	275,691
Net realized gains (losses)				168,735	61,912	230,647
Net impairment losses recognized in earnings				(16,849)	—	(16,849)
Equity in net income (loss) of investment funds accounted for using the equity method				32,054	—	32,054
Other income (loss)				(432)	—	(432)
Corporate expenses (2)				(37,926)	—	(37,926)
UGC transaction costs and other (2)				(7,142)	—	(7,142)
Amortization of intangible assets				(14,493)	—	(14,493)
Interest expense				(37,983)	(9,730)	(47,713)
Net foreign exchange gains (losses)				(3,812)	2,287	(1,525)
Income (loss) before income taxes				650,493	121,783	772,276
Income tax (expense) benefit				(43,673)	1	(43,672)
Net income (loss)				606,820	121,784	728,604
Dividends attributable to redeemable noncontrolling interests				—	(13,761)	(13,761)
Amounts attributable to nonredeemable noncontrolling interests				—	(96,118)	(96,118)
Net income (loss) available to Arch				606,820	11,905	618,725
Preferred dividends				(16,453)	—	(16,453)
Net income (loss) available to Arch common shareholders				$590,367	$11,905	$602,272

Underwriting Ratios							
Loss ratio	64.8	% 45.2	% 9.8	% 54.3	% 68.4	% 56.0	%
Acquisition expense ratio	14.7	% 20.0	% 8.3	% 15.8	% 27.5	% 17.2	%
Other operating expense ratio	16.9	% 13.5	% 34.4	% 17.2	% 5.3	% 15.8	%
Combined ratio	96.4	% 78.7	% 52.5	% 87.3	% 101.2	% 89.0	%

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.

(2) Certain expenses have been excluded from ‘corporate expenses’ and reflected in ‘UGC transaction costs and other.’

Table of Contents
ARCH CAPITAL GROUP LTD. AND SUBSIDIARIES
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (UNAUDITED)

6. Reserve for Losses and Loss Adjustment Expenses

The following table represents an analysis of losses and loss adjustment expenses and a reconciliation of the beginning and ending reserve for losses and loss adjustment expenses:

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2017	2016	2017	2016
Reserve for losses and loss adjustment expenses at beginning of period	$10,520,511	$9,471,647	$10,200,960	$9,125,250
Unpaid losses and loss adjustment expenses recoverable and deferred charges	2,116,210	2,003,768	2,083,575	1,828,837
Net reserve for losses and loss adjustment expenses at beginning of period	8,404,301	7,467,879	8,117,385	7,296,413
Net incurred losses and loss adjustment expenses relating to losses occurring in:				
Current year	1,092,175	598,940	2,487,212	1,848,299
Prior years	(45,232)	(74,757)	(197,839)	(216,575)
Discount and accretion on retroactive reinsurance	(802)	—	(802)	—
Total net incurred losses and loss adjustment expenses	1,046,141	524,183	2,288,571	1,631,724
Net foreign exchange losses (gains)	61,919	1,463	168,493	(13,270)
Net paid losses and loss adjustment expenses relating to losses occurring in:				
Current year	(167,450)	(128,432)	(282,952)	(285,468)
Prior years	(457,183)	(304,673)	(1,403,769)	(1,068,979)
Total net paid losses and loss adjustment expenses	(624,633)	(433,105)	(1,686,721)	(1,354,447)
Net reserve for losses and loss adjustment expenses at end of period	8,887,728	7,560,420	8,887,728	7,560,420
Unpaid losses and loss adjustment expenses recoverable and deferred charges	2,463,539	2,049,769	2,463,539	2,049,769
Reserve for losses and loss adjustment expenses at end of period	$11,351,267	$9,610,189	$11,351,267	$9,610,189

2017 Third Quarter Catastrophe Losses

The Company’s 2017 third quarter results reflect estimated net losses from current accident year catastrophic events of $347.8 million, net of reinsurance and reinstatement premiums, which consisted of $133.4 million from the reinsurance segment and $214.5 million from the insurance segment. Such amounts were primarily related to Hurricanes Harvey, Irma and Maria, along with the Mexican earthquakes and other more minor global events. In addition, estimated net losses from current accident year catastrophic events for the 2017 third quarter in the ‘other’ segment were $19.8 million.

Development on Prior Year Loss Reserves

2017 Third Quarter

During the 2017 third quarter, the Company recorded net favorable development on prior year loss reserves of $45.2 million, which consisted of $36.5 million from the reinsurance segment, $3.0 million from the insurance segment, $21.5 million from the mortgage segment and adverse development of $15.8 million from the 'other' segment.
The reinsurance segment's net favorable development of $36.5 million, or 11.3 points, for the 2017 third quarter consisted of $16.9 million from short-tailed lines and $19.6 million from long-tailed and medium-tailed lines. Favorable development in

short-tailed lines included $11.8 million from property catastrophe and property other than property catastrophe reserves, across most underwriting years (i.e., all premiums and losses attributable to contracts having an inception or renewal date within the given twelve-month period), reflecting lower 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 and medium-tailed lines reflected reductions in casualty reserves of $13.4 million based on varying levels of reported and paid claims activity, primarily from the 2002 to 2009 underwriting years, and favorable development in marine reserves of $4.3 million across most underwriting years.
The insurance segment's net favorable development of $3.0 million, or 0.6 points, for the 2017 third quarter consisted of $1.8 million of net favorable development in short-tailed lines and $1.2 million of net favorable development in long-tailed and medium-tailed lines. Net favorable development in short-tailed lines primarily resulted from property (including special risk other than marine) reserves from the 2011 to 2016 accident years (i.e., the year in which a loss occurred). Net favorable development in medium-tailed lines reflected $11.9 million from professional liability reserves across most accident years and in surety reserves with $4.2 million of favorable development. Such amounts were partially offset by $12.9 million of adverse development on a small number of programs in the 2014 to 2016 accident years.

Table of Contents
ARCH CAPITAL GROUP LTD. AND SUBSIDIARIES
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (UNAUDITED)

The mortgage segment's net favorable development was $21.5 million, or 7.8 points, for the 2017 third quarter. The 2017 third quarter development was primarily driven by continued lower than expected claim emergence across most origination years and also reflected $6.1 million related to second lien and other portfolios, primarily due to subrogation recoveries.

2016 Third Quarter

During the 2016 third quarter, the Company recorded net favorable development on prior year loss reserves of $74.8 million, which consisted of $59.5 million from the reinsurance segment, $13.7 million from the insurance segment, $2.5 million from the mortgage segment and adverse development of $0.9 million from the 'other' segment.

The reinsurance segment's net favorable development of $59.5 million, or 23.6 points, for the 2016 third quarter consisted of $27.7 million from short-tailed lines and $31.8 million from long-tailed and medium-tailed lines. Favorable development in short-tailed lines included $23.2 million from property catastrophe and property other than property catastrophe reserves, across most underwriting years, reflecting lower 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 $29.3 million based on varying levels of reported and paid claims activity, primarily from the 2002 to 2010 underwriting years and 2012 to 2013 underwriting years.

The insurance segment's net favorable development of $13.7 million, or 2.6 points, for the 2016 third quarter consisted of $18.2 million of net favorable development in long-tailed lines, partially offset by $2.4 million of net adverse development in short-tailed lines and $2.0 million of net adverse development in medium-tailed lines. Net favorable development in long-tailed lines reflected net reductions in executive assurance reserves from the 2008 to 2015 accident years, and net reductions in casualty reserves from the 2007 and 2008 accident years. Net adverse development in short-tailed lines primarily resulted from property (including special risk other than marine) reserves from the 2015 accident year, primarily due to a small number of attritional losses. Net adverse development in medium-tailed lines primarily resulted from an increase in programs of $6.2 million stemming in part from terminated programs, partially offset by favorable development of $4.2 million in other medium-tailed lines, primarily in professional liability and surety.

The mortgage segment's net favorable development was $2.5 million, or 3.2 points, for the 2016 third quarter. The 2016 third quarter development was primarily driven by lower than expected claim rates across most origination years.

Nine Months Ended September 30, 2017

During the nine months ended September 30, 2017, the Company recorded net favorable development on prior year loss reserves of $197.8 million, which consisted of $133.3 million from the reinsurance segment, $7.2 million from the insurance segment, $74.9 million from the mortgage segment and adverse development of $17.5 million from the 'other' segment.

The reinsurance segment's net favorable development of $133.3 million, or 15.1 points, for the 2017 period consisted of $85.8 million from short-tailed lines and $47.5 million from long-tailed and medium-tailed lines. Favorable development in short-tailed lines included $62.7 million from property catastrophe and property other than property catastrophe reserves, across most underwriting years, reflecting lower 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 and medium-tailed lines reflected reductions in casualty reserves of $28.0 million based on varying levels of reported and paid claims activity, primarily from the 2002 to 2013 underwriting years, and favorable development in marine reserves of $16.6 million across most underwriting years.

The insurance segment's net favorable development of $7.2 million, or 0.5 points, for the 2017 period consisted of $9.0 million of net favorable development in short-tailed lines and $7.4 million of net favorable development in long-tailed lines, partially offset by $9.2 million of net adverse development in medium-tailed lines. Net favorable development in short-tailed lines primarily resulted from property (including special risk other than marine) reserves from the 2011

to 2016 accident years. Net favorable development in long-tailed lines reflected net reductions in executive assurance reserves from the 2008 to 2014 accident years and reductions in healthcare reserves across various accident years, partially offset by $17.2 million of adverse development on construction reserves across various accident years. Net adverse development in medium-tailed lines primarily resulted from an increase in programs of $39.3 million stemming in part from development on a small number of programs in the 2013 to 2015 accident years, partially offset by net favorable development of $30.1 million in other medium-tailed lines, primarily in professional liability and surety.

The mortgage segment's net favorable development was $74.9 million, or 9.6 points, for the 2017 period. The development was primarily driven by continued lower than expected claim emergence across most origination years and also reflected $19.2 million related to second lien and other portfolios, primarily due to subrogation recoveries.

Table of Contents
ARCH CAPITAL GROUP LTD. AND SUBSIDIARIES
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (UNAUDITED)

Nine Months Ended September 30, 2016

During the nine months ended September 30, 2016, the Company recorded net favorable development on prior year loss reserves of $216.6 million, which consisted of $176.7 million from the reinsurance segment, $24.8 million from the insurance segment, $16.3 million from the mortgage segment and adverse development of $1.2 million from the 'other' segment.

The reinsurance segment's net favorable development of $176.7 million, or 22.0 points, for the 2016 period consisted of $113.1 million from short-tailed lines and $63.6 million from long-tailed and medium-tailed lines. Favorable development in short-tailed lines included $92.6 million from property catastrophe and property other than property catastrophe reserves, across most underwriting years. 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 $66.4 million based on varying levels of reported and paid claims activity, primarily from the 2002 to 2013 underwriting years. Such amounts were partially offset by net adverse development on marine reserves, primarily from the 2002 and 2015 underwriting years, partially offset by favorable development from most other underwriting years.

The insurance segment's net favorable development of $24.8 million, or 1.6 points, for the 2016 period consisted of $36.2 million of net favorable development in long-tailed lines and $7.7 million of net favorable development in short-tailed lines, partially offset by $19.1 million of net adverse development in medium-tailed lines. Net favorable development in long-tailed lines reflected net reductions in executive assurance reserves from the 2008 to 2009 accident years and 2011 to 2013 accident years, and net reductions in casualty reserves across most accident years, partially offset by a large energy casualty claim from the 2015 accident year. Net favorable development in short-tailed lines primarily resulted from reductions in property (including special risk other than marine) reserves from the 2009 to 2014 accident years, primarily due to varying levels of reported claims activity. Net adverse development in medium-tailed lines primarily resulted from an increase in programs of $28.6 million stemming in part from terminated programs, partially offset by favorable development of $9.5 million in other medium-tailed lines, primarily in professional liability and surety.

The mortgage segment's net favorable development was $16.3 million, or 7.9 points, for the 2016 period. The development was primarily driven by lower than expected claim rates across most origination years.

Table of Contents
ARCH CAPITAL GROUP LTD. AND SUBSIDIARIES
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (UNAUDITED)

7. Investment Information

At September 30, 2017, total investable assets of $22.00 billion included $19.70 billion managed by the Company and $2.30 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, 2017					
Fixed maturities (1):					
Corporate bonds	$4,275,437	$49,576	$(22,303)	$4,248,164	$(73)
Mortgage backed securities	323,900	5,078	(2,540)	321,362	(2,146)
Municipal bonds	2,353,234	31,202	(7,614)	2,329,646	—
Commercial mortgage backed securities	584,730	3,114	(4,377)	585,993	—
U.S. government and government agencies	3,761,612	3,303	(20,246)	3,778,555	—
Non-U.S. government securities	1,473,819	49,570	(21,647)	1,445,896	—
Asset backed securities	1,544,919	9,053	(4,748)	1,540,614	(22)
Total	14,317,651	150,896	(83,475)	14,250,230	(2,241)
Equity securities	480,607	84,755	(7,873)	403,725	—
Other investments	260,339	54,512	(1)	205,828	—
Short-term investments	1,646,036	667	(504)	1,645,873	—
Total	$16,704,633	$290,830	$(91,853)	$16,505,656	$(2,241)
December 31, 2016					
Fixed maturities (1):					
Corporate bonds	$4,392,373	$27,606	$(46,905)	$4,411,672	$(2,285)
Mortgage backed securities	490,093	4,794	(8,357)	493,656	(3,323)
Municipal bonds	3,713,434	8,554	(29,154)	3,734,034	(201)
Commercial mortgage backed securities	536,051	2,876	(6,508)	539,683	—
U.S. government and government agencies	2,804,540	9,319	(24,437)	2,819,658	—
Non-U.S. government securities	1,096,440	19,036	(56,872)	1,134,276	—
Asset backed securities	1,123,987	6,897	(6,526)	1,123,616	(22)
Total	14,156,918	79,082	(178,759)	14,256,595	(5,831)
Equity securities	532,680	62,627	(17,517)	487,570	—
Other investments	167,970	21,358	(2,465)	149,077	—
Short-term investments	612,005	272	(145)	611,878	—
Total	$15,469,573	$163,339	$(198,886)	$15,505,120	$(5,831)

(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, 2017, the net unrealized gain related to securities for which a non-credit OTTI was recognized in

AOCI was $0.9 million, compared to a net unrealized gain of $2.8 million at December 31, 2016.

Table of Contents
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, 2017						
Fixed maturities (1):						
Corporate bonds	$1,173,096	$(18,315)	$191,382	$(3,988)	$1,364,478	$(22,303)
Mortgage backed securities	146,352	(2,477)	1,511	(63)	147,863	(2,540)
Municipal bonds	745,410	(5,958)	110,752	(1,656)	856,162	(7,614)
Commercial mortgage backed securities	282,901	(3,579)	17,570	(798)	300,471	(4,377)
U.S. government and government agencies	3,083,239	(19,736)	25,894	(510)	3,109,133	(20,246)
Non-U.S. government securities	1,149,528	(20,741)	37,655	(906)	1,187,183	(21,647)
Asset backed securities	587,561	(4,404)	22,051	(344)	609,612	(4,748)
Total	7,168,087	(75,210)	406,815	(8,265)	7,574,902	(83,475)
Equity securities	170,937	(7,873)	—	—	170,937	(7,873)
Other investments	725	(1)	—	—	725	(1)
Short-term investments	110,444	(504)	—	—	110,444	(504)
Total	$7,450,193	$(83,588)	$406,815	$(8,265)	$7,857,008	$(91,853)
December 31, 2016						
Fixed maturities (1):						
Corporate bonds	$1,700,813	$(43,011)	$46,902	$(3,894)	$1,747,715	$(46,905)
Mortgage backed securities	402,699	(8,134)	6,105	(223)	408,804	(8,357)
Municipal bonds	1,513,308	(28,504)	29,636	(650)	1,542,944	(29,154)
Commercial mortgage backed securities	231,374	(6,331)	5,635	(177)	237,009	(6,508)
U.S. government and government agencies	1,888,018	(24,437)	—	—	1,888,018	(24,437)
Non-U.S. government securities	807,598	(56,872)	—	—	807,598	(56,872)
Asset backed securities	627,557	(5,465)	65,723	(1,061)	693,280	(6,526)
Total	7,171,367	(172,754)	154,001	(6,005)	7,325,368	(178,759)
Equity securities	269,381	(17,517)	—	—	269,381	(17,517)
Other investments	39,299	(2,465)	—	—	39,299	(2,465)
Short-term investments	29,146	(145)	—	—	29,146	(145)
Total	$7,509,193	$(192,881)	$154,001	$(6,005)	$7,663,194	$(198,886)

(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, 2017, on a lot level basis, approximately 2,870 security lots out of a total of approximately 7,410 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 $1.6 million. At December 31, 2016, on a lot level basis, approximately 3,540 security lots out of a total of approximately 7,240 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 $4.6 million.

Table of Contents
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.

	September 30, 2017		December 31, 2016	
Maturity	Estimated Fair Value	Amortized Cost	Estimated Fair Value	Amortized Cost
Due in one year or less	$537,043	$534,513	$560,830	$557,675
Due after one year through five years	7,547,002	7,508,674	6,158,148	6,211,099
Due after five years through 10 years	3,495,424	3,480,251	4,676,847	4,710,017
Due after 10 years	284,633	278,823	610,962	620,849
	11,864,102	11,802,261	12,006,787	12,099,640
Mortgage backed securities	323,900	321,362	490,093	493,656
Commercial mortgage backed securities	584,730	585,993	536,051	539,683
Asset backed securities	1,544,919	1,540,614	1,123,987	1,123,616
Total (1)	$14,317,651	$14,250,230	$14,156,918	$14,256,595

(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

The Company enters into securities lending agreements with financial institutions to enhance investment income whereby it 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 from the Company.

The Company receives collateral in the form of cash or securities. At September 30, 2017, the fair value of the cash collateral received on securities lending was $63.8 million and the fair value of security collateral received was $479.5 million. At December 31, 2016, the fair value of the cash collateral received on securities lending was $212.5 million, and the fair value of security collateral received was $550.1 million. Cash collateral is reinvested in short-term investments.

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

	Remaining Contractual Maturity of the Agreements				
	Overnight and Continuous	Less than 30 Days	30-90 Days	90 Days or More	Total
September 30, 2017					
U.S. government and government agencies	$424,838	$8,186	$74,930	$—	$507,954
Corporate bonds	31,305	—	—	—	31,305
Equity securities	3,984	—	—	—	3,984
Total	$460,127	$8,186	$74,930	$—	$543,243
				$—	

Gross amount of recognized liabilities for securities lending in offsetting disclosure in Note 9					
Amounts related to securities lending not included in offsetting disclosure in Note 9					$543,243
December 31, 2016					
U.S. government and government agencies	$556,015	$31,244	$126,093	$5,140	$718,492
Corporate bonds	29,078	—	—	—	29,078
Equity securities	14,984	—	—	—	14,984
Total	$600,077	$31,244	$126,093	$5,140	$762,554
Gross amount of recognized liabilities for securities lending in offsetting disclosure in Note 9					$—
Amounts related to securities lending not included in offsetting disclosure in Note 9					$762,554

Table of Contents
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, 2017	December 31, 2016
Available for sale:		
Asian and emerging markets	$ 123,225	$ 84,778
Investment grade fixed income	53,325	33,923
Credit related funds	20,752	7,469
Other	63,037	41,800
Total available for sale	260,339	167,970
Fair value option:		
Term loan investments (par value: $1,378,797 and $1,208,537)	1,387,663	1,190,799
Mezzanine debt funds	172,000	127,943
Credit related funds	194,200	218,298
Investment grade fixed income	95,151	75,468
Asian and emerging markets	300,552	178,568
Other (1)	147,639	129,717
Total fair value option	2,297,205	1,920,793
Total	$ 2,557,544	$ 2,088,763

(1) Includes fund investments with strategies in mortgage servicing rights, transportation, infrastructure 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, 2017	December 31, 2016
Fixed maturities	$ 1,508,204	$ 1,099,116
Other investments	2,297,205	1,920,793
Short-term investments	349,540	373,669
Equity securities	94,685	27,642
Investments accounted for using the fair value option	$ 4,249,634	$ 3,421,220
Limited partnership interests		

In the normal course of its activities, the Company invests in limited partnerships as part of its overall investment strategy. Such amounts are included in 'investments accounted for using the equity method' and 'investments accounted for using the fair value option.' The Company has determined that it is not required to consolidate these investments because it is not the primary beneficiary of the funds. The Company's maximum exposure to loss with respect to these investments is limited to the investment carrying amounts reported in the Company's consolidated balance sheet and any unfunded commitment.

