



Arch Capital Group Ltd.
Waterloo House, Ground Floor
100 Pitts Bay Road
Pembroke HM 08 Bermuda

Financial Supplement

Financial Information as of June 30, 2019

The following financial supplement is provided to assist in your understanding of Arch Capital Group Ltd. (“Arch Capital”) and its subsidiaries (collectively, the “Company”).

This report is for informational purposes only. It should be read in conjunction with documents filed by Arch Capital with the U.S. Securities and Exchange Commission, including the most recent Annual Report on Form 10-K and the Quarterly Reports on Form 10-Q. Please refer to the Company’s website at www.archcapgroup.com for further information describing Arch Capital.

Contacts

Arch Capital Group Ltd.

François Morin: (441) 278-9250

Investor Relations

Donald Watson: (914) 872-3616; dwatson@archcapservices.com

Arch Capital Group Ltd. and Subsidiaries
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Arch Capital Group Ltd. and Subsidiaries
Basis of Presentation

Basis of Presentation

All financial information contained herein is unaudited, however, certain information relating to the consolidated balance sheet at December 31, 2018 is derived from or agrees to audited financial information. Unless otherwise noted, all data is in thousands, except for share and per share amounts and ratio information.

In March 2014, the Company invested \$100.0 million to acquire approximately 11% of Watford Holdings Ltd.'s outstanding 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"). In accordance with GAAP, Watford is considered a variable interest entity and the Company concluded that it is the primary beneficiary of Watford Re. **As such, 100% of the results of Watford Re are included in the Company's consolidated financial statements.** The portion of Watford Re's earnings owned by third parties is recorded in the consolidated statements of income as 'amounts attributable to noncontrolling interests.' In addition, the Company reflects Watford Re's redeemable preference shares in the mezzanine section of the Company's consolidated balance sheets as 'redeemable noncontrolling interests' because they have redemption features that are not solely within the control of Watford Re.

Cautionary Note Regarding Forward-Looking Statements

The Private Securities Litigation Reform Act of 1995 provides a "safe harbor" for forward-looking statements. This release or any other written or oral statements made by or on behalf of Arch Capital and its subsidiaries may include forward-looking statements, which reflect the Company's 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 can generally be identified by the use of forward-looking terminology such as "may," "will," "expect," "intend," "estimate," "anticipate," "believe" or "continue" or their negative or variations or similar terminology. Forward-looking statements involve the Company's current assessment of risks and uncertainties. Actual events and results may differ materially from those expressed or implied in these statements. A non-exclusive list of the important factors that could cause actual results to differ materially from those in such forward-looking statements includes the following: adverse general economic and market conditions; increased competition; pricing and policy term trends; fluctuations in the actions of rating agencies and the Company's ability to maintain and improve the Company's ratings; investment performance; the loss of key personnel; the adequacy of the Company's loss reserves, severity and/or frequency of losses, greater than expected loss ratios and adverse development on claim and/or claim expense liabilities; greater frequency or severity of unpredictable natural and man-made catastrophic events; the impact of acts of terrorism and acts of war; changes in regulations and/or tax laws in the United States or elsewhere; the Company's ability to successfully integrate, establish and maintain operating procedures as well as integrate the businesses we have acquired or may acquire into the existing operations; changes in accounting principles or policies; material differences between actual and expected assessments for guaranty funds and mandatory pooling arrangements; availability and cost to the Company of reinsurance to manage gross and net exposures; the failure of others to meet their obligations to the Company; and other factors identified in the Company's filings with the U.S. Securities and Exchange Commission.

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. All subsequent written and oral forward-looking statements attributable to the Company or persons acting on the Company's behalf are expressly qualified in their entirety by these cautionary statements. The Company undertakes no obligation to publicly update or revise any forward-looking statement, whether as a result of new information, future events or otherwise.

Arch Capital Group Ltd. and Subsidiaries
Financial Highlights

The following table presents financial highlights (1):

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

	Three Months Ended			Six Months Ended		
	June 30,			June 30,		
	2019	2018	Change	2019	2018	Change
Underwriting results:						
Gross premiums written	\$ 1,829,829	\$ 1,591,202	15.0 %	\$ 3,810,282	\$ 3,312,807	15.0 %
Net premiums written	1,325,528	1,158,310	14.4 %	2,705,400	2,391,302	13.1 %
Net premiums earned	1,312,409	1,177,245	11.5 %	2,535,181	2,275,396	11.4 %
Underwriting income (2)	297,727	235,783	26.3 %	563,253	473,340	19.0 %
Loss ratio	50.0%	51.7 %	(1.7)	49.9%	50.4 %	(0.5)
Acquisition expense ratio	13.8%	14.3 %	(0.5)	13.8%	14.4 %	(0.6)
Other operating expense ratio	14.0%	14.2 %	(0.2)	14.7%	14.7 %	—
Combined ratio	77.8%	80.2 %	(2.4)	78.4%	79.5 %	(1.1)
Net investment income	\$ 123,038	\$ 107,761	14.2 %	\$ 244,287	\$ 208,004	17.4 %
<i>Per diluted share</i>	\$ 0.30	\$ 0.26	15.4 %	\$ 0.60	\$ 0.50	20.0 %
Net income available to Arch common shareholders	\$ 458,551	\$ 233,243	96.6 %	\$ 896,676	\$ 370,519	142.0 %
<i>Per diluted share</i>	\$ 1.12	\$ 0.56	100.0 %	\$ 2.19	\$ 0.89	146.1 %
After-tax operating income available to Arch common shareholders (2)	\$ 317,433	\$ 242,596	30.8 %	\$ 593,330	\$ 477,739	24.2 %
<i>Per diluted share</i>	\$ 0.77	\$ 0.59	30.5 %	\$ 1.45	\$ 1.15	26.1 %
Comprehensive income available to Arch	\$ 637,458	\$ 183,500	247.4 %	\$ 1,303,029	\$ 231,662	462.5 %
Net cash provided by operating activities	\$ 431,865	\$ 34,190	1,163.1 %	\$ 597,276	\$ 404,451	47.7 %
Weighted average common shares and common share equivalents outstanding — diluted	410,899,483	413,111,205	(0.5)%	409,755,250	415,460,756	(1.4)%
Financial measures:						
Change in book value per common share during period	6.6%	1.3 %	5.3	14.5%	1.9 %	12.6
Annualized return on average common equity	19.0%	11.1 %	7.9	19.2%	8.9 %	10.3
Annualized operating return on average common equity (2)	13.1%	11.6 %	1.5	12.7%	11.4 %	1.3
Total return on investments (3)	2.37%	(0.19)%	256 bps	5.14%	(0.51)%	565 bps

- (1) Presented on a 'core' basis which excludes amounts related to the 'other' segment (*i.e.*, results of Watford Re). See 'Comments on Regulation G' for a further discussion of the presentation of 'core' results.
- (2) See 'Comments on Regulation G' for a further discussion of consolidated underwriting income or loss, after-tax operating income or loss available to Arch common shareholders and annualized operating return on average common equity.
- (3) Total return on investments includes net investment income, equity in net income (loss) of investment funds accounted for using the equity method, net realized gains and losses and the change in unrealized gains and losses and is calculated on a pre-tax basis and before investment expenses. See 'Comments on Regulation G' for a further discussion of the presentation of total return on investments.