The following table summarizes investments in limited partnership interests where the Company has a variable interest by balance sheet line item:

	September 30, 2017	December 31, 2016
Investments accounted for using the equity method (1)	$ 962,574	$ 800,970
Investments accounted for using the fair value option (2)	109,157	90,804
Total	$ 1,071,731	$ 891,774

(1) Aggregate unfunded commitments were $850.4 million at September 30, 2017, compared to $776.6 million at December 31, 2016.

(2) Aggregate unfunded commitments were $162.3 million at September 30, 2017, compared to $16.7 million at December 31, 2016.

Table of Contents

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:

	September 30,	
	2017	2016
Three Months Ended		
Fixed maturities	$96,144	$71,366
Equity securities	2,887	3,311
Short-term investments	2,957	1,703
Other (1)	37,957	37,466
Gross investment income	139,945	113,846
Investment expenses	(23,486)	(20,228)
Net investment income	$116,459	$93,618
Nine Months Ended		
Fixed maturities	$284,807	$223,033
Equity securities	9,184	10,409
Short-term investments	6,732	3,015
Other (1)	111,613	98,089
Gross investment income	412,336	334,546
Investment expenses	(66,879)	(58,855)
Net investment income	$345,457	$275,691

(1) Includes income distributions from investment funds, term loan investments and other items.

Net Realized Gains (Losses)

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

	September 30,	
	2017	2016
Three Months Ended		
Available for sale securities:		
Gross gains on investment sales	$66,565	$84,451
Gross losses on investment sales	(39,015)	(22,985)
Change in fair value of assets and liabilities accounted for using the fair value option:		
Fixed maturities	4,035	43,935
Other investments	24,264	46,428
Equity securities	10,230	(52)
Short-term investments	(3,320)	1,150
Derivative instruments (1)	4,298	(16,964)
Other (2)	(782)	(10,858)
Net realized gains (losses)	$66,275	$125,105
Nine Months Ended		
Available for sale securities:		
Gross gains on investment sales	$212,470	$266,965
Gross losses on investment sales	(152,996)	(129,409)
Change in fair value of assets and liabilities accounted for using the fair value option:		
Fixed maturities	34,232	62,234
Other investments	42,149	38,016

Equity securities	16,604	385
Short-term investments	12	107
Derivative instruments (1)	(9,653)	24,102
Other (2)	(20,655)	(31,753)
Net realized gains (losses)	$122,163	$230,647

(1) See Note 9 for information on the Company's derivative instruments.
(2) Includes the re-measurement of contingent consideration liability amounts.

Equity in Net Income (Loss) of Investment Funds Accounted for Using the Equity Method
The Company recorded $31.1 million of equity in net income related to investment funds accounted for using the equity method in the 2017 third quarter, compared to $16.7 million for the 2016 third quarter, and $111.9 million for the nine months ended September 30, 2017, compared to $32.1 million for the 2016 period. In applying the equity method, investments are initially recorded at cost and are subsequently adjusted based on the Company's 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.

Table of Contents
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:

	September 30,	
	2017	2016
Three Months Ended		
Fixed maturities:		
Mortgage backed securities	$(50)	$(233)
Corporate bonds	(82)	—
Non-U.S. government securities	(178)	(545)
U.S. government and government agencies	(426)	—
Municipal bonds	(202)	—
Total	(938)	(778)
Equity securities	(940)	(557)
Other investments	—	(2,532)
Net impairment losses recognized in earnings	$(1,878)	$(3,867)
Nine Months Ended		
Fixed maturities:		
Mortgage backed securities	$(1,461)	$(788)
Corporate bonds	(1,484)	(5,655)
Non-U.S. government securities	(376)	(777)
Asset backed securities	—	(2,506)
U.S. government and government agencies	(426)	—
Municipal bonds	(375)	—
Total	(4,122)	(9,726)
Equity securities	(1,126)	(3,594)
Other investments	(167)	(3,529)
Net impairment losses recognized in earnings	$(5,415)	$(16,849)

Net impairment losses recognized in earnings in the 2017 third quarter were primarily related to equities and on fixed maturities with foreign currency fluctuations. For the nine months ended September 30, 2017, net impairment losses recognized in earnings reflected the Company’s decision to liquidate a portfolio of mortgage backed securities in April 2017. The Company recorded impairment losses on securities in such portfolio that were in an unrealized loss position at March 31, 2017.
The Company believes that the $2.2 million of OTTI included in accumulated other comprehensive income at September 30, 2017 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, 2017, 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:

	September 30,	
	2017	2016

Three Months Ended		
Balance at start of period	$4,437	$14,847
Credit loss impairments recognized on securities not previously impaired	—	38
Credit loss impairments recognized on securities previously impaired	15	60
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	(689)	(1,166)
Balance at end of period	$3,763	$13,779
Nine Months Ended		
Balance at start of year	$13,138	$26,875
Credit loss impairments recognized on securities not previously impaired	31	1,388
Credit loss impairments recognized on securities previously impaired	210	582
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	(9,616)	(15,066)
Balance at end of period	$3,763	$13,779

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 10 for further details. The following table details the value of the Company's restricted assets:

	September 30, 2017	December 31, 2016
Assets used for collateral or guarantees:		
Affiliated transactions	$ 4,264,131	$ 3,871,971
Third party agreements	1,689,104	1,513,079
Deposits with U.S. regulatory authorities	618,136	472,890
Deposits with non-U.S. regulatory authorities	56,753	44,399
Total restricted assets	$ 6,628,124	$ 5,902,339

Table of Contents
ARCH CAPITAL GROUP LTD. AND SUBSIDIARIES
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (UNAUDITED)

8. 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 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, 2017.

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 $21.14 billion of financial assets and liabilities measured at fair value at September 30, 2017, approximately $242.9 million, or 1.2%, were priced using non-binding broker-dealer quotes. Of the $19.10 billion of financial assets and liabilities measured at fair value at December 31, 2016, approximately $234.0 million,

or 1.2%, 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.

Table of Contents
ARCH CAPITAL GROUP LTD. AND SUBSIDIARIES
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (UNAUDITED)

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. A small number of securities are included in Level 3 due to a low level of transparency on the inputs used in the pricing process.

•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. A small number of securities are included in Level 3 due to a low level of transparency on the inputs used in the pricing process.

•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 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. A small number of securities are included in Level 3 due to a low level of transparency on the inputs used in the pricing process.

•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 are 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. A small number of securities are included in Level 3 due to a low level of transparency on the inputs used in the pricing process.

During the 2017 third quarter, the Company transferred $17.6 million of fixed maturities from Level 2 to Level 3 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.

Table of Contents
ARCH CAPITAL GROUP LTD. AND SUBSIDIARIES
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (UNAUDITED)

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. A small number of securities are included in Level 3 due to the lack of an available independent price source for such securities. During the 2017 third quarter, the Company transferred $4.8 million of other investments from Level 2 to Level 3 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, Treasury bills and commercial paper 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) include 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.

Table of Contents
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, 2017:

	Estimated Fair Value	Estimated Fair Value Measurements Using: Quoted Prices in Active Markets for Identical Assets (Level 1)	Significant Other Observable Inputs (Level 2)	Significant Unobservable Inputs (Level 3)
Assets measured at fair value (1):				
Available for sale securities:				
Fixed maturities:				
Corporate bonds	$4,275,437	$—	$4,263,446	$ 11,991
Mortgage backed securities	323,900	—	323,496	404
Municipal bonds	2,353,234	—	2,353,234	—
Commercial mortgage backed securities	584,730	—	584,185	545
U.S. government and government agencies	3,761,612	3,687,126	74,486	—
Non-U.S. government securities	1,473,819	—	1,473,819	—
Asset backed securities	1,544,919	—	1,539,919	5,000
Total	14,317,651	3,687,126	10,612,585	17,940
Equity securities	480,607	473,908	6,699	—
Short-term investments	1,646,036	1,600,885	45,151	—
Other investments	84,671	83,254	1,417	—
Other investments measured at net asset value (2)	175,668			
Total other investments	260,339	83,254	1,417	—
Derivative instruments (4)	33,141	—	33,141	—
Fair value option:				
Corporate bonds	823,181	—	811,710	11,471
Non-U.S. government bonds	97,614	—	97,614	—
Mortgage backed securities	21,218	—	21,218	—
Municipal bonds	2,740	—	2,740	—
Commercial mortgage backed securities	12,539	—	12,539	—
Asset backed securities	63,437	—	63,437	—
U.S. government and government agencies	487,475	487,475	—	—
Short-term investments	349,540	343,620	5,920	—
Equity securities	94,685	59,332	35,353	—
Other investments	1,298,198	120,212	1,146,840	31,146
Other investments measured at net asset value (2)	999,007			
Total	4,249,634	1,010,639	2,197,371	42,617
Total assets measured at fair value	$20,987,408	$6,855,812	$12,896,364	$ 60,557

Liabilities measured at fair value:				
Contingent consideration liabilities	$(59,248)	$—	$—	$ (59,248)
Securities sold but not yet purchased (3)	(72,682)	—	(72,682)	—
Derivative instruments (4)	(23,037)	—	(23,037)	—
Total liabilities measured at fair value	$(154,967)	$—	$(95,719)	$ (59,248)

(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 7, “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 9, “Derivative Instruments.”

Table of Contents
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, 2016:

	Estimated Fair Value	Estimated Fair Value Measurements Using: Quoted Prices in Active Markets for Identical Assets (Level 1)	Significant Other Observable Inputs (Level 2)	Significant Unobservable Inputs (Level 3)
Assets measured at fair value (1):				
Available for sale securities:				
Fixed maturities:				
Corporate bonds	$4,392,373	$—	$4,374,029	$ 18,344
Mortgage backed securities	490,093	—	490,093	—
Municipal bonds	3,713,434	—	3,713,434	—
Commercial mortgage backed securities	536,051	—	536,051	—
U.S. government and government agencies	2,804,540	2,691,575	112,965	—
Non-U.S. government securities	1,096,440	—	1,096,440	—
Asset backed securities	1,123,987	—	1,112,698	11,289
Total	14,156,918	2,691,575	11,435,710	29,633
Equity securities	532,680	529,695	2,985	—
Short-term investments	612,005	608,862	3,143	—
Other investments	112,313	112,313	—	—
Other investments measured at net asset value (2)	55,657			
Total other investments	167,970	112,313	—	—
Derivative instruments (4)	28,410	—	28,410	—
Fair value option:				
Corporate bonds	790,935	—	790,935	—
Non-U.S. government bonds	61,747	—	61,747	—
Mortgage backed securities	18,624	—	18,624	—
Asset backed securities	30,324	—	30,324	—
U.S. government and government agencies	197,486	197,486	—	—
Short-term investments	373,669	309,127	64,542	—
Equity securities	27,642	25,328	2,314	—
Other investments	1,226,242	80,706	1,120,536	25,000
Other investments measured at net asset value (2)	694,551			
Total	3,421,220	612,647	2,089,022	25,000
Total assets measured at fair value	$18,919,203	$4,555,092	$13,559,270	$ 54,633
Liabilities measured at fair value:				
Contingent consideration liabilities	$(122,350)	$—	$—	$ (122,350)

Securities sold but not yet purchased (3)	(33,157)	—	(33,157)	—
Derivative instruments (4)	(26,049)	—	(26,049)	—
Total liabilities measured at fair value	$(181,556)	$—	$(59,206)	$(122,350)

(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 7, “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 9, “Derivative Instruments.”

Table of Contents

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:

	Assets					Liabilities
	Available For Sale		Fair Value Option			
	Structured Securities (1)	Corporate Bonds	Corporate Bonds	Other Investments	Total	Contingent Consideration Liabilities
Three Months Ended September 30, 2017						
Balance at beginning of period	$—	$11,570	$—	$ 25,000	$36,570	$ (57,246)
Total gains or (losses) (realized/unrealized)						
Included in earnings (2)	—	—	—	—	—	(2,002)
Included in other comprehensive income	—	289	—	—	289	—
Purchases, issuances, sales and settlements						
Purchases	—	—	—	1,348	1,348	—
Issuances	—	—	—	—	—	—
Sales	—	—	—	—	—	—
Settlements	—	—	—	—	—	—
Transfers in and/or out of Level 3	5,949	132	11,471	4,798	22,350	—
Balance at end of period	$5,949	$11,991	$11,471	$ 31,146	$60,557	$ (59,248)
Three Months Ended September 30, 2016						
Balance at beginning of period	$49,211	$17,305	$—	$ —	$66,516	$ (111,670)
Total gains or (losses) (realized/unrealized)						
Included in earnings (2)	—	1,667	—	—	1,667	(4,795)
Included in other comprehensive income	—	—	—	—	—	88
Purchases, issuances, sales and settlements						
Purchases	—	—	—	—	—	—
Issuances	—	—	—	—	—	—
Sales	—	—	—	—	—	—
Settlements	(22,435)	—	—	—	(22,435)	—
Transfers in and/or out of Level 3	—	—	—	—	—	—
Balance at end of period	$26,776	$18,972	$—	$ —	$45,748	$ (116,377)
Nine Months Ended September 30, 2017						
Balance at beginning of year	$11,289	$18,344	$—	$ 25,000	$54,633	$ (122,350)
Total gains or (losses) (realized/unrealized)						
Included in earnings (2)	3,779	893	—	—	4,672	(9,089)
Included in other comprehensive income	—	289	—	—	289	—
Purchases, issuances, sales and settlements						
Purchases	—	4,935	—	1,348	6,283	—
Issuances	—	—	—	—	—	—
Sales	(13,640)	(12,602)	—	—	(26,242)	—
Settlements	(1,428)	—	—	—	(1,428)	72,191
Transfers in and/or out of Level 3	5,949	132	11,471	4,798	22,350	—
Balance at end of period	$5,949	$11,991	$11,471	$ 31,146	$60,557	$ (59,248)

Nine Months Ended September 30, 2016

Balance at beginning of year	$57,500	$16,368	$—	$ —	$73,868	$ (96,048)
Total gains or (losses) (realized/unrealized)						
Included in earnings (2)	(2,500)	1,828	—	—	(672)	(20,916)
Included in other comprehensive income	—	—	—	—	—	51
Purchases, issuances, sales and settlements						
Purchases	—	776	—	—	776	—
Issuances	—	—	—	—	—	—
Sales	—	—	—	—	—	—
Settlements	(28,224)	—	—	—	(28,224)	536
Transfers in and/or out of Level 3	—	—	—	—	—	—
Balance at end of period	$26,776	$18,972	$—	$ —	$45,748	$ (116,377)

(1) Includes asset backed securities, mortgage backed securities and commercial mortgage backed securities.

(2) For the 2017 periods, gains or losses were included in net realized gains (losses). For the 2016 periods, losses on structured securities were included in net impairment losses recognized in earnings gains or losses while gains or losses on corporate bonds and contingent consideration liabilities were included in net realized gains (losses).

Table of Contents
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, 2017, 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, 2017, the senior notes of ACGL were carried at their cost, net of debt issuance costs, of $297.0 million and had a fair value of $406.0 million, while the senior notes of Arch Capital Group (U.S.) Inc. (“Arch-U.S.”) were carried at their cost, net of debt issuance costs, of $494.6 million and had a fair value of $566.2 million. The senior notes of Arch Capital Finance LLC due in 2026 were carried at their cost, net of debt issuance costs, of $496.0 million and had a fair value of $519.8 million, while the senior notes due in 2046 were carried at their cost, net of debt issuance costs, of $445.1 million and had a fair value of $503.5 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 values of the senior notes are classified within Level 2.

9. Derivative Instruments

The Company’s investment strategy allows for the use of derivative instruments. 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 following table summarizes information on the fair values and notional values of the Company’s derivative instruments:

	Estimated Fair Value		
	Asset Derivatives	Liability Derivatives	Notional Value (1)
September 30, 2017			
Futures contracts (2)	$5,351	$ (6,722)	$1,524,985
Foreign currency forward contracts (2)	19,376	(5,348)	805,201
TBAs (3)	18,331	—	18,143
Other (2)	8,414	(10,967)	2,032,922
Total	$51,472	$ (23,037)	
December 31, 2016			
Futures contracts (2)	$360	$ (9,398)	$1,655,530
Foreign currency forward contracts (2)	9,354	(12,941)	1,186,386
TBAs (3)	—	—	—
Other (2)	20,287	(3,710)	1,014,863
Total	$30,001	$ (26,049)	

(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 did not hold any derivatives which were designated as hedging instruments at September 30, 2017 or December 31, 2016.

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 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. Contractual close-out netting reduces derivatives credit exposure from gross to net exposure.

At September 30, 2017, asset derivatives and liability derivatives of $49.4 million and $22.5 million, respectively, were subject to a master netting agreement, compared to $28.4 million and $26.0 million, respectively, at December 31, 2016. The remaining derivatives included in the preceding table 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

Table of Contents
ARCH CAPITAL GROUP LTD. AND SUBSIDIARIES
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (UNAUDITED)

gains (losses) in the consolidated statements of income, as summarized in the following table:

Derivatives not designated as hedging instruments:	September 30, 2017	2016
Three Months Ended		
Net realized gains (losses):		
Futures contracts	$4,899	$(15,368)
Foreign currency forward contracts	(228)	4,583
TBAs	122	(23)
Other	(495)	(6,156)
Total	$4,298	$(16,964)
Nine Months Ended		
Net realized gains (losses):		
Futures contracts	$7,309	$45,954
Foreign currency forward contracts	(12,266)	(13,951)
TBAs	143	311
Other	(4,839)	(8,212)
Total	$(9,653)	$24,102

10. Commitments and Contingencies

Letter of Credit and Revolving Credit Facilities

ACGL repaid $100.0 million of borrowings under its unsecured revolving loan and letter of credit facility in the 2017 third quarter, offset by an increase in borrowings in the Company's 'other' segment.

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 $1.58 billion at September 30, 2017, compared to $1.29 billion at December 31, 2016.

11. 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 125.2 million common shares for an aggregate purchase price of $3.68 billion. For the nine months ended September 30, 2017, the Company did not repurchase any shares under the share repurchase program, compared to 1.1 million common shares repurchased for the nine months ended September 30, 2016 with an aggregate purchase price of $75.3 million (no repurchases in the 2016 third quarter). At September 30, 2017, $446.5 million of share

repurchases were available under the program, which may be effected from time to time in open market or privately negotiated transactions through December 31, 2019. 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.