Arch Capital Group Ltd. and Subsidiaries
Consolidated Statements of Income

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

	Three Months Ended					Six Months Ended	
	June 30, 2019	March 31, 2019	December 31, 2018	September 30, 2018	June 30, 2018	June 30, 2019	June 30, 2018
Revenues							
Net premiums written	\$ 1,444,898	\$ 1,525,259	\$ 1,301,754	\$ 1,333,553	\$ 1,298,896	\$ 2,970,157	\$ 2,711,440
Change in unearned premiums	18,829	(156,393)	67,681	(42,675)	37,867	(137,564)	(139,778)
Net premiums earned	1,463,727	1,368,866	1,369,435	1,290,878	1,336,763	2,832,593	2,571,662
Net investment income	155,038	156,949	157,217	144,024	135,668	311,987	262,392
Net realized gains (losses)	120,806	141,565	(166,030)	(51,705)	(76,611)	262,371	(187,609)
Net impairment losses recognized in earnings	(49)	(1,309)	(1,705)	(492)	(470)	(1,358)	(632)
Other underwriting income	5,953	8,825	27	5,823	3,874	14,778	9,223
Equity in net income (loss) of investment funds accounted for using the equity method	32,536	46,867	(6,882)	15,982	8,472	79,403	36,541
Other income (loss)	1,129	1,083	(42)	(726)	3,113	2,212	3,187
Total revenues	1,779,140	1,722,846	1,352,020	1,403,784	1,410,809	3,501,986	2,694,764
Expenses							
Losses and loss adjustment expenses	(767,543)	(718,532)	(827,673)	(699,420)	(726,153)	(1,486,075)	(1,363,013)
Acquisition expenses	(210,089)	(197,848)	(209,319)	(201,602)	(202,838)	(407,937)	(394,214)
Other operating expenses	(198,914)	(201,163)	(165,515)	(161,098)	(176,181)	(400,077)	(351,196)
Corporate expenses	(18,251)	(17,962)	(26,835)	(14,335)	(22,512)	(36,213)	(37,824)
Amortization of intangible assets	(19,794)	(20,417)	(26,147)	(26,315)	(26,472)	(40,211)	(53,208)
Interest expense	(29,280)	(29,065)	(29,774)	(29,730)	(30,344)	(58,345)	(60,980)
Net foreign exchange gains (losses)	(4,952)	3,525	24,579	10,838	53,706	(1,427)	33,985
Total expenses	(1,248,823)	(1,181,462)	(1,260,684)	(1,121,662)	(1,130,794)	(2,430,285)	(2,226,450)
Income before income taxes	530,317	541,384	91,336	282,122	280,015	1,071,701	468,314
Income tax expense	(44,472)	(45,886)	(35,012)	(33,356)	(23,668)	(90,358)	(45,583)
Net income	485,845	495,498	56,324	248,766	256,347	981,343	422,731
Net (income) loss attributable to noncontrolling interests	(16,891)	(46,970)	80,170	(21,358)	(12,701)	(63,861)	(28,662)
Net income attributable to Arch	468,954	448,528	136,494	227,408	243,646	917,482	394,069
Preferred dividends	(10,403)	(10,403)	(10,403)	(10,402)	(10,403)	(20,806)	(20,840)
Loss on redemption of preferred shares	—	—	—	—	—	—	(2,710)
Net income available to Arch common shareholders	\$ 458,551	\$ 438,125	\$ 126,091	\$ 217,006	\$ 233,243	\$ 896,676	\$ 370,519
Comprehensive income available to Arch	\$ 637,458	\$ 665,571	\$ 178,817	\$ 200,524	\$ 183,500	\$ 1,303,029	\$ 231,662
Net income per common share and common share equivalent							
Basic	\$ 1.14	\$ 1.09	\$ 0.31	\$ 0.54	\$ 0.58	\$ 2.24	\$ 0.91
Diluted	\$ 1.12	\$ 1.07	\$ 0.31	\$ 0.53	\$ 0.56	\$ 2.19	\$ 0.89
Weighted average common shares and common share equivalents outstanding							
Basic	401,482,784	400,184,404	402,185,557	402,939,092	404,800,421	400,837,181	406,162,508
Diluted	410,899,483	408,971,029	410,112,097	411,721,214	413,111,205	409,755,250	415,460,756

Arch Capital Group Ltd. and Subsidiaries
Consolidated Balance Sheets

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

	June 30, 2019	March 31, 2019	December 31, 2018	September 30, 2018	June 30, 2018
Assets					
Investments:					
Fixed maturities available for sale, at fair value	\$ 15,881,732	\$ 15,177,312	\$ 14,699,010	\$ 14,331,641	\$ 14,128,989