Conversion of Convertible Non-Voting Common Equivalent Preferred Shares

On June 8, 2017, ACGL and AIG entered into Amendment No. 1 (the "Amendment") to the Investor Rights Agreement (the "Investor Rights Agreement") dated as of December 31, 2016 to amend the restrictions on transfers of the 1,276,282

shares of ACGL's convertible non-voting common-equivalent preference shares owned by AIG (the "Convertible Preferred Shares"). The Convertible Preferred Shares were issued to AIG as part of the consideration in UGC acquisition. Pursuant to the certificate of designations for the Convertible Preferred Shares and in accordance with the terms and conditions set forth therein, each Convertible Preferred Share is convertible into ten common shares of ACGL.

Pursuant to the Amendment, ACGL permitted AIG to transfer: (i) 638,141 Convertible Preferred Shares from and after June 8, 2017, and up to an additional 95,721 of the Convertible Preferred Shares to the extent that the several underwriters exercise the option to purchase additional securities expected to be granted pursuant to an underwritten secondary offering of ACGL common shares issuable upon conversion of the Convertible Preferred Shares by AIG and (ii) any and all of the Convertible Preferred Shares from and after January 15, 2018, subject to certain exceptions, and in each case subject to the terms and conditions of the Investor Rights Agreement. All other terms of the Investor Rights Agreement remain in effect.

In June 2017, ACGL completed an underwritten public secondary offering of 7,088,620 common shares by AIG following transfer of 708,862 Convertible Preferred Shares. Proceeds from the sale of common shares pursuant to the public offering were received by AIG. At September 30, 2017, 567,420 Convertible Preferred Shares were outstanding.

Series F Preferred Shares

In August 2017, ACGL completed a $230 million underwritten public offering of 9.2 million depositary shares (the "Depositary Shares"), each of which represents a 1/1,000th interest in a share of its 5.45% Non-Cumulative Preferred Shares, Series F, have a $0.01 par value and $25,000 liquidation preference per share (equivalent to $25 liquidation preference per Depositary Share) (the "Series F Preferred Shares"). Each Depositary Share, evidenced by a depositary receipt, entitles the holder, through the depositary, to a proportional fractional interest in all rights and preferences of the Series F Preferred Shares represented thereby (including any dividend, liquidation, redemption and voting rights).

Table of Contents
ARCH CAPITAL GROUP LTD. AND SUBSIDIARIES
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (UNAUDITED)

Holders of Series F Preferred Shares will be entitled to receive dividend payments only when, as and if declared by our board of directors or a duly authorized committee of the board. Any such dividends will be payable from, and including, the date of original issue on a noncumulative basis, quarterly in arrears on the last day of March, June, September and December of each year, at an annual rate of 5.45%. Dividends on the Series F Preferred Shares are not cumulative. The Company will be restricted from paying dividends on or repurchasing its common shares unless certain dividend payments are made on the Series F Preferred Shares.

Except in specified circumstances relating to certain tax or corporate events, the Series F Preferred Shares are not redeemable prior to August 17, 2022 (the fifth anniversary of the issue date). On and after that date, the Series F Preferred Shares will be redeemable at the Company's option, in whole or in part, at a redemption price of $25,000 per share of the Series F Preferred Shares (equivalent to $25 per depositary share), plus any declared and unpaid dividends, without accumulation of any undeclared dividends to, but excluding, the redemption date. The Depositary Shares will be redeemed if and to the extent the related Series F Preferred Shares are redeemed by the Company. Neither the Depositary Shares nor the Series F Preferred Shares have a stated maturity, nor will they be subject to any sinking fund or mandatory redemption. The Series F Preferred Shares are not convertible into any other securities. The Series F Preferred Shares will not have voting rights, except under limited circumstances.

The net proceeds from the offering of $222.1 million and other available funds were used to redeem in part its outstanding 6.75% Series C Non-Cumulative Preferred Shares. The preferred shares were redeemed at a redemption price equal to $25 per share, plus all declared and unpaid dividends to (but excluding) the redemption date. In accordance with GAAP, following the redemption, original issuance costs related to such shares have been removed from additional paid-in capital and recorded as a "loss on redemption of preferred shares." Such adjustment had no impact on total shareholders' equity or cash flows.

Table of Contents

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, 2017	2016	Nine Months Ended September 30, 2017	2016
Unrealized appreciation on available-for-sale investments					
	Net realized gains (losses)	$27,550	$61,464	$59,474	$137,555
	Other-than-temporary impairment losses	(1,878)	(3,867)	(5,415)	(16,999)
	Total before tax	25,672	57,597	54,059	120,556
	Income tax (expense) benefit	(1,760)	(2,605)	(7,879)	(11,247)
	Net of tax	$23,912	$54,992	$46,180	$109,309

	Before Tax Amount	Tax Expense (Benefit)	Net of Tax Amount
Three Months Ended September 30, 2017			
Unrealized appreciation (decline) in value of investments:			
Unrealized holding gains (losses) arising during period	$69,330	$2,868	$66,462
Portion of other-than-temporary impairment losses recognized in other comprehensive income (loss)	—	—	—
Less reclassification of net realized gains (losses) included in net income	25,672	1,760	23,912
Foreign currency translation adjustments	8,590	310	8,280
Other comprehensive income (loss)	$52,248	$1,418	$50,830
Three Months Ended September 30, 2016			
Unrealized appreciation (decline) in value of investments:			
Unrealized holding gains (losses) arising during period	$11,692	$(4,589)	$16,281
Portion of other-than-temporary impairment losses recognized in other comprehensive income (loss)	—	—	—
Less reclassification of net realized gains (losses) included in net income	57,597	2,605	54,992
Foreign currency translation adjustments	(5,407)	(95)	(5,312)
Other comprehensive income (loss)	$(51,312)	$(7,289)	$(44,023)
Nine Months Ended September 30, 2017			
Unrealized appreciation (decline) in value of investments:			
Unrealized holding gains (losses) arising during period	$288,813	$28,590	$260,223
Portion of other-than-temporary impairment losses recognized in other comprehensive income (loss)	—	—	—
Less reclassification of net realized gains (losses) included in net income	54,059	7,879	46,180
Foreign currency translation adjustments	30,264	563	29,701
Other comprehensive income (loss)	$265,018	$21,274	$243,744
Nine Months Ended September 30, 2016			
Unrealized appreciation (decline) in value of investments:			

Unrealized holding gains (losses) arising during period	$281,770	$30,048	$251,722
Portion of other-than-temporary impairment losses recognized in other comprehensive income (loss)	(150)	—	(150)
Less reclassification of net realized gains (losses) included in net income	120,556	11,247	109,309
Foreign currency translation adjustments	(5,733)	417	(6,150)
Other comprehensive income (loss)	$155,331	$19,218	$136,113

Table of Contents
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-U.S., a 100% owned subsidiary of ACGL, and ACGL's other subsidiaries.

	September 30, 2017				
Condensed Consolidating Balance Sheet	ACGL (Parent Guarantor)	Arch-U.S. (Subsidiary Issuer)	Other ACGL Subsidiaries	Consolidating Adjustments and Eliminations	ACGL Consolidated
Assets					
Total investments	$402	$69,671	$21,876,508	$(14,700)	$21,931,881
Cash	4,868	88,818	768,675	—	862,361
Investments in subsidiaries	9,214,178	4,028,493	—	(13,242,671)	—
Due from subsidiaries and affiliates	81	117	1,923,941	(1,924,139)	—
Premiums receivable	—	—	1,863,203	(593,525)	1,269,678
Reinsurance recoverable on unpaid and paid losses and loss adjustment expenses	—	—	7,023,836	(4,517,821)	2,506,015
Contractholder receivables	—	—	1,864,348	—	1,864,348
Ceded unearned premiums	—	—	2,240,129	(1,292,994)	947,135
Deferred acquisition costs	—	—	677,567	(146,371)	531,196
Goodwill and intangible assets	—	—	684,405	—	684,405
Other assets	13,357	59,734	2,146,993	(192,306)	2,027,778
Total assets	$9,232,886	$4,246,833	$41,069,605	$(21,924,527)	$32,624,797
Liabilities					
Reserve for losses and loss adjustment expenses	$—	$—	$15,836,263	$(4,484,996)	$11,351,267
Unearned premiums	—	—	5,044,544	(1,292,994)	3,751,550
Reinsurance balances payable	—	—	945,530	(593,524)	352,006
Contractholder payables	—	—	1,864,348	—	1,864,348
Collateral held for insured obligations	—	—	345,726		345,726
Senior notes	297,030	494,596	941,100	—	1,732,726
Revolving credit agreement borrowings	—	—	826,242	—	826,242
Due to subsidiaries and affiliates	41	542,103	1,381,996	(1,924,140)	—
Other liabilities	24,671	100,278	2,669,614	(371,502)	2,423,061
Total liabilities	321,742	1,136,977	29,855,363	(8,667,156)	22,646,926
Redeemable noncontrolling interests	—	—	220,529	(14,700)	205,829
Shareholders' Equity					
Total shareholders' equity available to Arch	8,911,144	3,109,856	10,132,815	(13,242,671)	8,911,144
Non-redeemable noncontrolling interests	—	—	860,898	—	860,898
Total shareholders' equity	8,911,144	3,109,856	10,993,713	(13,242,671)	9,772,042
Total liabilities, noncontrolling interests and shareholders' equity	$9,232,886	$4,246,833	$41,069,605	$(21,924,527)	$32,624,797

Table of Contents

ARCH CAPITAL GROUP LTD. AND SUBSIDIARIES
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (UNAUDITED)

	December 31, 2016				
Condensed Consolidating Balance Sheet	ACGL (Parent Guarantor)	Arch-U.S. (Subsidiary Issuer)	Other ACGL Subsidiaries	Consolidating Adjustments and Eliminations	ACGL Consolidated
Assets					
Total investments	$2,612	$41,672	$19,690,067	$(14,700)	$19,719,651
Cash	1,687	71,955	769,300	—	842,942
Investments in subsidiaries	8,660,586	3,716,681	—	(12,377,267)	—
Due from subsidiaries and affiliates	14,297	51,298	1,866,681	(1,932,276)	—
Premiums receivable	—	—	1,579,865	(507,430)	1,072,435
Reinsurance recoverable on unpaid and paid losses and loss adjustment expenses	—	—	6,114,518	(4,000,380)	2,114,138
Contractholder receivables	—	—	1,717,436	—	1,717,436
Ceded unearned premiums	—	—	1,985,311	(1,125,744)	859,567
Deferred acquisition costs	—	—	577,461	(129,901)	447,560
Goodwill and intangible assets	—	—	781,553	—	781,553
Other assets	15,725	49,244	1,901,786	(149,928)	1,816,827
Total assets	$8,694,907	$3,930,850	$36,983,978	$(20,237,626)	$29,372,109
Liabilities					
Reserve for losses and loss adjustment expenses	$—	$—	$14,164,191	$(3,963,231)	$10,200,960
Unearned premiums	—	—	4,532,614	(1,125,744)	3,406,870
Reinsurance balances payable	—	—	807,837	(507,430)	300,407
Contractholder payables	—	—	1,717,436	—	1,717,436
Collateral held for insured obligations	—	—	301,406	—	301,406
Deposit accounting liabilities	—	—	22,150	—	22,150
Senior notes	296,957	494,525	940,776	—	1,732,258
Revolving credit agreement borrowings	100,000	—	656,650	—	756,650
Due to subsidiaries and affiliates	26,270	535,584	1,370,422	(1,932,276)	—
Other liabilities	17,962	54,823	1,867,040	(316,978)	1,622,847
Total liabilities	441,189	1,084,932	26,380,522	(7,845,659)	20,060,984
Redeemable noncontrolling interests	—	—	220,253	(14,700)	205,553
Shareholders' Equity					
Total shareholders' equity available to Arch	8,253,718	2,845,918	9,531,349	(12,377,267)	8,253,718
Non-redeemable noncontrolling interests	—	—	851,854	—	851,854
Total shareholders' equity	8,253,718	2,845,918	10,383,203	(12,377,267)	9,105,572
Total liabilities, noncontrolling interests and shareholders' equity	$8,694,907	$3,930,850	$36,983,978	$(20,237,626)	$29,372,109

Table of Contents

ARCH CAPITAL GROUP LTD. AND SUBSIDIARIES
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (UNAUDITED)

	Three Months Ended September 30, 2017				
Condensed Consolidating Statement of Income and Comprehensive Income	ACGL (Parent Guarantor)	Arch-U.S. (Subsidiary Issuer)	Other ACGL Subsidiaries	Consolidating Adjustments and Eliminations	ACGL Consolidated
Revenues					
Net premiums earned	$—	$ —	$1,261,886	$ —	$1,261,886
Net investment income	117	151	138,784	(22,593)	116,459
Net realized gains (losses)	—	—	66,275	—	66,275
Net impairment losses recognized in earnings	—	—	(1,878)	—	(1,878)
Other underwriting income	—	—	6,064	—	6,064
Equity in net income (loss) of investment funds accounted for using the equity method	—	—	31,090	—	31,090
Other income (loss)	(102)	—	(240)	—	(342)
Total revenues	15	151	1,501,981	(22,593)	1,479,554
Expenses					
Losses and loss adjustment expenses	—	—	1,046,141	—	1,046,141
Acquisition expenses	—	—	193,854	—	193,854
Other operating expenses	—	—	170,127	—	170,127
Corporate expenses	14,576	410	2,112	—	17,098
Amortization of intangible assets	—	—	31,824	—	31,824
Interest expense	5,934	12,037	33,811	(22,272)	29,510

Net foreign exchange (gains) losses	—	—	20,510	7,518	28,028
Total expenses	20,510	12,447	1,498,379	(14,754)	1,516,582
Income (loss) before income taxes	(20,495)	(12,296)	3,602	(7,839)	(37,028)
Income tax (expense) benefit	—	4,432	(12,621)	—	(8,189)
Income (loss) before equity in net income of subsidiaries	(20,495)	(7,864)	(9,019)	(7,839)	(45,217)
Equity in net income (loss) of subsidiaries	(13,161)	50,057	—	(36,896)	—
Net income (loss)	(33,656)	42,193	(9,019)	(44,735)	(45,217)
Net (income) loss attributable to noncontrolling interests	—	—	11,238	323	11,561
Net income (loss) available to Arch	(33,656)	42,193	2,219	(44,412)	(33,656)
Preferred dividends	(12,369)	—	—	—	(12,369)
Loss on redemption of preferred shares	(6,735)	—	—	—	(6,735)
Net income (loss) available to Arch common shareholders	$(52,760)	$ 42,193	$2,219	$ (44,412)	$(52,760)
Comprehensive income (loss) available to Arch	$17,585	$ 47,676	$45,936	$ (93,612)	$17,585

Table of Contents

ARCH CAPITAL GROUP LTD. AND SUBSIDIARIES
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (UNAUDITED)

	Three Months Ended September 30, 2016				
Condensed Consolidating Statement of Income and Comprehensive Income	ACGL (Parent Guarantor)	Arch-U.S. (Subsidiary Issuer)	Other ACGL Subsidiaries	Consolidating Adjustments and Eliminations	ACGL Consolidated
Revenues					
Net premiums earned	$—	$ —	$ 958,403	$ —	$ 958,403
Net investment income	6	803	99,654	(6,845)	93,618
Net realized gains (losses)	—	—	125,105	—	125,105
Net impairment losses recognized in earnings	—	—	(3,867)	—	(3,867)
Other underwriting income	—	—	7,980	—	7,980
Equity in net income (loss) of investment funds accounted for using the equity method	—	—	16,662	—	16,662
Other income (loss)	71	—	(471)	—	(400)
Total revenues	77	803	1,203,466	(6,845)	1,197,501
Expenses					
Losses and loss adjustment expenses	—	—	524,183	—	524,183
Acquisition expenses	—	—	161,267	—	161,267
Other operating expenses	—	—	153,286	—	153,286
Corporate expenses	18,488	608	(611)	—	18,485
Amortization of intangible assets	—	—	4,865	—	4,865
Interest expense	5,948	6,627	9,890	(6,522)	15,943

Net foreign exchange (gains) losses	—	—	2,723	(102)	2,621
Total expenses	24,436	7,235	855,603	(6,624)	880,650
Income (loss) before income taxes	(24,359)	(6,432)	347,863	(221)	316,851
Income tax (expense) benefit	—	2,116	(15,347)	—	(13,231)
Income (loss) before equity in net income of subsidiaries	(24,359)	(4,316)	332,516	(221)	303,620
Equity in net income of subsidiaries	277,231	21,945	—	(299,176)	—
Net income	252,872	17,629	332,516	(299,397)	303,620
Net (income) loss attributable to noncontrolling interests	—	—	(51,071)	323	(50,748)
Net income available to Arch	252,872	17,629	281,445	(299,074)	252,872
Preferred dividends	(5,484)	—	—	—	(5,484)
Net income available to Arch common shareholders	$247,388	$ 17,629	$ 281,445	$ (299,074)	$ 247,388
Comprehensive income (loss) available to Arch	$208,790	$ 2,019	$ 237,555	$ (239,574)	$ 208,790

Table of Contents

ARCH CAPITAL GROUP LTD. AND SUBSIDIARIES
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (UNAUDITED)

	Nine Months Ended September 30, 2017				
Condensed Consolidating Statement of Income and Comprehensive Income	ACGL (Parent Guarantor)	Arch-U.S. (Subsidiary Issuer)	Other ACGL Subsidiaries	Consolidating Adjustments and Eliminations	ACGL Consolidated
Revenues					
Net premiums earned	$—	$—	$3,619,777	$—	$3,619,777
Net investment income	123	1,151	410,392	(66,209)	345,457
Net realized gains (losses)	—	—	122,163	—	122,163
Net impairment losses recognized in earnings	—	—	(5,415)	—	(5,415)
Other underwriting income	—	—	15,519	—	15,519
Equity in net income of investment funds accounted for using the equity method	—	—	111,884	—	111,884
Other income (loss)	(368)	—	(2,750)	—	(3,118)
Total revenues	(245)	1,151	4,271,570	(66,209)	4,206,267
Expenses					
Losses and loss adjustment expenses	—	—	2,288,571	—	2,288,571
Acquisition expenses	—	—	566,579	—	566,579
Other operating expenses	—	—	514,827	—	514,827
Corporate expenses	53,639	3,727	12,400	—	69,766
Amortization of intangible assets	—	—	93,942	—	93,942
Interest expense	18,024	35,956	98,197	(65,242)	86,935

Net foreign exchange losses (gains)	—	—	65,701	21,274	86,975
Total expenses	71,663	39,683	3,640,217	(43,968)	3,707,595
Income (loss) before income taxes	(71,908)	(38,532)	631,353	(22,241)	498,672
Income tax (expense) benefit	—	13,374	(84,129)	—	(70,755)
Income (loss) before equity in net income of subsidiaries	(71,908)	(25,158)	547,224	(22,241)	427,917
Equity in net income of subsidiaries	476,546	213,586	—	(690,132)	—
Net income	404,638	188,428	547,224	(712,373)	427,917
Amounts attributable to noncontrolling interests	—	—	(24,247)	968	(23,279)
Net income available to Arch	404,638	188,428	522,977	(711,405)	404,638
Preferred dividends	(34,936)	—	—	—	(34,936)
Loss on redemption of preferred shares	(6,735)	—	—	—	(6,735)
Net income available to Arch common shareholders	$362,967	$188,428	$522,977	$(711,405)	$362,967
Comprehensive income (loss) available to Arch	$648,861	$240,759	$745,856	$(986,615)	$648,861

Table of Contents

ARCH CAPITAL GROUP LTD. AND SUBSIDIARIES
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (UNAUDITED)

	Nine Months Ended September 30, 2016				
Condensed Consolidating Statement of Income and Comprehensive Income	ACGL (Parent Guarantor)	Arch-U.S. (Subsidiary Issuer)	Other ACGL Subsidiaries	Consolidating Adjustments and Eliminations	ACGL Consolidated
Revenues					
Net premiums earned	$—	$ —	$2,915,967	$ —	$2,915,967
Net investment income	7	2,351	294,012	(20,679)	275,691
Net realized gains (losses)	—	—	230,647	—	230,647
Net impairment losses recognized in earnings	—	—	(16,849)	—	(16,849)
Other underwriting income	—	—	54,749	(16,498)	38,251
Equity in net income of investment funds accounted for using the equity method	—	—	32,054	—	32,054
Other income (loss)	270	—	(702)	—	(432)
Total revenues	277	2,351	3,509,878	(37,177)	3,475,329
Expenses					
Losses and loss adjustment expenses	—	—	1,631,724	—	1,631,724
Acquisition expenses	—	—	501,782	—	501,782
Other operating expenses	—	—	460,748	—	460,748
Corporate expenses	45,284	1,549	(1,765)	—	45,068
Amortization of intangible assets	—	—	14,493	—	14,493
Interest expense	17,811	19,946	46,169	(36,213)	47,713

Net foreign exchange losses (gains)	—	—	5,093	(3,568)	1,525
Total expenses	63,095	21,495	2,658,244	(39,781)	2,703,053
Income (loss) before income taxes	(62,818)	(19,144)	851,634	2,604	772,276
Income tax (expense) benefit	—	6,446	(50,118)	—	(43,672)
Income (loss) before equity in net income of subsidiaries	(62,818)	(12,698)	801,516	2,604	728,604
Equity in net income of subsidiaries	681,543	64,684	—	(746,227)	—
Net income	618,725	51,986	801,516	(743,623)	728,604
Amounts attributable to noncontrolling interests	—	—	(110,844)	965	(109,879)
Net income available to Arch	618,725	51,986	690,672	(742,658)	618,725
Preferred dividends	(16,453)	—	—	—	(16,453)
Net income available to Arch common shareholders	$602,272	$ 51,986	$690,672	$ (742,658)	$602,272
Comprehensive income (loss) available to Arch	$754,979	$ 89,204	$830,348	$ (919,552)	$754,979

Table of Contents

ARCH CAPITAL GROUP LTD. AND SUBSIDIARIES
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (UNAUDITED)

	Nine Months Ended September 30, 2017				
Condensed Consolidating Statement of Cash Flows	ACGL (Parent Guarantor)	Arch-U.S. (Subsidiary Issuer)	Other ACGL Subsidiaries	Consolidating Adjustments and Eliminations	ACGL Consolidated
Operating Activities					
Net Cash Provided By (Used For) Operating Activities	$130,715	$ 70,761	$1,464,701	$ (585,043)	$1,081,134
Investing Activities					
Purchases of fixed maturity investments	—	—	(28,079,129)	—	(28,079,129)
Purchases of equity securities	—	—	(667,135)	—	(667,135)
Purchases of other investments	—	—	(1,406,528)	—	(1,406,528)
Proceeds from the sales of fixed maturity investments	—	—	27,629,474	—	27,629,474
Proceeds from the sales of equity securities	—	—	751,873	—	751,873
Proceeds from the sales, redemptions and maturities of other investments	—	—	938,581	—	938,581
	—	—	747,621	—	747,621

Proceeds from redemptions and maturities of fixed maturity investments					
Net settlements of derivative instruments	—	—	(20,952)	—	(20,952)
Net (purchases) sales of short-term investments	2,209	(27,998)	(938,864)	—	(964,653)
Change in cash collateral related to securities lending	—	—	148,692	—	148,692
Contributions to subsidiaries	20,641	(72,900)	(353,588)	405,847	—
Issuance of intercompany loans	—	—	(47,000)	47,000	—
Repayment of intercompany loans	—	47,000	—	(47,000)	—
Acquisitions, net of cash	—	—	(27,709)	—	(27,709)
Purchases of fixed assets	(18)	—	(16,844)	—	(16,862)
Other	—	—	106,786	(20,641)	86,145
Net Cash Provided By (Used For) Investing Activities	22,832	(53,898)	(1,234,722)	385,206	(880,582)
Financing Activities					
Proceeds from issuance of	222,054	—	—	—	222,054

preferred shares, net					
Redemption of preferred shares	(230,000)	—	—	—	(230,000)
Proceeds from common shares issued, net	(7,484)	—	405,847	(405,847)	(7,484)
Proceeds from intercompany borrowings	—	—	47,000	(47,000)	—
Proceeds from borrowings	—	—	238,915	—	238,915
Repayments of intercompany borrowings	—	—	(47,000)	47,000	—
Repayments of borrowings	(100,000)	—	(72,000)	—	(172,000)
Change in cash collateral related to securities lending	—	—	(148,692)	—	(148,692)
Dividends paid to redeemable noncontrolling interests	—	—	(14,447)	956	(13,491)
Dividends paid to parent (1)	—	—	(584,087)	584,087	—
Other	—	—	(69,921)	20,641	(49,280)
Preferred dividends paid	(34,936)	—	—	—	(34,936)
Net Cash Provided By (Used For) Financing Activities	(150,366)	—	(244,385)	199,837	(194,914)
Effects of exchange	—	—	13,781	—	13,781

rates changes on foreign currency cash					
Increase (decrease) in cash	3,181	16,863	(625)	—	19,419
Cash beginning of year	1,687	71,955	769,300	—	842,942
Cash end of period	$4,868	$ 88,818	$768,675	$ —	$862,361

(1) Dividends received by parent are included in net cash provided by (used for) operating activities.

Table of Contents

ARCH CAPITAL GROUP LTD. AND SUBSIDIARIES
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (UNAUDITED)

	Nine Months Ended September 30, 2016				
Condensed Consolidating Statement of Cash Flows	ACGL (Parent Guarantor)	Arch-U.S. (Subsidiary Issuer)	Other ACGL Subsidiaries	Consolidating Adjustments and Eliminations	ACGL Consolidated
Operating Activities					
Net Cash Provided By (Used For) Operating Activities	$94,250	$ 14,448	$1,096,443	$ (168,002)	$1,037,139
Investing Activities					
Purchases of fixed maturity investments	—	—	(27,840,555)	—	(27,840,555)
Purchases of equity securities	—	—	(377,767)	—	(377,767)
Purchases of other investments	—	—	(1,008,774)	—	(1,008,774)
Proceeds from the sales of fixed maturity investments	—	—	26,731,924	—	26,731,924
Proceeds from the sales of equity securities	—	—	464,904	—	464,904
Proceeds from the sales, redemptions and maturities of other investments	—	—	879,330	—	879,330
	—	41,500	499,323	—	540,823

Proceeds from redemptions and maturities of fixed maturity investments	—	—	23,396	—	23,396
Net settlements of derivative instruments	—	—	(113,553)	—	(604,162)
Net (purchases) sales of short-term investments	(436,830)	(53,779)	(27,935)	—	(27,935)
Change in cash collateral related to securities lending	—	—	(9,247)	12,832	—
Contributions to subsidiaries	(3,585)	—	(20,911)	—	(20,911)
Acquisitions, net of cash	—	—	(11,557)	—	(11,565)
Purchases of fixed assets	(8)	—	(5,816)	—	(3,816)
Other	2,000	—	(817,238)	12,832	(1,255,108)
Net Cash Provided By (Used For) Investing Activities	(438,423)	(12,279)			
Financing Activities					
Proceeds from issuance of preferred shares, net	434,899	—	—	—	434,899
Purchases of common shares under share repurchase	(75,256)	—	—	—	(75,256)

program					
Proceeds from common shares issued, net	(3,785)	—	12,832	(12,832)	(3,785)
Proceeds from borrowings	—	—	46,000	—	46,000
Repayments of borrowings	—	—	(179,171)	—	(179,171)
Change in cash collateral related to securities lending	—	—	27,935	—	27,935
Dividends paid to redeemable noncontrolling interests	—	—	(14,448)	957	(13,491)
Dividends paid to parent (1)	—	—	(167,045)	167,045	—
Other	—	200	32,913	—	33,113
Preferred dividends paid	(16,453)	—	—	—	(16,453)
Net Cash Provided By (Used For) Financing Activities	339,405	200	(240,984)	155,170	253,791
Effects of exchange rates changes on foreign currency cash	—	—	(10,332)	—	(10,332)
Increase (decrease) in cash	(4,768)	2,369	27,889	—	25,490
Cash beginning of year	6,809	17,023	529,494	—	553,326
Cash end of period	$2,041	$ 19,392	$557,383	$ —	$578,816

(1) Dividends received by parent are included in net cash provided by (used for) operating activities.

Table of Contents
ARCH CAPITAL GROUP LTD. AND SUBSIDIARIES
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (UNAUDITED)

14. Income Taxes

The Company's income tax provision on income before income taxes resulted in an expense of 14.2% for the nine months ended September 30, 2017, compared to an expense of 5.7% for the 2016 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. For interim reporting purposes, the Company has calculated its effective tax rate for the full year of 2017 by treating any excess tax benefits that arise from the accounting for stock based compensation as a discrete item. As such, this amount is not included when projecting the Company's full year effective tax rate but rather is accounted for at the U.S. Federal statutory rate of 35% after applying the projected full year effective tax rate to actual nine-month results before the discrete item. The impact of the discrete item resulted in a benefit of 1.5% for the nine months ended September 30, 2017.

The Company had a net deferred tax asset of $248.3 million at September 30, 2017, compared to $221.2 million at December 31, 2016. In addition, the Company paid $47.9 million and $40.7 million of income taxes for the nine months ended September 30, 2017 and 2016, respectively.

15. 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, 2017, 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.

16. Transactions with Related Parties

Kewsong Lee, a director of ACGL, is a Managing Director and Deputy Chief Investment Officer for Corporate Private Equity of Carlyle Group LP ("Carlyle"). As part of its investment philosophy, the Company invests a portion of its investment portfolio in alternative investment funds. As of September 30, 2017, the total value of the Company's investments in funds or other investments managed by Carlyle was approximately $248.5 million, and the Company had aggregate unfunded commitments to funds managed by Carlyle of $471.6 million. The Company may make additional commitments to funds managed by Carlyle from time to time. During the nine months ended September 30, 2017 and 2016, the Company made aggregate capital contributions to funds managed by Carlyle of $86.0 million and $50.1 million, respectively, and received aggregate cash distributions from funds managed by Carlyle of $48.7 million and $17.9 million, respectively. Effective November 2, 2017, Mr. Lee resigned from ACGL's Board of Directors because of the expansion of his duties at Carlyle following his recent promotion to co-CEO effective January 1, 2018.

17. Acquisition

On July 1, 2017, the Company completed its previously announced acquisition of AIG United Guaranty Insurance (Asia) Limited (renamed "Arch MI Asia Limited") following the payment of $40.0 million to AIG. Arch MI Asia Limited compliments the Company's existing private mortgage insurance businesses, which have operations in the United States, Europe and Australia.

The purchase price was allocated to the acquired assets and liabilities of Arch MI Asia Limited based on estimated fair values on the acquisition date. The Company recognized other intangible assets of $2.3 million and goodwill of $0.8 million. The goodwill balance is primarily attributed to Arch MI Asia Limited's assembled workforce and access to the mortgage insurance market. None of the goodwill recognized is expected to be deductible for income tax purposes.

Table of Contents
ARCH CAPITAL GROUP LTD. AND SUBSIDIARIES
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (UNAUDITED)

18. Subsequent Events

On October 25, 2017, the Company's first-lien U.S. mortgage insurance subsidiaries entered into an aggregate excess of loss reinsurance agreement with Bellemeade Re 2017-1 Ltd. ("Bellemeade III"), a special purpose reinsurance company domiciled in Bermuda. The Bellemeade III agreement provides for up to $368.1 million of aggregate excess of loss reinsurance coverage at inception for new delinquencies on a portfolio of in-force policies issued between January 1, 2017 and June 30, 2017. For the coverage period, Bellemeade III will cover $368.1 million in excess of $165.7 million of aggregate losses. The coverage amount decreases over a ten-year period as the underlying covered mortgages amortize.

Bellemeade III financed the coverage through the issuance of mortgage insurance-linked notes in an aggregate amount of approximately $368.1 million to unrelated investors (the "Notes"). The maturity date of the Notes is October 25, 2027. The Notes will be redeemed prior to maturity upon the occurrence of a mandatory termination event or if the ceding insurers trigger a termination of the reinsurance agreement following the occurrence of an optional termination event. All of the proceeds paid to Bellemeade III from the sale of the Notes were deposited into a reinsurance trust for the sole benefit of the ceding insurers as security for Bellemeade III's obligations. At all times, funds in the reinsurance trust account are required to be invested in high credit quality money market funds.

In October 2017, a series of wildfires burned across several California counties. With the information available, the Company has established a preliminary range of pre-tax losses of $30 million to $55 million for these wildfires, net of reinsurance and reinstatement premiums. At this time, there are significant uncertainties surrounding the numbers of claims and scope of damage for these wildfires. The Company's preliminary estimate for the wildfires is based on currently available information derived from modeling techniques, industry assessments of exposure, preliminary claims information obtained from the Company's clients and brokers to date and a review of in-force contracts. Actual losses from these wildfires may vary materially from the estimates due to the inherent uncertainties in making such determinations.

Table of Contents

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, 2016 ("2016 Form 10-K"). In addition, readers should review "Risk Factors" set forth in Item 1A of Part I of our 2016 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 $11.04 billion in capital at September 30, 2017 and, through operations in Bermuda, the United States, Europe, Canada and Australia, writes insurance, reinsurance and mortgage insurance on a worldwide basis.

CURRENT OUTLOOK

The broad property casualty insurance market environment continues to be competitive in our business, consistent with our view in prior quarters, reflecting slight deterioration in rates across certain sectors. As in prior quarters, this has led to flat or lower writings in certain property casualty lines in the 2017 third quarter. However, with the continued low interest rate environment, additional price increases are needed in many lines in order for us to achieve our return requirements. Recent catastrophic loss activity, including Hurricanes Harvey, Irma and Maria and the California wildfires, may result in improvements in rates and provide opportunities for growth. Our underwriting teams continue to execute a disciplined strategy by emphasizing small and medium-sized accounts over large accounts and by utilizing reinsurance purchases to reduce volatility on large account, high capacity business.

Our mortgage segment continues to experience favorable market conditions. The mortgage segment includes our U.S. primary mortgage insurance operations, international mortgage insurance and reinsurance operations as well as government sponsored enterprise ("GSE") credit-risk sharing transactions. On December 31, 2016, we completed the acquisition of United Guaranty Corporation, a North Carolina corporation ("UGC") from American International Group, Inc. ("AIG"). The acquisition of UGC expanded our U.S. primary mortgage insurance operations by combining UGC's position as the market leader in the U.S. private mortgage insurance industry with Arch's financial strength and history of innovation. On July 1, 2017, we completed our previously announced

acquisition of AIG United Guaranty Insurance (Asia) Limited from AIG (renamed "Arch MI Asia Limited").

We insure mortgages for homes in areas that have been impacted by catastrophic events, such as Hurricanes Harvey and Irma and the California wildfires. We anticipate that we will experience an increase in delinquency notices on insured loans impacted by such events, principally in the 2017 fourth quarter. Generally, mortgage insurance losses occur only when a credit event occurs and, following a physical damage event, when the home is restored to pre-storm condition. Our ultimate claims exposure will depend on the number of delinquency notices received and the ultimate claim rate related to such notices. In the event of natural disasters, cure rates are influenced by the adequacy of homeowners and flood insurance carried on a related property, and a borrower's access to aid from government entities and private organizations, in addition to other factors which generally impact cure rates in unaffected areas. The 2017 third quarter results do not include a reserve for claims associated with future notices not yet reported as, in accordance with GAAP, no reserves are recorded until we are notified of the delinquencies. Management anticipates that subsequent quarters may experience some loss activity from the impacted areas, but does not expect this to be material.

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

Table of Contents

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, 2017, our modeled peak zone catastrophe exposure was a windstorm affecting the Northeastern U.S., with a net probable maximum pre-tax loss of $493 million, followed by windstorms affecting the Gulf of Mexico and Florida Tri-County regions with net probable maximum pre-tax losses of $442 million and $383 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. As of October 1, 2017, our modeled peak zone earthquake exposure (Los Angeles earthquake) represented approximately 60% of our peak zone catastrophe exposure, and our modeled 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—Risks 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 2016 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 $59.61 at September 30, 2017, compared to $59.60 at June 30, 2017 and $53.30 at September 30, 2016. The 11.8% increase over the trailing twelve months reflected strong investment and underwriting results, albeit impacted by the 2017 third quarter catastrophic event activity.

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 financial measure as defined in Regulation G, 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, net foreign exchange gains or losses, UGC transaction costs and other, loss on repurchase of preferred shares and income taxes. Management uses Operating ROAE as a key measure of the return generated to common shareholders. See "Comment on Non-GAAP Financial Measures."

Our Operating ROAE was (5.3)% for the 2017 third quarter, compared to 9.3% for the 2016 third quarter, and 4.4% for the nine months ended September 30, 2017, compared to 9.4% for

Table of Contents

the 2016 period. The 2017 returns reflect the high level of catastrophic loss activity in the 2017 third quarter, partially offset by strong mortgage insurance underwriting performance and favorable investment returns.

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, excludes amounts reflected in the 'other' segment, and reflects the effect of financial market conditions along with foreign currency fluctuations. In addition, total return incorporates the timing of investment returns during the periods. The following table summarizes our total return compared to the benchmark return against which we measured our portfolio during the periods. See "Comment on Non-GAAP Financial Measures."

	Arch Portfolio	Benchmark Return
2017 Third Quarter	1.60 %	1.24 %
2016 Third Quarter	0.88 %	0.83 %
Nine Months Ended September 30, 2017	5.05 %	4.33 %
Nine Months Ended September 30, 2016	4.03 %	4.44 %

Excluding the effects of foreign exchange, total return was 1.26% for the 2017 third quarter and 4.24% for the nine months ended September 30, 2017, reflecting strong returns on equity and alternative strategies. Total return for the 2017 third quarter reflected the weakening of the U.S. Dollar against the Euro, British Pound Sterling and other major currencies on non-U.S. Dollar denominated investments.

The benchmark return index included weightings to the following indices, which are primarily from The Bank of America Merrill Lynch ("BoAML"):

	%
BoAML 1-10 Year U.S. Corporate & All Yankees, A - AAA Rated Index	20.00 %
BoAML 1-10 Year U.S. Municipal Securities Index	17.00
BoAML 1-5 Year U.S. Treasury Index	13.00
BoAML 3-5 Year Fixed Rate Asset Backed Securities Index	7.00
BoAML 5-10 Year U.S. Treasury Index	5.00
Barclays CMBS Inv. Grade, AAA Rated Index	5.00
MSCI All Country World Gross Total Return Index	5.00
BoAML German Government Index	4.50
BoAML U.S. Mortgage Backed Securities Index	4.00
BoAML 1-5 Year U.K. Gilt Index	3.00
Hedge Fund Research HFRX Fixed Income Credit Index	2.50
Hedge Fund Research HFRX Equal Weighted Strategies	2.50
BoAML U.S. High Yield Constrained Index	2.50
BoAML 1-5 Year Australian Governments Index	2.50
S&P Leveraged Loan Index	2.50
BoAML 0-3 Month U.S. Treasury Bill Index	2.00
BoAML 1-5 Year Canada Government Index	1.50
BoAML 20+ Year Canada Government Index	0.50
Total	100.00%

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 changes to the mix of liability currencies and durations 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, 2017, the benchmark return index had an average credit quality of “Aa2” by Moody’s Investors Service (“Moody’s”), and an estimated duration of 3.55 years.