Short-term investments available for sale, at fair value	821,961	706,214	955,880	961,799	1,096,798
Collateral received under securities lending, at fair value	450,320	415,056	274,133	306,893	236,956
Equity securities, at fair value	670,943	495,895	338,899	444,118	534,482
Investments accounted for using the fair value option	3,721,035	3,969,623	3,983,571	4,097,735	4,111,611
Investments accounted for using the equity method	1,581,972	1,563,779	1,493,791	1,524,242	1,428,582
Total investments	23,127,963	22,327,879	21,745,284	21,666,428	21,537,418
Cash	605,316	633,100	646,556	651,037	526,628
Accrued investment income	119,252	112,935	114,641	106,543	114,307
Securities pledged under securities lending, at fair value	440,510	404,262	268,395	299,409	230,064
Premiums receivable	1,606,040	1,584,682	1,299,150	1,307,466	1,351,310
Reinsurance recoverable on unpaid and paid losses and loss adjustment expenses	3,171,257	3,099,823	2,919,372	2,749,785	2,727,303
Contractholder receivables	2,102,544	2,087,720	2,079,111	2,067,268	2,044,322
Ceded unearned premiums	1,136,728	1,099,581	975,469	1,011,850	1,014,663
Deferred acquisition costs	600,740	597,526	569,574	572,987	569,817
Receivable for securities sold	164,592	334,982	36,246	278,753	143,809
Goodwill and intangible assets	641,010	659,215	634,920	566,662	593,008
Other assets	1,135,718	1,035,332	929,611	974,346	1,000,471
Total assets	\$ 34,851,670	\$ 33,977,037	\$ 32,218,329	\$ 32,252,534	\$ 31,853,120
Liabilities					
Reserve for losses and loss adjustment expenses	\$ 12,230,316	\$ 12,010,041	\$ 11,853,297	\$ 11,554,321	\$ 11,424,337
Unearned premiums	4,056,860	4,036,119	3,753,636	3,868,379	3,833,540
Reinsurance balances payable	531,990	453,058	393,107	404,936	411,082
Contractholder payables	2,102,544	2,087,720	2,079,111	2,067,268	2,044,322
Collateral held for insured obligations	237,056	232,411	236,630	249,723	257,396
Senior notes	1,733,865	1,733,694	1,733,528	1,733,364	1,733,211
Revolving credit agreement borrowings	491,006	488,612	455,682	554,756	572,289
Securities lending payable	450,312	415,048	274,125	306,886	236,948
Payable for securities purchased	294,109	376,332	90,034	255,427	356,583
Other liabilities	904,438	984,942	911,500	819,373	752,399
Total liabilities	23,032,496	22,817,977	21,780,650	21,814,433	21,622,107
Redeemable noncontrolling interests	206,475	206,383	206,292	206,199	206,105
Shareholders' equity					
Non-cumulative preferred shares	780,000	780,000	780,000	780,000	780,000
Common shares	638	636	634	633	633
Additional paid-in capital	1,847,949	1,819,605	1,793,781	1,775,499	1,760,606
Retained earnings	10,322,975	9,864,424	9,426,299	9,300,208	9,083,202
Accumulated other comprehensive income (loss), net of deferred income tax	206,827	38,323	(178,720)	(221,041)	(194,157)
Common shares held in treasury, at cost	(2,401,037)	(2,388,392)	(2,382,167)	(2,280,151)	(2,266,529)
Total shareholders' equity available to Arch	10,757,352	10,114,596	9,439,827	9,355,148	9,163,755
Non-redeemable noncontrolling interests	855,347	838,081	791,560	876,754	861,153
Total shareholders' equity	11,612,699	10,952,677	10,231,387	10,231,902	10,024,908
Total liabilities, noncontrolling interests and shareholders' equity	\$ 34,851,670	\$ 33,977,037	\$ 32,218,329	\$ 32,252,534	\$ 31,853,120
Common shares and common share equivalents outstanding, net of treasury shares	404,887,534	403,738,764	402,454,834	405,524,360	405,436,637
Book value per common share (1)	\$ 24.64	\$ 23.12	\$ 21.52	\$ 21.15	\$ 20.68