Table of Contents

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, net foreign exchange gains or losses, UGC transaction costs and other, loss on redemption of preferred shares and income taxes, and the use of annualized operating return on average common equity. The presentation of after-tax operating income available to Arch common shareholders and annualized operating return on average common equity are non-GAAP financial measures as defined in Regulation G. The reconciliation of such measures to net income available to Arch common shareholders and annualized return on average common equity (the most directly comparable GAAP financial measures) 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, net foreign exchange gains or losses, UGC transaction costs and other and loss on repurchase of preferred shares 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 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. UGC transaction costs and other include advisory, financing, legal, severance, incentive compensation and other transaction costs related to the UGC acquisition. The Company believes that UGC transaction costs and other, due to their non-recurring nature, are not indicative of the performance of, or trends in, the Company’s business performance. The loss on redemption of preferred shares related to the redemption of our Series C preferred shares in September 2017 and had no impact on shareholders' equity or cash flows. 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, net foreign exchange gains or losses, UGC transaction costs and other and loss on redemption of preferred shares 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.

Our segment information includes the presentation of consolidated underwriting income or loss and a subtotal of underwriting income or loss before the contribution from the ‘other’ segment. Such measures represent the pre-tax profitability of our underwriting operations and include net premiums earned plus other underwriting income, less losses and loss adjustment expenses, acquisition expenses and other operating expenses. Other operating expenses include those operating expenses that are incremental and/or directly attributable to our individual underwriting operations. Underwriting income or loss does not incorporate items included in our corporate (non-underwriting) segment. While these measures are presented in Note 5, “Segment Information,” of the notes accompanying our consolidated financial statements, they are considered non-GAAP financial measures when presented elsewhere on a consolidated basis. The

Table of Contents

reconciliations of underwriting income or loss to income before income taxes (the most directly comparable GAAP financial measure) on a consolidated basis and a subtotal before the contribution from the 'other' segment, in accordance with Regulation G, is shown in Note 5, "Segment Information" of the notes accompanying our consolidated financial statements.

We measure segment performance for our three underwriting segments based on underwriting income or loss. We do not manage our assets by underwriting segment and, accordingly, investment income and other non-underwriting related items are not allocated to each underwriting segment. For the 'other' segment, performance is measured based on net income or loss.

Along with consolidated underwriting income, we provide a subtotal of underwriting income or loss before the contribution from the 'other' segment. Pursuant to generally accepted accounting principles, Watford Re is considered a variable interest entity and we concluded that we are the primary beneficiary of Watford Re. As such, we consolidate the results of Watford Re in our consolidated financial statements, although we only own approximately 11% of Watford Re's common equity. Watford Re has its own management and board of directors that is responsible for its overall profitability. In addition, we do not guarantee or provide credit support for Watford Re. Since Watford Re is an independent company, the assets of Watford Re can be used only to settle obligations of Watford Re and Watford Re is solely responsible for its own liabilities and commitments. Our financial exposure to Watford Re is limited to our investment in Watford Re's common and preferred shares and counterparty credit risk (mitigated by collateral) arising from the reinsurance transactions. We believe that presenting certain information excluding the 'other' segment enables investors and other users of our financial information to analyze our performance in a manner similar to how our management analyzes performance

Our presentation of segment information includes the use of a current year loss ratio which excludes favorable or adverse development in prior year loss reserves. This ratio is a non-GAAP financial measure as defined in Regulation G. The reconciliation of such measure to the loss ratio (the most directly comparable GAAP financial measure) in accordance with Regulation G is shown on the individual segment pages. Management utilizes the current year loss ratio in its analysis of the underwriting performance of each of our underwriting segments.

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, excludes amounts reflected in the 'other' segment, and reflects the effect of financial market conditions along with foreign currency fluctuations. In addition, total return incorporates the timing of investment returns during the

periods. There is no directly comparable GAAP financial measure for total return. 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.

RESULTS OF OPERATIONS

The following table summarizes our consolidated financial data, including a reconciliation of net income available to Arch common shareholders to after-tax operating income available to Arch common shareholders. Each line item reflects the impact of our approximate 11% ownership of Watford Re's common equity.

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2017	2016	2017	2016
Net income (loss) available to Arch common shareholders	$(52,760)	$247,388	$362,967	$602,272
Net realized (gains) losses	(64,344)	(99,159)	(111,930)	(175,558)
Net impairment losses recognized in earnings	1,878	3,867	5,415	16,849
	(31,090)	(16,662)	(111,884)	(32,054)

Equity in net (income) loss of investment funds accounted for using the equity method				
Net foreign exchange (gains) losses	27,811	4,054	85,619	3,560
UGC transaction costs and other	2,990	7,142	21,249	7,142
Loss on redemption of preferred shares	6,735	—	6,735	—
Income tax expense (benefit) (1)	1,647	2,970	1,580	13,705
After-tax operating income (loss) available to Arch common shareholders	$(107,133)	$149,600	$259,751	$435,916
Beginning common shareholders' equity	$8,126,332	$6,340,583	$7,481,163	$5,841,542
Ending common shareholders' equity	8,138,589	6,538,983	8,138,589	6,538,983
Average common shareholders' equity	$8,132,461	$6,439,783	$7,809,876	$6,190,263
Annualized return on average common equity %	(2.6)	15.4	6.2	13.0
Annualized operating return on average common equity %	(5.3)	9.3	4.4	9.4

(1) Income tax on 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, net foreign exchange gains or losses, UGC transaction costs and other and loss on redemption of preferred shares reflects the relative mix reported by jurisdiction and the varying tax rates in each jurisdiction.

Table of Contents

Segment Information

We classify our businesses into three underwriting segments — insurance, reinsurance and mortgage — and two other operating segments — corporate (non-underwriting) and 'other.' 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 and Chief Executive Officer, the President and Chief Operating Officer, 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.

Insurance Segment

The following tables set forth our insurance segment's underwriting results:

	Three Months Ended September 30,		
	2017	2016	% Change
Gross premiums written	$787,447	$758,934	3.8
Premiums ceded	(222,516)	(217,446)	
Net premiums written	564,931	541,488	4.3
Change in unearned premiums	(29,766)	(22,410)	
Net premiums earned	535,165	519,078	3.1
Losses and loss adjustment expenses	(568,795)	(332,845)	
Acquisition expenses	(82,638)	(77,146)	
Other operating expenses	(90,875)	(86,613)	
Underwriting income (loss)	$(207,143)	$22,474	(1,021.7)

Underwriting Ratios			% Point Change
Loss ratio	106.3%	64.1%	42.2
Acquisition expense ratio	15.4%	14.9%	0.5
Other operating expense ratio	17.0%	16.7%	0.3
Combined ratio	138.7%	95.7%	43.0

	Nine Months Ended September 30,		
	2017	2016	% Change
Gross premiums written	$2,313,630	$2,319,530	(0.3)
Premiums ceded	(704,057)	(713,110)	
Net premiums written	1,609,573	1,606,420	0.2
Change in unearned premiums	(51,188)	(46,603)	
Net premiums earned	1,558,385	1,559,817	(0.1)
Losses and loss adjustment expenses	(1,252,375)	(1,011,087)	
Acquisition expenses	(236,378)	(228,806)	
Other operating expenses	(271,268)	(263,111)	
Underwriting income (loss)	$(201,636)	$56,813	(454.9)

Underwriting Ratios			% Point Change

Loss ratio	80.4	% 64.8	% 15.6
Acquisition expense ratio	15.2	% 14.7	% 0.5
Other operating expense ratio	17.4	% 16.9	% 0.5
Combined ratio	113.0	% 96.4	% 16.6

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, 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

Table of Contents

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,			
	2017		2016	
	Amount	%	Amount	%
Professional lines	$120,509	21.3	$119,198	22.0
Programs	109,805	19.4	91,165	16.8
Construction and national accounts	66,053	11.7	65,105	12.0
Travel, accident and health	71,386	12.6	63,453	11.7
Excess and surplus casualty	43,853	7.8	54,075	10.0
Property, energy, marine and aviation	48,396	8.6	42,092	7.8
Lenders products	25,732	4.6	28,633	5.3
Other	79,197	14.0	77,767	14.4
Total	$564,931	100.0	$541,488	100.0

2017 Third Quarter versus 2016 Third Quarter. Gross premiums written by the insurance segment in the 2017 third quarter were 3.8% higher than in the 2016 third quarter, while net premiums written were 4.3% higher than in the 2016 third quarter. The increase in net premiums written reflected growth in program business, due to the continued effects of two newer programs, and in travel business. Such amounts were partially offset by a decrease in excess and surplus casualty business which reflected a lower level of project-related premiums, primarily due to the fact that the 2016 period included a

significant amount of premium from one large construction project, along with a targeted reduction in certain exposures.

	Nine Months Ended September 30,			
	2017		2016	
	Amount	%	Amount	%
Professional lines	$339,761	21.1	$336,184	20.9
Programs	303,190	18.8	256,369	16.0
Construction and national accounts	239,504	14.9	254,839	15.9
Travel, accident and health	189,604	11.8	175,172	10.9
Excess and surplus casualty	134,907	8.4	168,144	10.5
Property, energy, marine and aviation	134,531	8.4	142,261	8.9
Lenders products	71,896	4.5	78,671	4.9
Other	196,180	12.2	194,780	12.1
Total	$1,609,573	100.0	$1,606,420	100.0

Nine Months Ended September 30, 2017 versus 2016 period. Gross premiums written by the insurance segment for the nine months ended September 30, 2017 were 0.3% lower than in the 2016 period, while net premiums written were 0.2% higher than in the 2016 period. The change in net premiums written largely reflected our response to weaker market conditions, with reductions in excess and surplus casualty, construction and property lines, partially offset by growth in programs and travel, accident and health. The lower level of excess and surplus casualty reflected a targeted reduction in certain exposures, increased use of reinsurance and other factors while the decrease in construction premiums reflected non-renewals as well as lower audit and project premiums. The reduction in property lines reflected continued weak market conditions. Growth in program business primarily reflected the continued impact of two newer programs while the increase in travel, accident and health reflected continued expansion in existing travel accounts.

Table of Contents

Net Premiums Earned.

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

	Three Months Ended September 30,			
	2017		2016	
	Amount	%	Amount	%
Professional lines	$113,146	21.1	$110,614	21.3
Programs	94,353	17.6	84,889	16.4
Construction and national accounts	77,779	14.5	80,090	15.4
Travel, accident and health	66,136	12.4	57,097	11.0
Excess and surplus casualty	47,852	8.9	54,687	10.5
Property, energy, marine and aviation	46,906	8.8	45,304	8.7
Lenders products	23,499	4.4	25,090	4.8
Other	65,494	12.2	61,307	11.8
Total	$535,165	100.0	$519,078	100.0

	Nine Months Ended September 30,			
	2017		2016	
	Amount	%	Amount	%
Professional lines	$330,159	21.2	$324,114	20.8
Programs	267,115	17.1	273,985	17.6
Construction and national accounts	236,050	15.1	241,547	15.5
Travel, accident and health	188,053	12.1	164,463	10.5
Excess and surplus casualty	147,709	9.5	166,807	10.7
Property, energy, marine and aviation	126,407	8.1	141,417	9.1
Lenders products	72,160	4.6	72,499	4.6
Other	190,732	12.2	174,985	11.2
Total	$1,558,385	100.0	$1,559,817	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 reflect changes in net premiums written over the previous five quarters. Net premiums earned in the 2017 third quarter were 3.1% higher than in the 2016 third quarter, and 0.1% lower for the nine months ended September 30, 2017 than in the 2016 period.

Losses and Loss Adjustment Expenses.

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

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2017	2016	2017	2016
Current year	106.9 %	66.7 %	80.9 %	66.4 %
Prior period reserve development	(0.6)%	(2.6)%	(0.5)%	(1.6)%
Loss ratio	106.3 %	64.1 %	80.4 %	64.8 %

Current Year Loss Ratio.

The insurance segment's current year loss ratio in the 2017 third quarter was 40.2 points higher than in the 2016 third quarter and reflected 40.1 points of current year catastrophic activity, primarily related to Hurricanes Harvey, Irma and Maria, compared to 0.3 points in the 2016 third quarter. The insurance segment's current year loss ratio for the nine months ended September 30, 2017 was 14.5 points higher than in the 2016 period and reflected 14.5 points of current year catastrophic activity, compared to 1.5 points in the 2016 period. The current year loss ratios for the 2017 periods reflected changes in the mix of business and loss cost trends.

Prior Period Reserve Development.

The insurance segment's net favorable development was $3.0 million, or 0.6 points, for the 2017 third quarter, compared to $13.7 million, or 2.6 points, for the 2016 third quarter, and $7.2 million, or 0.5 points, for the nine months ended September 30, 2017, compared to $24.8 million, or 1.6 points, for the 2016 period. See note 6, "Reserve for Losses and Loss Adjustment Expenses," of the notes accompanying our consolidated financial statements for information about the insurance segment's prior year reserve development.

Underwriting Expenses.

2017 Third Quarter versus 2016 Third Quarter: The insurance segment's underwriting expense ratio was 32.4% in the 2017 third quarter, compared to 31.6% in the 2016 third quarter. The comparison of the underwriting expense ratios reflects changes in the level of reinsurance ceded on a quota share basis and changes in the mix of business.

Nine Months Ended September 30, 2017 versus 2016 period: The insurance segment's underwriting expense ratio was 32.6% for the nine months ended September 30, 2017, compared to 31.6% for the 2016 period. The comparison of the underwriting expense ratios reflects changes in the level of reinsurance ceded on a quota share basis and changes in the mix of business.

Table of Contents

Reinsurance Segment

The following tables set forth our reinsurance segment's underwriting results:

	Three Months Ended September 30,		
	2017	2016	% Change
Gross premiums written	$422,083	$324,361	30.1
Premiums ceded	(105,389)	(89,551)	
Net premiums written	316,694	234,810	34.9
Change in unearned premiums	6,879	17,117	
Net premiums earned	323,573	251,927	28.4
Other underwriting income	1,728	2,216	
Losses and loss adjustment expenses	(318,609)	(105,924)	
Acquisition expenses	(57,340)	(50,192)	
Other operating expenses	(36,214)	(35,389)	
Underwriting income (loss)	$(86,862)	$62,638	(238.7)

Underwriting Ratios			% Point Change
Loss ratio	98.5%	42.0%	56.5
Acquisition expense ratio	17.7%	19.9%	(2.2)
Other operating expense ratio	11.2%	14.0%	(2.8)
Combined ratio	127.4%	75.9%	51.5

	Nine Months Ended September 30,		
	2017	2016	% Change
Gross premiums written	$1,351,051	$1,217,804	10.9
Premiums ceded	(386,743)	(370,068)	
Net premiums written	964,308	847,736	13.8
Change in unearned premiums	(81,182)	(43,345)	
Net premiums earned	883,126	804,391	9.8
Other underwriting income	1,143	22,659	
Losses and loss adjustment expenses	(631,669)	(363,613)	
Acquisition expenses	(154,638)	(160,706)	
Other operating expenses	(110,458)	(108,561)	
Underwriting income (loss)	$(12,496)	$194,170	(106.4)

Underwriting Ratios			% Point Change
Loss ratio	71.5%	45.2%	26.3
Acquisition expense ratio	17.5%	20.0%	(2.5)
Other operating expense ratio	12.5%	13.5%	(1.0)
Combined ratio	101.5%	78.7%	22.8

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.

Table of Contents

Premiums Written.

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

	Three Months Ended September 30,			
	2017		2016	
	Amount	%	Amount	%
Other specialty	$101,400	32.0	$74,169	31.6
Casualty	113,446	35.8	59,242	25.2
Property excluding property catastrophe	63,943	20.2	70,733	30.1
Property catastrophe	28,123	8.9	19,793	8.4
Marine and aviation	2,037	0.6	5,435	2.3
Other	7,745	2.4	5,438	2.3
Total	$316,694	100.0	$234,810	100.0
Pro rata	$206,948	65.3	$147,280	62.7
Excess of loss	109,746	34.7	87,530	37.3
Total	$316,694	100.0	$234,810	100.0

2017 Third Quarter versus 2016 Third Quarter. Gross premiums written by the reinsurance segment in the 2017 third quarter were 30.1% higher than in the 2016 third quarter, while net premiums written were 34.9% higher than in the 2016 third quarter. Gross and net premiums written for the 2017 third quarter reflected an increase of $45.4 million in casualty business related to a retroactive reinsurance contract which was substantially earned in the period and resulted in a corresponding increase to losses and loss adjustment expenses. In addition, reinstatement premiums related to Hurricanes Harvey, Irma and Maria contributed $25.0 million to gross premiums written and $15.8 million to net premiums written in the 2017 third quarter. The increase in net premiums written in the 2017 third quarter also reflected growth in other specialty business, primarily in international motor quota share contracts.

	Nine Months Ended September 30,			
	2017		2016	
	Amount	%	Amount	%
Other specialty	$371,146	38.5	$288,932	34.1
Casualty	287,120	29.8	247,280	29.2
Property excluding property catastrophe	208,445	21.6	214,287	25.3
Property catastrophe	57,773	6.0	59,269	7.0
Marine and aviation	20,510	2.1	24,438	2.9
Other	19,314	2.0	13,530	1.6
Total	$964,308	100.0	$847,736	100.0
Pro rata	$536,857	55.7	$405,720	47.9
Excess of loss	427,451	44.3	442,016	52.1
Total	$964,308	100.0	$847,736	100.0

Nine Months Ended September 30, 2017 versus 2016 period. Gross premiums written by the reinsurance segment for the nine months ended September 30, 2017 were 10.9% higher than in the 2016 period, while net premiums written were 13.8% higher than in the 2016 period. Gross and net premiums written for the

nine months ended September 30, 2017 reflected the casualty retroactive reinsurance contract from the 2017 third quarter noted above and reinstatement premiums from Hurricanes Harvey, Irma and Maria. Gross and net premiums written in both periods also reflected an increase in other specialty business related to certain other retroactive reinsurance contracts written in the second quarter of each period. In addition to the retroactive reinsurance contracts noted above, the increase in net premiums written in the nine months ended September 30, 2017 reflected growth in

other specialty business, primarily in international motor quota share contracts.

Net Premiums Earned.

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

	Three Months Ended September 30,			
	2017		2016	
	Amount	%	Amount	%
Other specialty	$96,090	29.7	$76,686	30.4
Casualty	117,255	36.2	69,414	27.6
Property excluding property catastrophe	65,049	20.1	72,550	28.8
Property catastrophe	30,039	9.3	17,582	7.0
Marine and aviation	6,801	2.1	10,336	4.1
Other	8,339	2.6	5,359	2.1
Total	$323,573	100.0	$251,927	100.0
Pro rata	$188,874	58.4	$132,649	52.7
Excess of loss	134,699	41.6	119,278	47.3
Total	$323,573	100.0	$251,927	100.0

	Nine Months Ended September 30,			
	2017		2016	
	Amount	%	Amount	%
Other specialty	$307,620	34.8	$260,428	32.4
Casualty	270,126	30.6	225,624	28.0
Property excluding property catastrophe	197,785	22.4	209,990	26.1
Property catastrophe	61,975	7.0	55,358	6.9
Marine and aviation	26,277	3.0	40,773	5.1
Other	19,343	2.2	12,218	1.5
Total	$883,126	100.0	$804,391	100.0
Pro rata	$503,954	57.1	$426,275	53.0
Excess of loss	379,172	42.9	378,116	47.0
Total	$883,126	100.0	$804,391	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. For the 2017 third quarter, net premiums earned were 28.4% higher than in the 2016 third quarter, and reflect the retroactive reinsurance contract and reinstatement premium impacts discussed above as well as in net premiums written over the previous five quarters. Net premiums earned for the nine months ended September 30, 2017 were 9.8% higher than in the 2016 period.