(1) Excludes the effects of stock options and restricted stock units outstanding.

Arch Capital Group Ltd. and Subsidiaries
Consolidated Statements of Changes in Shareholders' Equity

(U.S. Dollars in thousands)

	Three Months Ended					Six Months Ended	
	June 30, 2019	March 31, 2019	December 31, 2018	September 30, 2018	June 30, 2018	June 30, 2019	June 30, 2018
Non-cumulative preferred shares							
Balance at beginning of period	\$ 780,000	\$ 780,000	\$ 780,000	\$ 780,000	\$ 780,000	\$ 780,000	\$ 872,555
Preferred shares redeemed	—	—	—	—	—	—	(92,555)
Balance at end of period	<u>\$ 780,000</u>	<u>\$ 780,000</u>	<u>\$ 780,000</u>	<u>\$ 780,000</u>	<u>\$ 780,000</u>	<u>\$ 780,000</u>	<u>\$ 780,000</u>
Convertible non-voting common equivalent preferred shares							
Balance at beginning of period	—	—	—	—	—	—	489,627
Preferred shares converted to common shares	—	—	—	—	—	—	(489,627)
Balance at end of period	<u>—</u>	<u>—</u>	<u>—</u>	<u>—</u>	<u>—</u>	<u>—</u>	<u>—</u>
Common shares							
Balance at beginning of period	636	634	633	633	630	634	611
Common shares issued, net	2	2	1	—	3	4	22
Balance at end of period	<u>638</u>	<u>636</u>	<u>634</u>	<u>633</u>	<u>633</u>	<u>638</u>	<u>633</u>
Additional paid-in capital							
Balance at beginning of period	1,819,605	1,793,781	1,775,499	1,760,606	1,737,978	1,793,781	1,230,617
Preferred shares converted to common shares	—	—	—	—	—	—	489,608
Reversal of original issue costs on redeemed preferred shares	—	—	—	—	—	—	2,710
All other	28,344	25,824	18,282	14,893	22,628	54,168	37,671
Balance at end of period	<u>1,847,949</u>	<u>1,819,605</u>	<u>1,793,781</u>	<u>1,775,499</u>	<u>1,760,606</u>	<u>1,847,949</u>	<u>1,760,606</u>
Retained earnings							
Balance at beginning of period	9,864,424	9,426,299	9,300,208	9,083,202	8,849,959	9,426,299	8,562,889
Cumulative effect of an accounting change	—	—	—	—	—	—	149,794
Balance at beginning of period, as adjusted	9,864,424	9,426,299	9,300,208	9,083,202	8,849,959	9,426,299	8,712,683
Net income	485,845	495,498	56,324	248,766	256,347	981,343	422,731
Amounts attributable to noncontrolling interests	(16,891)	(46,970)	80,170	(21,358)	(12,701)	(63,861)	(28,662)
Preferred share dividends	(10,403)	(10,403)	(10,403)	(10,402)	(10,403)	(20,806)	(20,840)
Loss on redemption of preferred shares	—	—	—	—	—	—	(2,710)
Balance at end of period	<u>10,322,975</u>	<u>9,864,424</u>	<u>9,426,299</u>	<u>9,300,208</u>	<u>9,083,202</u>	<u>10,322,975</u>	<u>9,083,202</u>
Accumulated other comprehensive income (loss)							
Balance at beginning of period	38,323	(178,720)	(221,041)	(194,157)	(134,009)	(178,720)	118,044
Cumulative effect of an accounting change	—	—	—	—	—	—	(149,794)
Change in unrealized appreciation (decline) in value of available-for-sale investments, net of deferred income tax	164,425	211,380	58,042	(28,867)	(47,115)	375,805	(150,959)
Change in foreign currency translation adjustments	4,079	5,663	(15,721)	1,983	(13,033)	9,742	(11,448)
Balance at end of period	<u>206,827</u>	<u>38,323</u>	<u>(178,720)</u>	<u>(221,041)</u>	<u>(194,157)</u>	<u>206,827</u>	<u>(194,157)</u>
Common shares held in treasury, at cost							
Balance at beginning of period	(2,388,392)	(2,382,167)	(2,280,151)	(2,266,529)	(2,084,186)	(2,382,167)	(2,077,741)
Shares repurchased for treasury	(12,645)	(6,225)	(102,016)	(13,622)	(182,343)	(18,870)	(188,788)
Balance at end of period	<u>(2,401,037)</u>	<u>(2,388,392)</u>	<u>(2,382,167)</u>	<u>(2,280,151)</u>	<u>(2,266,529)</u>	<u>(2,401,037)</u>	<u>(2,266,529)</u>
Total shareholders' equity available to Arch	10,757,352	10,114,596	9,439,827	9,355,148	9,163,755	10,757,352	9,163,755
Non-redeemable noncontrolling interests	855,347	838,081	791,560	876,754	861,153	855,347	861,153
Total shareholders' equity	\$ 11,612,699	\$ 10,952,677	\$ 10,231,387	\$ 10,231,902	\$ 10,024,908	\$ 11,612,699	\$ 10,024,908

Arch Capital Group Ltd. and Subsidiaries
Consolidated Statements of Cash Flows

(U.S. Dollars in thousands)

	Three Months Ended					Six Months Ended	
	June 30, 2019	March 31, 2019	December 31, 2018	September 30, 2018	June 30, 2018	June 30, 2019	June 30, 2018
Operating Activities							
Net income	\$ 485,845	\$ 495,498	\$ 56,324	\$ 248,766	\$ 256,347	\$ 981,343	\$ 422,731
Adjustments to reconcile net income to net cash provided by operating activities:							
Net realized (gains) losses	(118,893)	(145,400)	162,793	47,315	75,447	(264,293)	177,442
Net impairment losses included in earnings	49	1,309	1,705	492	470	1,358	632
Equity in net income or loss of investment funds accounted for using the equity method and other income or loss	(15,968)	(29,752)	30,337	19,900	5,840	(45,720)	(13,543)
Amortization of intangible assets	19,794	20,417	26,147	26,315	26,472	40,211	53,208
Share-based compensation	15,646	25,891	9,970	10,387	20,755	41,537	35,419
Changes in:							
Reserve for losses and loss adjustment expenses, net	160,401	(6,005)	175,489	146,136	(164,210)	154,396	(77,891)
Unearned premiums, net	(18,829)	156,393	(67,681)	42,675	(37,867)	137,564	139,778
Premiums receivable	(16,913)	(285,137)	(8,049)	33,703	(3,178)	(302,050)	(236,950)
Deferred acquisition costs	(1,622)	(23,168)	(1,773)	(963)	(4,764)	(24,790)	(35,111)
Reinsurance balances payable	76,810	62,605	(10,258)	(5,265)	35,327	139,415	88,961
Other items, net	(109,194)	(37,253)	63,331	54,640	(113,933)	(146,447)	(57,790)
Net cash provided by operating activities	477,126	235,398	438,335	624,101	96,706	712,524	496,886
Investing Activities							
Purchases of fixed maturity investments	(8,888,176)	(7,444,470)	(8,489,743)	(7,970,347)	(7,186,303)	(16,332,646)	(16,867,570)
Purchases of equity securities	(228,129)	(203,810)	(181,807)	(139,679)	(302,663)	(431,939)	(679,663)
Purchases of other investments	(352,470)	(324,593)	(471,290)	(526,185)	(494,693)	(677,063)	(1,017,147)
Proceeds from sales of fixed maturity investments	8,555,892	7,076,590	8,203,068	7,219,660	7,411,396	15,632,482	16,090,543
Proceeds from sales of equity securities	81,684	95,017	251,526	244,851	330,757	176,701	622,068
Proceeds from sales, redemptions and maturities of other investments	318,215	216,483	383,923	404,737	336,732	534,698	773,298
Proceeds from redemptions and maturities of fixed maturity investments	144,525	100,424	168,734	212,573	224,417	244,949	511,448
Net settlements of derivative instruments	57,964	29,737	43,934	(3,733)	(31,572)	87,701	4,498
Net (purchases) sales of short-term investments	(91,081)	292,601	(68,842)	102,414	(143,417)	201,520	451,901
Change in cash collateral related to securities lending	37,208	(29,618)	43,810	(39,231)	14,737	7,590	176,304
Purchases of fixed assets	(6,936)	(9,423)	(10,759)	(5,808)	(9,002)	(16,359)	(13,242)
Other	(80,847)	(93,731)	(36,491)	8,266	9,924	(174,578)	49,961
Net cash provided by (used for) investing activities	(452,151)	(294,793)	(163,937)	(492,482)	160,313	(746,944)	102,399
Financing Activities							
Redemption of preferred shares	—	—	—	—	—	—	(92,555)
Purchases of common shares under share repurchase program	—	(2,871)	(98,233)	(10,954)	(170,276)	(2,871)	(173,575)
Proceeds from common shares issued, net	1,344	(1,901)	4,421	1,822	(11,072)	(557)	(13,851)
Proceeds from borrowings	3,800	59,000	51,000	36,680	90,994	62,800	130,579
Repayments of borrowings	(1,500)	(26,038)	(149,401)	(54,000)	(272,000)	(27,538)	(373,000)
Change in cash collateral related to securities lending	(37,208)	29,618	(43,810)	39,231	(14,737)	(7,590)	(176,304)
Dividends paid to redeemable noncontrolling interests	(4,497)	(4,497)	(4,498)	(4,497)	(4,497)	(8,994)	(8,994)
Other	(2,140)	(1,389)	(1,142)	(1,595)	(2,133)	(3,529)	(4,489)
Preferred dividends paid	(10,403)	(10,403)	(10,403)	(10,402)	(10,403)	(20,806)	(20,840)
Net cash provided by (used for) financing activities	(50,604)	41,519	(252,066)	(3,715)	(394,124)	(9,085)	(733,029)
Effects of exchange rate changes on foreign currency cash and restricted cash	(1,512)	3,449	(7,508)	(1,194)	(12,042)	1,937	(10,431)
Increase (decrease) in cash and restricted cash	(27,141)	(14,427)	14,824	126,710	(149,147)	(41,568)	(144,175)
Cash and restricted cash, beginning of period	710,216	724,643	709,819	583,109	732,256	1,434,859	727,284
Cash and restricted cash, end of period	\$ 683,075	\$ 710,216	\$ 724,643	\$ 709,819	\$ 583,109	\$ 1,393,291	\$ 583,109
Income taxes paid (received)	\$ 76,166	\$ (32,666)	\$ 33,032	\$ 12,499	\$ 3,346	\$ 43,500	\$ (46,511)
Interest paid	\$ 54,612	\$ 6,246	\$ 52,170	\$ 6,748	\$ 52,996	\$ 60,858	\$ 60,857
Net cash provided by operating activities, excluding the 'other' segment	\$ 431,865	\$ 165,411	\$ 383,622	\$ 543,205	\$ 34,190	\$ 597,276	\$ 404,451

Arch Capital Group Ltd. and Subsidiaries

Segment Information — Overview

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’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 President and Chief Executive Officer of Arch Capital and the Chief Financial Officer of Arch Capital. 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 core underwriting segments based on underwriting income or loss. The Company does not manage its assets by underwriting segment and, accordingly, investment income is not allocated to each underwriting segment.

The Company determined its reportable operating 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.

Insurance 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:* 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 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.

Arch Capital Group Ltd. and Subsidiaries

Segment Information — Overview

Reinsurance Segment

The reinsurance segment consists of the Company's 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.

Mortgage Segment

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 and United Guaranty Residential Insurance Company (combined "Arch MI U.S.") are approved as eligible mortgage insurers by Fannie Mae and Freddie Mac.