Table of Contents

Other Underwriting Income (Loss).

Other underwriting income (loss) for the 2017 third quarter and nine months ended September 30, 2017 was $1.7 million, compared to $2.2 million for the 2016 third quarter, and $1.1 million for the nine months ended September 30, 2017, compared to $22.7 million for the 2016 period. The 2016 year-to-date period included $19.1 million related to a contract which was commuted during the 2016 second quarter. This contract had been reflected as a deposit accounting liability (i.e., a contract that, in accordance with GAAP, does not pass risk transfer) prior to the commutation.

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,	
	2017	2016	2017	2016
Current year	109.8 %	65.6 %	86.6 %	67.2 %
Prior period reserve development	(11.3)%	(23.6)%	(15.1)%	(22.0)%
Loss ratio	98.5 %	42.0 %	71.5 %	45.2 %

Current Year Loss Ratio.

The reinsurance segment's current year loss ratio in the 2017 third quarter was 44.2 points higher than in the 2016 third quarter and reflected 46.3 points of current year catastrophic activity, primarily related to Hurricanes Harvey, Irma and Maria, compared to 4.1 points in the 2016 third quarter. The reinsurance segment's current year loss ratio for the nine months ended September 30, 2017 was 19.4 points higher than in the 2016 period and reflected 20.0 points of current year catastrophic activity, compared to 3.9 points in the 2016 period. The balance of the change in the 2017 current year loss ratios resulted, in part, from the effects of market conditions and changes in the mix of business.

Prior Period Reserve Development.

The reinsurance segment's net favorable development was $36.5 million, or 11.3 points, for the 2017 third quarter, compared to $59.5 million, or 23.6 points, for the 2016 third quarter, and $133.3 million, or 15.1 points, for the nine months ended September 30, 2017, compared to $176.7 million, or 22.0 points, for the 2016 period. See note 6, "Reserve for Losses and Loss Adjustment Expenses," of the notes accompanying our consolidated financial statements for information about the reinsurance segment's prior year reserve development.

Underwriting Expenses.

2017 Third Quarter versus 2016 Third Quarter: The underwriting expense ratio for the reinsurance segment was 28.9% in the 2017 third quarter, compared to 33.9% in the 2016

third quarter. The retroactive reinsurance contract noted above improved the reported 2017 third quarter underwriting expense ratio by 4.1 points. The comparison of the underwriting expense ratios also reflected changes in the mix and type of business and a higher level of net premiums earned in the 2017 third quarter.

Nine Months Ended September 30, 2017 versus 2016 period: The underwriting expense ratio for the reinsurance segment was 30.0% for the nine months ended September 30, 2017, compared to 33.5% for the 2016 period. The comparison of the underwriting expense ratios primarily reflected changes in the mix and type of business.

Mortgage Segment

The following tables set forth our mortgage segment's underwriting results. On December 31, 2016, we completed the acquisition of UGC. As such, the 2017 results reflect the combination of Arch and UGC while the 2016 periods do not reflect UGC activity.

	Three Months Ended September 30,		
	2017	2016	% Change
Gross premiums written	$347,951	$131,726	164.1
Premiums ceded	(57,900)	(51,182)	
Net premiums written	290,051	80,544	260.1
Change in unearned premiums	(15,533)	(3,582)	

Net premiums earned	274,518	76,962	256.7
Other underwriting income	3,599	4,740	
Losses and loss adjustment expenses	(35,156)	(11,107)	
Acquisition expenses	(21,803)	(5,190)	
Other operating expenses	(34,770)	(24,249)	
Underwriting income	$186,388	$41,156	352.9

Underwriting Ratios			% Point Change
Loss ratio	12.8%	14.4%	(1.6)
Acquisition expense ratio	7.9%	6.7%	1.2
Other operating expense ratio	12.7%	31.5%	(18.8)
Combined ratio	33.4%	52.6%	(19.2)

Table of Contents

	Nine Months Ended September 30,		
	2017	2016	% Change
Gross premiums written	$1,032,800	$361,440	185.7
Premiums ceded	(194,139)	(62,918)	
Net premiums written	838,661	298,522	180.9
Change in unearned premiums	(61,776)	(93,283)	
Net premiums earned	776,885	205,239	278.5
Other underwriting income	11,999	12,670	
Losses and loss adjustment expenses	(84,915)	(20,102)	
Acquisition expenses	(76,235)	(16,947)	
Other operating expenses	(108,790)	(70,590)	
Underwriting income	$518,944	$110,270	370.6

Underwriting Ratios			% Point Change
Loss ratio	10.9%	9.8%	1.1
Acquisition expense ratio	9.8%	8.3%	1.5
Other operating expense ratio	14.0%	34.4%	(20.4)
Combined ratio	34.7%	52.5%	(17.8)

The mortgage segment includes the results of our U.S. primary mortgage insurance operations, including Arch Mortgage Insurance Company and United Guaranty Residential Insurance Company (combined “Arch MI U.S.”), which are approved as eligible mortgage insurers by Federal National Mortgage Association (“Fannie Mae”) and Federal Home Loan Mortgage Corporation (“Freddie Mac”), each a GSE. Arch MI U.S. and Arch Mortgage Insurance Designated Activity Company are leading providers of mortgage insurance products and services to the U.S. and European markets, respectively. The mortgage segment also includes GSE credit risk-sharing transactions and mortgage reinsurance for the U.S. and Australian markets.

Premiums Written.

The following tables set 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,			
	2017		2016	
	Amount	%	Amount	%
Client location:				
United States	$262,028	90.3	$77,488	96.2
Other	28,023	9.7	3,056	3.8
Total	$290,051	100.0	$80,544	100.0
Underwriting location:				
United States	$235,447	81.2	$50,236	62.4
Other	54,604	18.8	30,308	37.6
Total	$290,051	100.0	$80,544	100.0

	Nine Months Ended September 30,			
	2017		2016	
	Amount	%	Amount	%
Client location:				
United States	756,620	90.2	199,552	66.8

Other	82,041	9.8	98,970	33.2
Total	$838,661	100.0	$298,522	100.0

Underwriting location:				
United States	$679,442	81.0	$128,008	42.9
Other	159,219	19.0	170,514	57.1
Total	$838,661	100.0	$298,522	100.0

2017 Third Quarter versus 2016 Third Quarter. Gross premiums written by the mortgage segment in the 2017 third quarter were 164.1% higher than in the 2016 third quarter, primarily reflecting the growth in insurance in force due to the acquisition of UGC. Premiums ceded for the 2017 third quarter were primarily related to the 50% quota share reinsurance agreement to AIG, covering 2014 to 2016 policy years of UGC business on a run-off basis, while the 2016 third quarter reflected the retrocession of $45.4 million of Australian mortgage reinsurance business.

Nine Months Ended September 30, 2017 versus 2016 period. Gross premiums written by the mortgage segment were 185.7% higher than in the 2016 period, primarily reflecting the growth in insurance in force due to the acquisition of UGC.

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 80.2% at September 30, 2017, compared to 78.1% at June 30, 2017. The higher persistency rate at September 30, 2017 reflects changes in level of mortgage refinance activity and mortgage interest rates.

Table of Contents

Arch MI U.S. generated $17.7 billion of new insurance written ("NIW") in the 2017 third quarter, compared to $8.8 billion in the 2016 third quarter. NIW represents the original principal balance of all loans that received coverage during the period. Our NIW for the 2017 third quarter reflected the combination of Arch and UGC, a higher percentage of monthly premium business and an increase in purchase market activity.

The following tables provide details on the NIW generated by Arch MI U.S.:

(U.S. Dollars in millions)	Three Months Ended September 30,			
	2017		2016	
	Amount	%	Amount	%
Total new insurance written (NIW) (1)	$17,683		$8,753	
Credit quality (FICO):				
>=740	$10,063	56.9	$5,187	59.3
680-739	6,357	35.9	3,074	35.1
620-679	1,263	7.1	492	5.6
Total	$17,683	100.0	$8,753	100.0
Loan-to-value (LTV):				
95.01% and above	$1,757	9.9	$507	5.8
90.01% to 95.00%	8,406	47.5	4,261	48.7
85.01% to 90.00%	5,668	32.1	2,883	32.9
85.01% and below	1,852	10.5	1,102	12.6
Total	$17,683	100.0	$8,753	100.0
Monthly vs. single:				
Monthly	$15,392	87.0	$7,765	88.7
Single	2,291	13.0	988	11.3
Total	$17,683	100.0	$8,753	100.0
Purchase vs. refinance:				
Purchase	$16,460	93.1	$7,264	83.0
Refinance	1,223	6.9	1,489	17.0
Total	$17,683	100.0	$8,753	100.0

(1) Represents the original principal balance of all loans that received coverage during the period.

(U.S. Dollars in millions)	Nine Months Ended September 30,			
	2017		2016	
	Amount	%	Amount	%
Total new insurance written (NIW) (1)	$47,646		$18,079	
Credit quality (FICO):				
>=740	$27,061	56.8	$10,945	60.5
680-739	17,246	36.2	6,195	34.3
620-679	3,339	7.0	938	5.2
<620	—	—	1	—
Total	$47,646	100.0	$18,079	100.0

Loan-to-value (LTV):				
95.01% and above	$4,429	9.3	$1,233	6.8
90.01% to 95.00%	22,763	47.8	8,477	46.9
85.01% to 90.00%	15,191	31.9	5,982	33.1
85.01% and below	5,263	11.0	2,387	13.2
Total	$47,646	100.0	$18,079	100.0
Monthly vs. single:				
Monthly	$40,592	85.2	$15,136	83.7
Single	7,054	14.8	2,943	16.3
Total	$47,646	100.0	$18,079	100.0
Purchase vs. refinance:				
Purchase	$43,243	90.8	$14,628	80.9
Refinance	4,403	9.2	3,451	19.1
Total	$47,646	100.0	$18,079	100.0

(1) Represents the original principal balance of all loans that received coverage during the period.

Net Premiums Earned.

The following tables set forth our mortgage segment's net premiums earned by client location and underwriting location:

	Three Months Ended September 30,			
	2017		2016	
	Amount	%	Amount	%
Client Location:				
United States	$262,324	95.6	$64,616	84.0
Other	12,194	4.4	12,346	16.0
Total	$274,518	100.0	$76,962	100.0
Underwriting location:				
United States	$233,862	85.2	$40,498	52.6
Other	40,656	14.8	36,464	47.4
Total	$274,518	100.0	$76,962	100.0

	Nine Months Ended September 30,			
	2017		2016	
	Amount	%	Amount	%
Client Location:				
United States	$745,011	95.9	$182,794	89.1
Other	31,874	4.1	22,445	10.9
Total	$776,885	100.0	$205,239	100.0
Underwriting location:				
United States	$661,645	85.2	$107,142	52.2
Other	115,240	14.8	98,097	47.8
Total	$776,885	100.0	$205,239	100.0

Table of Contents

Net premiums earned for the 2017 periods were higher than in the 2016 periods, primarily due to the UGC acquisition and growth in insurance in force for Arch MI U.S.

Other Underwriting Income.

Other underwriting income, which is primarily related to older GSE risk-sharing transactions receiving derivative accounting treatment, was $3.6 million for the 2017 third quarter, compared to $4.7 million for the 2016 third quarter, and $12.0 million for the nine months ended September 30, 2017, compared to $12.7 million for the 2016 period.

Losses and Loss Adjustment Expenses.

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

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2017	2016	2017	2016
Current year	20.6 %	17.6 %	20.5 %	17.7 %
Prior period reserve development	(7.8)%	(3.2)%	(9.6)%	(7.9)%
Loss ratio	12.8 %	14.4 %	10.9 %	9.8 %

Current Year Loss Ratio.

The mortgage segment's current year loss ratio was 3.0 points higher in the 2017 third quarter than in the 2016 third quarter and 2.8 points higher for the nine months ended September 30, 2017 than in the 2016 period. The current year loss ratio for the 2017 third quarter reflects the UGC acquisition and growth in insurance in force along with changes in the mix of business.

Prior Period Reserve Development.

The mortgage segment's net favorable development was $21.5 million, or 7.8 points, for the 2017 third quarter, compared to $2.5 million, or 3.2 points, for the 2016 third quarter, and $74.9 million, or 9.6 points for the nine months ended September 30, 2017, compared to $16.3 million, or 7.9 points, for the 2016 period. See note 6, "Reserve for Losses and Loss Adjustment Expenses," of the notes accompanying our consolidated financial statements for information about the mortgage segment's prior year reserve development.

Underwriting Expenses.

2017 Third Quarter versus 2016 Third Quarter. The underwriting expense ratio for the mortgage segment was 20.6% in the 2017 third quarter, compared to 38.2% in the 2016 third quarter. The improvement primarily resulted from a higher level of net premiums earned reflecting the UGC acquisition as Arch MI U.S. has increased its scale of operations.

Nine Months Ended September 30, 2017 versus 2016 period. The underwriting expense ratio for the mortgage segment was

23.8% for the nine months ended September 30, 2017, compared to 42.7% for the 2016 period. The improvement primarily resulted from a higher level of net premiums earned reflecting the UGC acquisition as Arch MI U.S. has increased its scale of operations.

Corporate (Non-Underwriting) Segment

The corporate (non-underwriting) segment results include net investment income, other income (loss), corporate expenses, UGC transaction costs and other, amortization of intangible assets, interest expense, items related to our non-cumulative preferred shares, 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 and income taxes. Such amounts exclude the results of 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,	
	2017	2016	2017	2016
Fixed maturities	$84,602	$58,542	$251,039	$181,908

Equity securities	3,210	3,633	10,152	11,373
Short-term investments	2,514	823	5,624	1,899
Other (1)	18,238	15,103	57,770	47,454
Gross investment income	108,564	78,101	324,585	242,634
Investment expenses (2)	(14,437)	(11,819)	(42,126)	(35,546)
Net investment income	$94,127	$66,282	$282,459	207,088

(1) Amounts include dividends and interest distributions on investment funds, term loan investments and other items.

(2) Investment expenses were approximately 0.32% of average invested assets for the 2017 third quarter, compared to 0.31% for the 2016 third quarter, and 0.30% for the nine months ended September 30, 2017, compared to 0.32% for the 2016 period.

Net investment income for the 2017 periods reflected income on the acquired UGC portfolio and higher returns on fund investments than in the 2016 periods. The pre-tax investment income yield, calculated based on amortized cost and on an annualized basis, was 2.00% for the 2017 third quarter, compared to 1.81% for the 2016 third quarter, and 2.04% for the nine months ended September 30, 2017, compared to 1.95% for the 2016 period.

Table of Contents

Corporate Expenses.
Corporate expenses were $14.1 million for the 2017 third quarter, compared to $11.3 million for the 2016 third quarter, and $48.5 million for the nine months ended September 30, 2017, compared to $37.9 million for the 2016 period. The higher level of corporate expenses in the 2017 periods was primarily due to higher incentive compensation costs.
UGC Transaction Costs and Other.
UGC transaction costs and other were $3.0 million for the 2017 third quarter and $21.2 million for the nine months ended September 30, 2017. UGC transaction costs and other include advisory, financing, legal and other transaction costs related to the UGC acquisition. Amounts for the 2017 third quarter primarily related to severance and related costs, while the total for the nine months ended September 30, 2017 reflected $13.2 million of severance and related costs, with the remainder primarily due to incentive compensation paid in conjunction with the UGC acquisition.
Amortization of Intangible Assets.
Amortization of intangible assets for the 2017 third quarter was $31.8 million, compared to $4.9 million for the 2016 third quarter, and $93.9 million for the nine months ended September 30, 2017, compared to $14.5 million for the 2016 period. During the 2017 first quarter, we reclassified our income statement presentation of amortization of intangible assets to reflect such item separately (previously reflected in acquisition and/or other operating expenses). The higher level of expense for the 2017 periods reflects the amortization of intangible assets included in the UGC acquisition, including intangible assets related to acquired insurance contracts and distribution relationships.
Interest Expense.
Interest expense was $26.3 million for the 2017 third quarter, compared to $12.9 million for the 2016 third quarter, and $77.9 million for the nine months ended September 30, 2017, compared to $38.0 million for the 2016 period. The increase in the 2017 periods primarily reflects the impact of the issuance of the Company's 2026 and 2046 senior notes in December 2016 and the higher level of borrowings outstanding under our revolving credit agreement. The proceeds from the debt offering and additional borrowings under the revolving credit agreement were used to close the UGC acquisition on December 31, 2016.
Loss on Redemption of Preferred Shares.
In September 2017, we redeemed $230 million of 6.75% Series C preferred shares and, in accordance with GAAP, recorded a loss of $6.7 million to remove original issuance costs related to the redeemed shares from additional paid-in capital. Such adjustment had no impact on total shareholders' equity or cash flows.

Net Realized Gains or Losses.
We recorded net realized gains of $64.1 million for the 2017 third quarter, compared to net realized gains of $95.9 million for the 2016 third quarter, and net realized gains of $110.7 million for the nine months ended September 30, 2017, compared to net realized gains of $168.7 million for the 2016 period. Currently, our portfolio is actively managed to maximize total return within certain guidelines. 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 results 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 includes 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-measurement of contingent consideration liability amounts.
Net Impairment Losses Recognized in Earnings.
We recorded $1.9 million of impairment losses for the 2017 third quarter, compared to $3.9 million for the 2016 third quarter, and $5.4 million for the nine months ended September 30, 2017, compared to $16.8 million for the 2016 period. See note 7, "Investment Information—Other-Than-Temporary Impairments," of the notes accompanying our consolidated financial statements for additional information.
Equity in Net Income (Loss) of Investment Funds Accounted for Using the Equity Method.
We recorded $31.1 million of equity in net income related to investment funds accounted for using the equity method in the 2017 third quarter, compared to $16.7 million of income for the 2016 third quarter, and $111.9 million of

income for the nine months ended September 30, 2017, compared to $32.1 million of income for the 2016 period. Investment funds accounted for using the equity method totaled $962.6 million at September 30, 2017, compared to $811.3 million at December 31, 2016.

Net Foreign Exchange Gains or Losses.

Net foreign exchange losses for the 2017 third quarter were $27.8 million, compared to net foreign exchange losses for the 2016 third quarter of $4.2 million, and net foreign exchange losses of $85.5 million for the nine months ended September 30, 2017, compared to net foreign exchange losses of $3.8 million for the 2016 period. Amounts in such 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.

Table of Contents

Income Tax Expense.

Our income tax provision on income (loss) before income taxes resulted in an expense of 34.8% for the 2017 third quarter, compared to an expense of 5.1% for the 2016 third quarter, and an expense of 14.9% for the nine months ended September 30, 2017, compared to 6.7% for the 2016 period. The effective tax rates for the 2017 third quarter and nine months ended September 30, 2017 included a discrete income tax benefit of $1.3 million and $7.7 million, respectively, arising from the change in accounting for stock based compensation. 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.

Other Segment

The 'other' segment includes the results of Watford Re. Pursuant to generally accepted accounting principles, Watford Re is considered a variable interest entity and we concluded that we are the primary beneficiary of Watford Re. As such, we consolidate the results of Watford Re in our consolidated financial statements, although we only own approximately 11% of Watford Re's common equity. See note 3, "Variable Interest Entities and Noncontrolling Interests" and note 5, "Segment Information," of the notes accompanying our consolidated financial statements for additional information on Watford Re.

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 2016 Form 10-K, updated where applicable in the notes accompanying our consolidated financial statements, including note 2, "Recent Accounting Pronouncements."

FINANCIAL CONDITION, LIQUIDITY AND CAPITAL RESOURCES

Financial Condition

Investable Assets

At September 30, 2017, total investable assets of $22.00 billion included $19.70 billion held by Arch and $2.30 billion included in the 'other' segment (i.e., attributable to Watford Re).

- Investable Assets Held by Arch

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

Investable assets (1):	Estimated Fair Value	% of Total
September 30, 2017		
Fixed maturities (2)	$14,731,262	74.8
Short-term investments	1,723,081	8.7
Cash	805,210	4.1
Equity securities (2)	546,027	2.8
Other investments (2)	1,496,531	7.6
Investments accounted for using the equity method	962,574	4.9
Securities transactions entered into but not settled at the balance sheet date	(568,498)	(2.9)
Total investable assets held by Arch	$19,696,187	100.0
December 31, 2016		
Fixed maturities (2)	$14,521,774	77.9
Short-term investments	676,547	3.6
Cash	768,049	4.1
Equity securities (2)	558,008	3.0

Other investments (2)	1,276,841	6.9
Investments accounted for using the equity method	811,273	4.4
Securities transactions entered into but not settled at the balance sheet date	23,697	0.1
Total investable assets held by Arch	$18,636,189	100.0

(1) In securities lending transactions, we receive collateral in excess of the fair value of the securities pledged. For 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.

(2) Includes investments carried as available for sale, at fair value and at fair value under the fair value option.

At September 30, 2017, 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 2.20%. At December 31, 2016, our fixed income portfolio had average credit quality ratings from S&P/Moody's of "AA-/Aa3" and an average yield to maturity of 2.03%. Our investment portfolio had an average effective duration of 3.14 years at September 30, 2017, compared to 3.64 years at December 31, 2016. At September 30, 2017, approximately $13.59 billion, or 69%, of total investable assets held by Arch were internally managed, compared to $13.90 billion, or 75%, at December 31, 2016.

Table of Contents

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

	Estimated Fair Value	% of Total
September 30, 2017		
Corporate bonds	$4,588,758	31.1
Mortgage backed securities	337,478	2.3
Municipal bonds	2,353,234	16.0
Commercial mortgage backed securities	584,730	4.0
U.S. government and government agencies	3,761,612	25.5
Non-U.S. government securities	1,554,956	10.6
Asset backed securities	1,550,494	10.5
Total	$14,731,262	100.0
December 31, 2016		
Corporate bonds	$4,696,079	32.3
Mortgage backed securities	504,677	3.5
Municipal bonds	3,713,434	25.6
Commercial mortgage backed securities	536,051	3.7
U.S. government and government agencies	2,804,811	19.3
Non-U.S. government securities	1,142,735	7.9
Asset backed securities	1,123,987	7.7
Total	$14,521,774	100.0

The following table provides the credit quality distribution of our Fixed Maturities. For individual fixed maturities, S&P ratings are used. In the absence of an S&P rating, ratings from Moody's are used, followed by ratings from Fitch Ratings.

	Estimated Fair Value	% of Total
September 30, 2017		
U.S. government and gov't agencies (1)	$4,040,392	27.4
AAA	4,048,800	27.5
AA	2,406,692	16.3
A	2,285,336	15.5
BBB	1,110,089	7.5
BB	291,798	2.0
B	231,880	1.6
Lower than B	90,947	0.6
Not rated	225,328	1.5
Total	$14,731,262	100.0
December 31, 2016		
U.S. government and gov't agencies (1)	$3,210,899	22.1
AAA	3,918,739	27.0
AA	3,148,226	21.7
A	2,338,834	16.1
BBB	1,203,942	8.3
BB	226,321	1.6
B	156,405	1.1
Lower than B	90,833	0.6

Not rated	227,574	1.6
Total	$14,521,774	100.0

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

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 gross unrealized losses:	Estimated Fair Value	Gross Unrealized Losses	% of Total Gross Unrealized Losses
September 30, 2017			
0-10%	$7,499,372	$(71,889)	86.1
10-20%	73,042	(10,600)	12.7
20-30%	2,164	(687)	0.8
Greater than 30%	324	(299)	0.4
Total	$7,574,902	$(83,475)	100.0
December 31, 2016			
0-10%	$7,078,582	$(127,909)	71.6
10-20%	155,403	(24,219)	13.5
20-30%	89,887	(25,929)	14.5
Greater than 30%	1,496	(702)	0.4
Total	$7,325,368	$(178,759)	100.0

The following table summarizes our top ten exposures to fixed income corporate issuers by fair value at September 30, 2017, excluding guaranteed amounts and covered bonds:

	Estimated Fair Value	Credit Rating (1)
Apple Inc.	$ 144,561	AA+/Aa1
Microsoft Corporation	131,597	AAA/Aaa
JPMorgan Chase & Co.	116,451	A-/A3
The Bank of New York Mellon Corporation	89,245	A/A1
Citigroup Inc.	87,285	A-/A3
Wells Fargo & Company	82,560	A/A2
New York Life Insurance Company	74,684	AA+/Aaa
Massmutual Global Funding II C	72,581	AA+/Aa2
MetLife, Inc.	71,893	AA-/Aa3
American Express Company	69,096	A-/A2
Total	$ 939,953	

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

Table of Contents

The following table provides information on our structured securities, which includes residential mortgage-backed securities ("RMBS"), commercial mortgage-backed securities ("CMBS") and asset-backed securities ("ABS"):

	Agencies	Investment Grade	Below Investment Grade	Total
Sep. 30, 2017				
RMBS	$274,710	$19,940	$ 42,828	$337,478
CMBS	4,071	509,080	71,579	584,730
ABS	—	1,458,114	92,380	1,550,494
Total	$278,781	$1,987,134	$ 206,787	$2,472,702
December 31, 2016				
RMBS	$393,188	$60,600	$ 50,889	$504,677
CMBS	12,900	513,266	9,885	536,051
ABS	—	1,077,614	46,373	1,123,987
Total	$406,088	$1,651,480	$ 107,147	$2,164,715

At September 30, 2017, our structured securities included $40.5 million par value in sub-prime securities with a fair value of $34.5 million and average credit quality ratings from S&P/Moody's of "CCC/Caa3." At December 31, 2016, our fixed income portfolio included $25.3 million par value in sub-prime securities with a fair value of $23.3 million and average credit quality ratings from S&P/Moody's of "CCC/Caa3."

At September 30, 2017, our equity portfolio included $546.0 million of equity securities, compared to $558.0 million at December 31, 2016. 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 gross unrealized losses:	Estimated Fair Value	Gross Unrealized Losses	% of Total Gross Unrealized Losses
September 30, 2017			
0-10%	$ 155,016	$(3,670)	46.6
10-20%	11,219	(1,804)	22.9
20-30%	2,632	(848)	10.8
Greater than 30%	2,070	(1,551)	19.7
Total	$ 170,937	$(7,873)	100.0
December 31, 2016			
0-10%	$ 214,364	$(8,776)	50.1
10-20%	52,034	(7,100)	40.5
20-30%	1,983	(607)	3.5
Greater than 30%	1,000	(1,034)	5.9
Total	$ 269,381	$(17,517)	100.0

The following table provides information on the fair value of our Eurozone investments at September 30, 2017:

Country (1)	Sovereign (2)	Corporate Bonds	Other (3)	Total
Netherlands	$100,463	$96,733	$7,154	$204,350
Germany	103,751	27,931	43,928	175,610
Belgium	47,890	7,522	—	55,412

Luxembourg	—	16,605	18,624	35,229
France	1,011	7,017	23,885	31,914
Austria	16,120	—	—	16,120
Spain	—	1,696	10,192	11,889
Ireland	—	6,698	2,670	9,369
Italy	—	1,685	6,942	8,626
Finland	—	—	4,306	4,306
Portugal	—	—	549	549
Greece	—	—	402	402
Total	$269,236	$165,887	$118,653	$553,777

(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, 2017.

(2) Includes securities issued and/or guaranteed by Eurozone governments.

(3) Includes bank loans, equities and other.

The following table summarizes our other investments:

	September 30, 2017	December 31, 2016
Available for sale:		
Asian and emerging markets	$ 123,225	$ 84,778
Investment grade fixed income	53,325	33,923
Credit related funds	20,752	7,469
Other	63,037	41,800
Total available for sale	260,339	167,970
Fair value option:		
Term loan investments	376,721	378,877
Mezzanine debt funds	172,000	127,943
Credit related funds	194,200	218,298
Investment grade fixed income	95,151	75,468
Asian and emerging markets	250,481	178,568
Other (1)	147,639	129,717
Total fair value option	1,236,192	1,108,871
Total	$ 1,496,531	$ 1,276,841

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

- 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.

Table of Contents

The following table summarizes investable assets in the 'other' segment:

	September 30, 2017	December 31, 2016
Investments accounted for using the fair value option:		
Other investments	$ 1,061,013	$ 811,922
Fixed maturities	1,094,593	734,260
Short-term investments	272,495	309,127
Equity securities	29,265	2,314
Total	2,457,366	1,857,623
Cash	57,151	74,893
Securities sold but not yet purchased	(72,682)	(33,157)
Securities transactions entered into but not settled at the balance sheet date	(137,014)	(41,596)
Total investable assets included in 'other' segment	$ 2,304,821	$ 1,857,763

Premiums Receivable and Reinsurance Recoverables

At September 30, 2017, 81.2% of premiums receivable of $1.27 billion represented amounts not yet due, while amounts in excess of 90 days overdue were 4.1% of the total. At December 31, 2016, 81.0% of premiums receivable of $1.07 billion represented amounts not yet due, while amounts in excess of 90 days overdue were 5.2% of the total. Our reserves for doubtful accounts were approximately $24.0 million at September 30, 2017, compared to $21.0 million at December 31, 2016.

At September 30, 2017 and December 31, 2016, approximately 72.5% and 75.7% of reinsurance recoverables on paid and unpaid losses (not including ceded unearned premiums) of $2.51 billion and $2.11 billion, respectively, were due from carriers which had an A.M. Best rating of "A-" or better while 27.5% and 24.3%, respectively, were from companies not rated. For items not rated, over 90% of such amount was collateralized through reinsurance trusts or letters of credit at September 30, 2017 and December 31, 2016. The largest reinsurance recoverables from any one carrier was approximately 2.2% and 2.4%, respectively, of total shareholders' equity available to Arch at September 30, 2017 and December 31, 2016.

Approximately 4.1% of the $43.3 million of paid losses and loss adjustment expenses recoverable at September 30, 2017 were more than 90 days overdue, compared to 6.7% of the $30.6 million of paid losses and loss adjustment expenses recoverable at December 31, 2016. No collection issues were indicated on the amount in excess of 90 days overdue at September 30, 2017.

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

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2017	2016	2017	2016
Premiums written:				
Direct	$1,147,793	$841,119	$3,338,106	$2,539,073
Assumed	500,453	437,646	1,577,789	1,507,594
Ceded	(322,843)	(264,487)	(1,065,537)	(887,591)
Net	$1,325,403	$1,014,278	$3,850,358	$3,159,076
Premiums earned:				
Direct	$1,121,168	$807,656	$3,216,268	$2,382,784
Assumed	501,587	413,960	1,431,746	1,308,349
Ceded	(360,869)	(263,213)	(1,028,237)	(775,166)
Net	$1,261,886	$958,403	$3,619,777	$2,915,967

Losses and LAE:

Direct	$917,721	$490,420	$1,968,900	$1,471,472
Assumed	621,717	172,490	1,112,255	630,271
Ceded	(493,297)	(138,727)	(792,584)	(470,019)
Net	$1,046,141	$524,183	$2,288,571	$1,631,724

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.

Table of Contents

At September 30, 2017 and December 31, 2016, our Loss Reserves, net of unpaid losses and loss adjustment expenses recoverable and deferred reinsurance charge asset, by type and by operating segment were as follows:

	September 30, 2017	December 31, 2016
Insurance segment:		
Case reserves	$ 1,524,718	$ 1,414,603
IBNR reserves	3,411,009	3,187,451
Total net reserves	4,935,727	4,602,054
Reinsurance segment:		
Case reserves	1,011,298	762,730
Additional case reserves	162,632	92,524
IBNR reserves	1,534,236	1,517,983
Deferred reinsurance charge asset	(802)	—
Total net reserves	2,707,364	2,373,237
Mortgage segment:		
Case reserves	458,960	593,222
IBNR reserves	84,926	59,791
Total net reserves (1)	543,886	653,013
Other segment:		
Case reserves	232,345	125,703
Additional case reserves	31,575	9,513
IBNR reserves	436,831	353,865
Total net reserves	700,751	489,081
Total:		
Case reserves	3,227,321	2,896,258
Additional case reserves	194,207	102,037
IBNR reserves	5,467,002	5,119,090
Deferred reinsurance charge asset	(802)	—
Total net reserves	$ 8,887,728	$ 8,117,385

(1) At September 30, 2017, total net reserves include $481.5 million from U.S. primary mortgage insurance business, of which 72.2% represents policy years 2007 and prior, 11.7% from 2008 and the remainder from later policy years.

At September 30, 2017 and December 31, 2016, 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, 2017	December 31, 2016
Insurance segment:		
Professional lines (1)	$ 1,321,024	$ 1,293,667
Construction and national accounts	1,064,949	976,109
Excess and surplus casualty (2)	683,852	687,305
Programs	677,879	667,677
Property, energy, marine and aviation	439,409	302,057
Travel, accident and health	80,391	72,726
Lenders products	53,512	42,147
Other (3)	614,711	560,366
Total net reserves	$ 4,935,727	$ 4,602,054

(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, 2017 and December 31, 2016, the reinsurance segment's Loss Reserves by major line of business, net of unpaid losses and loss adjustment expenses recoverable and including deferred reinsurance charge asset, were as follows:

	September 30, 2017	December 31, 2016
Reinsurance segment:		
Casualty (1)	$ 1,482,463	$ 1,355,362
Other specialty (2)	503,947	428,205
Property excluding property catastrophe (3)	392,002	297,200
Marine and aviation	140,432	147,700
Property catastrophe	128,988	86,026
Other (4)	59,532	58,744
Total net reserves	$ 2,707,364	$ 2,373,237

(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 at the end of the last two quarters:

(U.S. Dollars in millions)	September 30, 2017		June 30, 2017	
	Amount	%	Amount	%
Insurance In Force (IIF) (1):				
U.S. primary mortgage insurance	$250,375	72.3	$244,235	73.4
Mortgage reinsurance	26,869	7.8	26,120	7.8
Other (2)	68,925	19.9	62,503	18.8
Total	$346,169	100.0	$332,858	100.0
Risk In Force (RIF) (3):				
U.S. primary mortgage insurance	$64,005	92.5	$62,362	92.6
Mortgage reinsurance	2,433	3.5	2,453	3.6
Other (2)	2,742	4.0	2,517	3.7
Total	$69,180	100.0	$67,332	100.0

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

(2) Includes GSE credit risk-sharing transactions and international insurance business.

(3) Represents the aggregate dollar amount of each insured mortgage loan's current principal balance multiplied by the 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.

Table of Contents

The insurance in force and risk in force for our U.S. primary mortgage insurance business by policy year were as follows at September 30, 2017:

(U.S. Dollars in millions)	IIF Amount	%	RIF Amount	%	Delinquency Rate (1)	
Policy year:						
2007 and prior	$22,206	8.9	$5,052	7.9	10.30	%
2008	5,192	2.1	1,273	2.0	6.27	%
2009	1,192	0.5	282	0.4	2.72	%
2010	1,368	0.5	369	0.6	1.70	%
2011	4,415	1.8	1,205	1.9	1.09	%
2012	14,995	6.0	4,101	6.4	0.60	%
2013	22,719	9.1	6,217	9.7	0.77	%
2014	24,747	9.9	6,582	10.3	0.81	%
2015	44,453	17.8	11,417	17.8	0.47	%
2016	63,805	25.5	16,027	25.0	0.32	%
2017	45,283	18.1	11,480	17.9	0.06	%
Total	$250,375	100.0	$64,005	100.0	1.98	%

(1) Represents the ending percentage of loans in default.

The following tables provide supplemental disclosures on risk in force for our U.S. primary mortgage insurance business at the end of the last two quarters:

(U.S. Dollars in millions)	September 30, 2017 Amount	%	June 30, 2017 Amount	%
Credit quality (FICO):				
>=740	$37,297	58.3	$36,378	58.3
680-739	20,822	32.5	20,122	32.3
620-679	5,178	8.1	5,118	8.2
<620	708	1.1	744	1.2
Total	$64,005	100.0	$62,362	100.0
Weighted average FICO score	743		743	
Loan-to-value (LTV):				
95.01% and above	$6,175	9.6	$5,983	9.6
90.01% to 95.00%	35,703	55.8	34,718	55.7
85.01% to 90.00%	19,247	30.1	18,810	30.2
85.00% and below	2,880	4.5	2,851	4.6
Total	$64,005	100.0	$62,362	100.0
Weighted average LTV	92.9 %		92.8 %	
Total RIF, net of external reinsurance	$47,980		$45,774	

(U.S. Dollars in millions)	September 30, 2017 Amount	%	June 30, 2017 Amount	%
Total RIF by State:				
Texas	$5,120	8.0	$5,075	8.1
California	3,671	5.7	3,524	5.7

Florida	2,764	4.3	2,622	4.2
Virginia	2,743	4.3	2,691	4.3
North Carolina	2,378	3.7	2,346	3.8
Washington	2,312	3.6	2,311	3.7
Georgia	2,293	3.6	2,239	3.6
Maryland	2,209	3.5	2,160	3.5
Illinois	2,200	3.4	2,157	3.5
Minnesota	2,138	3.3	2,072	3.3
Others	36,177	56.5	35,165	56.4
Total	$64,005	100.0	$62,362	100.0

The following table provides supplemental disclosures for our U.S. primary mortgage insurance business related to insured loans and loss metrics:

(U.S. Dollars in thousands, except policy, loan and claim count)	Three Months Ended September 30, 2017	June 30, 2017
Roll-forward of insured loans in default:		
Beginning delinquent number of loans	23,903	26,234
New notices	9,028	8,858
Cures	(7,891)	(9,078)
Paid claims	(1,270)	(2,111)
Ending delinquent number of loans (1)	23,770	23,903
Ending number of policies in force (1)	1,202,619	1,183,659
Delinquency rate (1)	1.98%	2.02%
Losses:		
Number of claims paid	1,270	2,111
Total paid claims	$59,832	$85,539
Average per claim	$47.1	$40.5
Severity (2)	103.5%	104.4%
Average reserve per default (in thousands) (1)	$19.3	$20.4

(1) Includes first lien primary and pool policies.

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

The risk-to-capital ratio, which represents total current (non-delinquent) risk in force, net of reinsurance, divided by total statutory capital, for Arch MI U.S. was approximately 11.2 to 1 at September 30, 2017, compared to 12.0 to 1 at June 30, 2017.