Corporate (Non-Underwriting) Segment

The corporate (non-underwriting) segment results include net investment income, other income (loss), corporate expenses, transaction costs and other, amortization of intangible assets, 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.

Other Segment

The 'other' segment includes the results of Watford Holdings Ltd. and its subsidiary Watford Re Ltd., a multi-line Bermuda reinsurance company, which was launched in March 2014. Subsidiaries of the Company act as Watford Re's reinsurance and insurance underwriting managers while HPS Investment Partners, LLC manages Watford Re's non-investment grade credit portfolios and the Company manages Watford Re's investment grade portfolios, all under long term services agreements. Pursuant to generally accepted accounting principles, Watford Re is considered a variable interest entity and the Company concluded that it is the primary beneficiary of Watford Re. As such, the Company consolidates the results of Watford Re in its consolidated financial statements, although it only owns approximately 11% of Watford Re's common equity (listed on the Nasdaq Select Global Market under the ticker symbol "WTRE"). Watford Re has its own management and board of directors that is responsible for its overall profitability. The portion of Watford Re's earnings attributable to third party investors is recorded in the consolidated statements of income as 'amounts attributable to noncontrolling interests.' Management measures segment performance for the 'other' segment based on net income or loss.

Arch Capital Group Ltd. and Subsidiaries
Segment Information

(U.S. Dollars in thousands)

	Three Months Ended June 30, 2019					
	Insurance	Reinsurance	Mortgage	Sub-total (Core)	Other	Total
Gross premiums written (1)	\$ 919,925	\$ 545,547	\$ 364,465	\$ 1,829,829	\$ 161,978	\$ 1,937,809
Premiums ceded	(292,095)	(169,457)	(42,857)	(504,301)	(42,608)	(492,911)
Net premiums written	627,830	376,090	321,608	1,325,528	119,370	1,444,898
Change in unearned premiums	(35,388)	(8,906)	31,175	(13,119)	31,948	18,829
Net premiums earned	592,442	367,184	352,783	1,312,409	151,318	1,463,727
Other underwriting income	—	1,224	4,056	5,280	673	5,953
Losses and loss adjustment expenses	(389,172)	(240,958)	(25,997)	(656,127)	(111,416)	(767,543)
Acquisition expenses	(91,094)	(56,785)	(32,654)	(180,533)	(29,556)	(210,089)
Other operating expenses	(109,523)	(33,960)	(39,819)	(183,302)	(15,612)	(198,914)
Underwriting income (loss)	\$ 2,653	\$ 36,705	\$ 258,369	297,727	(4,593)	293,134
Net investment income				123,038	32,000	155,038
Net realized gains				125,112	(4,306)	120,806
Net impairment losses recognized in earnings				(49)	—	(49)
Equity in net income (loss) of investment funds accounted for using the equity method				32,536	—	32,536
Other income				1,129	—	1,129
Corporate expenses (2)				(16,073)	—	(16,073)
Transaction costs and other (2)				(2,178)	—	(2,178)
Amortization of intangible assets				(19,794)	—	(19,794)
Interest expense				(23,375)	(5,905)	(29,280)
Net foreign exchange gains (losses)				(6,190)	1,238	(4,952)
Income before income taxes				511,883	18,434	530,317
Income tax expense				(44,452)	(20)	(44,472)
Net income				467,431	18,414	485,845
Dividends attributable to redeemable noncontrolling interests				—	(4,590)	(4,590)
Amounts attributable to nonredeemable noncontrolling interests				—	(12,301)	(12,301)
Net income available to Arch				467,431	1,523	468,954
Preferred dividends				(10,403)	—	(10,403)
Net income available to Arch common shareholders				\$ 457,028	\$ 1,523	\$ 458,551
Underwriting Ratios						
Loss ratio	65.7%	65.6%	7.4%	50.0%	73.6%	52.4%
Acquisition expense ratio	15.4%	15.5%	9.3%	13.8%	19.5%	14.4%
Other operating expense ratio	18.5%	9.2%	11.3%	14.0%	10.3%	13.6%
Combined ratio	99.6%	90.3%	28.0%	77.8%	103.4%	80.4%
Net premiums written to gross premiums written	68.2%	68.9%	88.2%	72.4%	73.7%	74.6%
Total investable assets				\$ 20,776,663	\$ 2,768,466	\$ 23,545,129
Total assets				31,418,142	3,433,528	34,851,670
Total liabilities				20,781,438	2,251,058	23,032,496

- (1) Certain amounts included in the gross premiums written of each segment are related to intersegment transactions and are included in the gross premiums written of each segment. 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 'Transaction costs and other.' See 'Comments on Regulation G' for a further discussion of such items.