Shareholders' Equity and Book Value per Share

Total shareholders' equity available to Arch was $8.91 billion at September 30, 2017, compared to $8.25 billion at December 31, 2016. The increase was primarily attributable to net income, reflecting contributions from both underwriting and investing activities.

Table of Contents

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

(U.S. dollars in thousands, except share data)	September 30, 2017	December 31, 2016
Total shareholders' equity available to Arch	$ 8,911,144	$ 8,253,718
Less preferred shareholders' equity	772,555	772,555
Common shareholders' equity available to Arch	$ 8,138,589	$ 7,481,163
Common shares and common share equivalents outstanding, net of treasury shares (1)	136,540,573	135,550,337
Book value per share	$ 59.61	$ 55.19

(1) Excludes the effects of 6,784,649 and 6,872,494 stock options and 419,908 and 381,461 restricted stock units outstanding at September 30, 2017 and December 31, 2016, respectively.

Liquidity and Capital Resources

Refer to the 'Liquidity and Capital Resources' section contained in Item 7 of our 2016 Form 10-K for a general discussion of our liquidity and capital resources. This section does not include information specific to Watford Re. We do not guarantee or provide credit support for Watford Re, and our financial exposure to Watford Re is limited to our investment in Watford Re's common and preferred shares and counterparty credit risk (mitigated by collateral) arising from reinsurance transactions with Watford Re.

The following table provided an analysis of our capital structure:

(U.S. dollars in thousands, except share data)	September 30, 2017	December 31, 2016
Debt:		
ACGL senior notes, due May 2034	$ 297,030	$ 296,957
Arch-U.S. senior notes, due Nov 2043 (1)	494,596	494,525
ACF senior notes, due Dec 2026 (2)	495,955	495,689
ACF senior notes, due Dec 2046 (2)	445,145	445,087
Revolving credit agreement borrowings due Oct 2021	400,000	500,000
Total	$ 2,132,726	$ 2,232,258
Shareholders' equity available to Arch:		
Series C non-cumulative preferred shares	$ 92,555	$ 322,555
Series E non-cumulative preferred shares	450,000	450,000
Series F non-cumulative preferred shares	230,000	—
Common shareholders' equity	8,138,589	7,481,163
Total	$ 8,911,144	$ 8,253,718
Total capital available to Arch	$ 11,043,870	$ 10,485,976
Debt to total capital (%)	19.3	21.3
Debt and prefered to total capital (%)	26.3	28.7

(1) Issued by Arch Capital Group (U.S.) Inc., a wholly owned subsidiary of ACGL, and fully and unconditionally guaranteed by ACGL.

(2) Issued by Arch Capital Finance LLC ("ACF"), a wholly owned subsidiary of Arch U.S. MI Holdings Inc., and fully and unconditionally guaranteed by ACGL.

For the nine months ended September 30, 2017, ACGL received dividends of $182.5 million from Arch Reinsurance Ltd. ("Arch Re Bermuda"), our Bermuda-based reinsurer and insurer, which can pay approximately $1.79 billion to ACGL during the remainder of 2017 without providing an affidavit to the Bermuda Monetary Authority ("BMA"). In August 2017, ACGL completed a $230.0 million underwritten public offering of 5.45% Series F preferred shares and, in September 2017, used the net proceeds received and other available funds to redeem in part its outstanding 6.75% Series C preferred shares.

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 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.

In addition, Arch MI U.S. is required to maintain compliance with the GSEs requirements, known as the Private Mortgage Insurer Eligibility Requirements or "PMIERs." The financial requirements require an eligible mortgage insurer's available assets, which generally include only the most liquid assets of an insurer, to meet or exceed "minimum required assets" as of each quarter end. Minimum required assets are calculated from PMIERs tables with several risk dimensions (including origination year, original loan-to-value and original credit score of performing loans, and the delinquency status of non-performing loans) and are subject to a minimum amount. Arch MI U.S. satisfied the PMIERs' financial requirements as of September 30, 2017 with an estimated PMIER sufficiency ratio of 122%, compared to 122% at June 30, 2017.

For the nine months ended September 30, 2017, Arch U.S. MI Holdings Inc., a subsidiary of Arch-U.S., received $342.0 million of dividends from subsidiaries of United Guaranty Corporation, including United Guaranty Residential Insurance Company ("UGRIC"). Of such amount, $263.0 million was contributed to Arch Mortgage Insurance Company. UGRIC may not pay additional dividends during the remainder of 2017.

For the nine months ended September 30, 2017, Arch-U.S. received $50.0 million of dividends from Arch Reinsurance Company ("Arch Re U.S."), our U.S.-licensed reinsurer. Arch Re U.S. can pay approximately $78.4 million to Arch-U.S. during the remainder of 2017, subject to the approval of the Commissioner of the Delaware Department of Insurance.

Pursuant to our 2014 acquisition of the CMG Entities, we made a contingent consideration payment of $71.7 million in April 2017. The maximum amount of remaining contingent

Table of Contents

consideration payments over the remaining earn-out period is $68.3 million.

The following table summarizes our cash flows from operating, investing and financing activities, excluding amounts related to the 'other' segment (i.e., Watford Re). See Note 3, "Variable Interest Entities," for cash flows related to Watford Re.

	Nine Months Ended September 30,	
	2017	2016
Total cash provided by (used for):		
Operating activities	$860,197	$831,086
Investing activities	(486,201)	(1,131,147)
Financing activities	(348,337)	372,393
Effects of exchange rate changes on foreign currency cash	11,492	(5,322)
Increase (decrease) in cash	$37,151	$67,010

•Cash provided by operating activities for the nine months ended September 30, 2017 was higher than in the 2016 period, primarily reflecting higher premiums collected, partially offset by a higher level of paid losses.

•Cash used for investing activities for the nine months ended September 30, 2017 was lower than in the 2016 period, reflecting changes in cash collateral related to securities lending. In addition, activity for the 2017 period reflected higher net sales of investments than in the 2016 period.

•Cash used for financing activities for the nine months ended September 30, 2017 was higher than the cash provided in the 2016 period, reflecting changes in cash collateral related to securities lending and a $100.0 million paydown of revolving credit agreement borrowings. Activity for the 2016 period reflected a $434.9 million inflow from the issuance of preferred shares and $75.3 million of repurchases under our share repurchase program.

At September 30, 2017, our investable assets were $19.70 billion (excluding the $2.30 billion of investable assets related to the 'other' segment). Our unfunded investment commitments totaled approximately $1.58 billion at September 30, 2017. Please refer to Item 1A "Risk Factors" of our 2016 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 (re)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.

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 2016 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, 2017. 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. We have not included Watford Re in the following analyses as we do not guarantee or provide credit support for Watford Re, and our financial exposure to Watford Re is limited to our investment in Watford Re's common and preferred shares and counterparty credit risk (mitigated by collateral) arising from reinsurance transactions.

An analysis of material changes in market risk exposures at September 30, 2017 that affect the quantitative and qualitative disclosures presented in our 2016 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.

Table of Contents

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:

(U.S. dollars in billions)	Interest Rate Shift in Basis Points -100	-50	—	+50	+100
Sep. 30, 2017					
Total fair value	$18.95	$18.64	$18.35	$18.07	$17.79
Change from base	3.3 %	1.6 %		(1.5)%	(3.0)%
Change in unrealized value	$0.61	$0.29		$(0.28)	$(0.55)
Dec. 31, 2016					
Total fair value	$17.95	$17.62	$17.31	$17.00	$16.70
Change from base	3.7 %	1.8 %		(1.8)%	(3.5)%
Change in unrealized value	$0.64	$0.31		$(0.31)	$(0.61)

In addition, we consider the effect of credit spread movements on the fair value of our 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.

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:

(U.S. dollars in billions)	Credit Spread Shift in Percentage Points -100	-50	—	+50	+100
Sep. 30, 2017					
Total fair value	$18.73	$18.55	$18.35	$18.14	$17.96
Change from base	2.1 %	1.1 %		(1.1)%	(2.1)%
Change in unrealized value	$0.39	$0.20		$(0.20)	$(0.39)
Dec. 31, 2016					
Total fair value	$17.79	$17.55	$17.31	$17.07	$16.83
Change from base	2.8 %	1.4 %		(1.4)%	(2.8)%
Change in unrealized value	$0.48	$0.24		$(0.24)	$(0.48)

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, 2017, our portfolio’s VaR was estimated to be 3.76% compared to an estimated 3.75% at December 31, 2016.

Equity Securities. At September 30, 2017 and December 31, 2016, the fair value of our investments in equity securities totaled $546.0 million and $558.0 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 $54.6 million and $55.8 million at September 30, 2017 and December 31, 2016, respectively, and would have decreased book value per common share by approximately $0.40 and $0.41, respectively. An immediate hypothetical 10% increase in the value of each position would increase the fair value of such investments by approximately $54.6 million and $55.8 million at September 30, 2017 and December 31, 2016, respectively, and would have increased book value per common share by approximately $0.40 and $0.41, respectively.

Investment-Related Derivatives. At September 30, 2017, 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 $3.06 billion, compared to $2.12 billion at December 31, 2016. If the underlying exposure of each investment-related derivative held at September 30, 2017 depreciated by 100 basis points, it would have resulted in a reduction in net income of approximately $30.6 million, and a decrease in book value per common share of approximately $0.22 per share, compared to $21.2 million and $0.16 per share, respectively, on investment-related derivatives held at December 31, 2016. If the underlying exposure of each investment-related derivative held at September 30, 2017 appreciated by 100 basis points, it would have resulted in an increase in net income of approximately $30.6 million, and an increase in book value per common share of approximately $0.22 per share, compared to $21.2 million and $0.16 per share, respectively, on investment-related derivatives held at December 31, 2016. See note 9, “Derivative Instruments,” of the notes accompanying our consolidated financial statements for additional disclosures concerning derivatives.

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 and also utilize foreign currency forward contracts and currency options as part of our investment strategy. From time to time, we may elect to over or underweight one or more currencies, which could increase our exposure to

Table of Contents

foreign currency fluctuations and increase the volatility of our shareholders' equity.

For further discussion on foreign exchange activity, please refer to "—Results of Operations" and note 9, "Derivative Instruments," of the notes accompanying our consolidated financial statements.

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, 2017	December 31, 2016
Net assets (liabilities), denominated in foreign currencies, excluding shareholders' equity and derivatives	$ (713,065)	$ (63,077)
Shareholders' equity denominated in foreign currencies (1)	356,048	290,752
Net foreign currency forward contracts outstanding (2)	(191,878)	(250,263)
Net exposures denominated in foreign currencies	$ (548,895)	$ (22,588)
Pre-tax impact of a hypothetical 10% appreciation of the U.S. Dollar against foreign currencies:		
Shareholders' equity	$ 54,890	$ 2,259
Book value per common share	$ 0.40	$ 0.02
Pre-tax impact of a hypothetical 10% decline of the U.S. Dollar against foreign currencies:		
Shareholders' equity	$ (54,890)	$ (2,259)
Book value per common share	$ (0.40)	$ (0.02)

(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.

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.

Other Financial Information

The consolidated financial statements as of September 30, 2017 and for the three month and nine month periods ended September 30, 2017 and 2016 have been reviewed by PricewaterhouseCoopers LLP, the registrant's independent public accountants, whose report is included as an exhibit to this filing. 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 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.

Table of Contents

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

We acquired all of the issued and outstanding capital stock of UGC on December 31, 2016. As allowed under SEC guidance, management’s assessment of and conclusion regarding the design and operating effectiveness of internal control over financial reporting excluded the internal control over financial reporting of UGC, which is relevant to the Company’s consolidated financial statements as of and for the nine months ended September 30, 2017. UGC represents 14% of total assets as of September 30, 2017 and 13% of our total revenues for the nine months ended September 30, 2017. The financial reporting systems of UGC have not yet been fully integrated into our financial reporting systems and, as such, we did not have the practical ability to perform an assessment of UGC’s internal control over financial reporting in time for the current quarter-end. Management expects to complete the process of integrating UGC’s internal control over financial reporting during the 2017 fourth quarter. The UGC acquisition represents a material change in internal control over financial reporting as defined in Exchange Act Rule 13a-15(f) for

the nine months ended September 30, 2017.

There have been no changes in internal control over financial reporting that occurred during the quarter ended September 30, 2017 that have materially affected, or are reasonably likely to materially affect, internal control over financial reporting, other than the UGC acquisition as described in the preceding paragraph.

Table of Contents

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, 2017, 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.

ITEM 1A. RISK FACTORS

There were no material changes from the risk factors previously disclosed in our Annual Report on Form 10-K for the year ended December 31, 2016.

Table of Contents

ITEM 2. UNREGISTERED SALES OF EQUITY SECURITIES AND USE OF PROCEEDS

The following table summarizes our purchases of our common shares for the 2017 third quarter:

	Issuer Purchases of Equity Securities			
Period	Total Number of Shares Purchased (1)	Average Price Paid per Share	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)
7/1/2017 - 7/31/2017	4,414	$ 94.39	—	$ 446,501
8/1/2017 - 8/31/2017	4,074	96.99	—	$ 446,501
9/1/2017 - 9/30/2017	15,618	95.38	—	$ 446,501
Total	24,106	$ 95.47	—	$ 446,501

(1) Represents 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, 2017 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, 2019.

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 2017 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.

Disclosure of Certain Activities Under Section 13(r) of the Securities Exchange Act of 1934

Section 13(r) of the Securities Exchange Act of 1934, as amended, requires an issuer to disclose in its annual or quarterly reports whether it or an affiliate knowingly engaged in certain activities described in that section, including certain activities related to Iran during the period covered by the report.

Effective January 16, 2016, the Office of Foreign Assets Control of the U.S. Department of the Treasury adopted General License H which authorizes non-U.S. entities that are owned or controlled by a U.S. person to engage in certain activities with Iran so long as they comply with certain specific requirements set forth therein.

Certain of our non-U.S. subsidiaries provide global marine policies that provide coverage for vessels navigating into and out of ports worldwide. In light of European Union and U.S. modifications to Iran sanctions this year, including the issuance of General License H, and consistent with General License H, we have been notified that certain of our policyholders have begun to, or will begin to, ship cargo to and from Iran, and that such cargo may include transporting crude oil from Iran to another country. Since these policies insure multiple voyages and fleets containing multiple ships, we are unable to attribute gross revenues and net profits from such marine policies to these activities involving Iran. We intend for our non-U.S. subsidiaries to continue to provide such coverage to the extent permitted by applicable law.

Table of Contents

ITEM 6. EXHIBITS

Exhibit No.	Description
10.1	Share Appreciation Right Agreement, dated as of May 6, 2011 between Arch Capital Group Ltd. and Maamoun Rajeh†
10.2	Share Appreciation Right Agreement, dated as of May 9, 2012, between Arch Capital Group Ltd. and Maamoun Rajeh†
10.3	Share Appreciation Right Agreement, dated as of May 9, 2012 between Arch Capital Group Ltd. and Andrew Rippert†
10.4	Share Appreciation Right Agreement, dated as of July 1, 2012, between Arch Capital Group Ltd. and Maamoun Rajeh†
10.5	Share Appreciation Agreement with Arch Capital Group Ltd. substantially in the form signed by each of Nicolas Papadopoulo and Maamoun Rajeh for November 12, 2012 grants†
10.6	Restricted Share Agreement, dated as of November 12, 2012 between Arch Capital Group Ltd. and Nicholas Papadopoulo†
10.7	Restricted Share Unit Agreement, dated as of November 12, 2012 between Arch Capital Group Ltd. and Maamoun Rajeh†
10.8	Restricted Share Agreement, dated as of November 12, 2012 between Arch Capital Group Ltd. and Andrew Rippert†
10.9	Share Appreciation Agreement, dated as of November 12, 2012 between Arch Capital Group Ltd. and Andrew Rippert†
10.10	Share Appreciation Right Agreement, dated as of May 9, 2013 between Arch Capital Group Ltd. and Maamoun Rajeh†
10.11	Share Appreciation Right Agreement, dated as of May 9, 2013 between Arch Capital Group Ltd. and Andrew Rippert†
10.12	Share Appreciation Right Agreement, dated as of February 4, 2014 between Arch Capital Group Ltd. and Andrew Rippert†
10.13	Share Appreciation Right Agreement, dated as of May 13, 2014 between Arch Capital Group Ltd. and Maamoun Rajeh†
10.14	Share Appreciation Right Agreement, dated as of May 13, 2014 between Arch Capital Group Ltd. and Andrew Rippert†
10.15	Share Appreciation Right Agreement, dated as of July 1, 2014 between Arch Capital Group Ltd. and Maamoun Rajeh†
10.16	Restricted Share Agreement, dated as of November 6, 2014 between Arch Capital Group Ltd. and Nicolas Papadopoulo†
10.17	Share Appreciation Right Agreement, dated as of November 6, 2014 between Arch Capital Group Ltd. and Nicolas Papadopoulo†
10.18	Stock Option Agreement with Arch Capital Group Ltd. substantially in the form signed by each of Nicolas Papadopoulo, Maamoun Rajeh, and Andrew Rippert for May 13, 2015 grants†
10.19	Restricted Share Agreement with Arch Capital Group Ltd. substantially in the form signed by each of Nicolas Papadopoulo, Maamoun Rajeh, and Andrew Rippert for May 13, 2015 grants†
10.20	Stock Option Agreement with Arch Capital Group Ltd. substantially in the form signed by each of Nicolas Papadopoulo, Maamoun Rajeh, and Andrew Rippert for May 13, 2016 grants†
10.21	Restricted Share Agreement with Arch Capital Group Ltd. substantially in the form signed by each of Nicolas Papadopoulo, Maamoun Rajeh, and Andrew Rippert for May 13, 2016 grants†

10.22	Stock Option Agreement, dated as of February 24, 2017 between Arch Capital Group Ltd. and Constantine Iordanou†
10.23	Stock Option Agreement, dated as of May 8, 2017 between Arch Capital Group Ltd. and Maamoun Rajeh†
10.24	Restricted Share Agreement, dated as of May 8, 2017 between Arch Capital Group Ltd. and Maamoun Rajeh†
10.25	Consulting Letter Agreement, dated September 19, 2017, between Arch Capital Group Ltd. and David McElroy
10.26	Employment Agreement, dated as of October 1, 2017 between Arch Capital Group Ltd. and Maamoun Rajeh
10.27	Employment Agreement, dated as of October 1, 2017 between Arch Capital Group Ltd. and Nicholas Papadopoulo
10.28	Employment Agreement, dated as of October 30, 2017, between Arch Capital Group Ltd. and Andrew Rippert
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, 2017 formatted in XBRL: (i) Consolidated Balance Sheets at September 30, 2017 and December 31, 2016; (ii) Consolidated Statements of Income for the three and nine month periods ended September 30, 2017 and 2016; (iii) Consolidated Statements of Comprehensive Income for the three and nine month periods ended September 30, 2017 and 2016; (iv) Consolidated Statements of Changes in Shareholders' Equity for the nine month periods ended September 30, 2017 and 2016; (v) Consolidated Statements of Cash Flows for the nine month periods ended September 30, 2017 and 2016; and (vi) Notes to Consolidated Financial Statements.

† Management contract or compensatory plan or arrangement.

Table of Contents

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 3, 2017	/s/ Constantine Iordanou Constantine Iordanou Chief Executive Officer (Principal Executive Officer) and Chairman of the Board of Directors
Date: November 3, 2017	/s/ Mark D. Lyons Mark D. Lyons Executive Vice President, Chief Financial Officer and Treasurer (Principal Financial and Accounting Officer)