Arch Capital Group Ltd. and Subsidiaries
Segment Information

(U.S. Dollars in thousands)

	Three Months Ended June 30, 2018					
	Insurance	Reinsurance	Mortgage	Sub-total (Core)	Other	Total
Gross premiums written (1)	\$ 769,372	\$ 490,327	\$ 330,990	\$ 1,591,202	\$ 175,175	\$ 1,696,544
Premiums ceded	(245,265)	(136,247)	(50,867)	(432,892)	(34,589)	(397,648)
Net premiums written	524,107	354,080	280,123	1,158,310	140,586	1,298,896
Change in unearned premiums	22,342	(13,762)	10,355	18,935	18,932	37,867
Net premiums earned	546,449	340,318	290,478	1,177,245	159,518	1,336,763
Other underwriting income (loss)	—	(129)	3,315	3,186	688	3,874
Losses and loss adjustment expenses	(357,465)	(229,956)	(21,591)	(609,012)	(117,141)	(726,153)
Acquisition expenses	(90,670)	(50,142)	(27,737)	(168,549)	(34,289)	(202,838)
Other operating expenses	(92,680)	(35,678)	(38,729)	(167,087)	(9,094)	(176,181)
Underwriting income (loss)	\$ 5,634	\$ 24,413	\$ 205,736	235,783	(318)	235,465
Net investment income				107,761	27,907	135,668
Net realized gains (losses)				(59,545)	(17,066)	(76,611)
Net impairment losses recognized in earnings				(470)	—	(470)
Equity in net income (loss) of investment funds accounted for using the equity method				8,472	—	8,472
Other income (loss)				3,113	—	3,113
Corporate expenses (2)				(15,604)	—	(15,604)
Transaction costs and other (2)				(6,908)	—	(6,908)
Amortization of intangible assets				(26,472)	—	(26,472)
Interest expense				(26,058)	(4,286)	(30,344)
Net foreign exchange gains (losses)				46,211	7,495	53,706
Income before income taxes				266,283	13,732	280,015
Income tax expense				(23,644)	(24)	(23,668)
Net income				242,639	13,708	256,347
Dividends attributable to redeemable noncontrolling interests				—	(4,585)	(4,585)
Amounts attributable to nonredeemable noncontrolling interests				—	(8,116)	(8,116)
Net income available to Arch				242,639	1,007	243,646
Preferred dividends				(10,403)	—	(10,403)
Net income available to Arch common shareholders				\$ 232,236	\$ 1,007	\$ 233,243
Underwriting Ratios						
Loss ratio	65.4%	67.6%	7.4%	51.7%	73.4%	54.3%
Acquisition expense ratio	16.6%	14.7%	9.5%	14.3%	21.5%	15.2%
Other operating expense ratio	17.0%	10.5%	13.3%	14.2%	5.7%	13.2%
Combined ratio	99.0%	92.8%	30.2%	80.2%	100.6%	82.7%
Net premiums written to gross premiums written	68.1%	72.2%	84.6%	72.8%	80.3%	76.6%
Total investable assets				\$ 19,172,010	\$ 2,647,841	\$ 21,819,851
Total assets				28,515,604	3,337,516	31,853,120
Total liabilities				19,473,218	2,148,889	21,622,107

- (1) Certain amounts included in the gross premiums written of each segment are related to intersegment transactions and are included in the gross premiums written of each segment. 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 ‘Transaction costs and other.’ See ‘Comments on Regulation G’ for a further discussion of such items.

Arch Capital Group Ltd. and Subsidiaries
Segment Information

(U.S. Dollars in thousands)

	Six Months Ended June 30, 2019					
	Insurance	Reinsurance	Mortgage	Sub-total (Core)	Other	Total
Gross premiums written (1)	\$ 1,861,879	\$ 1,228,402	\$ 720,515	\$ 3,810,282	\$ 348,667	\$ 4,015,688
Premiums ceded	(612,717)	(401,024)	(91,655)	(1,104,882)	(83,910)	(1,045,531)
Net premiums written	1,249,162	827,378	628,860	2,705,400	264,757	2,970,157
Change in unearned premiums	(103,215)	(113,829)	46,825	(170,219)	32,655	(137,564)
Net premiums earned	1,145,947	713,549	675,685	2,535,181	297,412	2,832,593
Other underwriting income	—	5,601	7,912	13,513	1,265	14,778
Losses and loss adjustment expenses	(745,895)	(480,768)	(37,146)	(1,263,809)	(222,266)	(1,486,075)
Acquisition expenses	(173,918)	(111,111)	(64,326)	(349,355)	(58,582)	(407,937)
Other operating expenses	(222,919)	(69,664)	(79,694)	(372,277)	(27,800)	(400,077)
Underwriting income (loss)	\$ 3,215	\$ 57,607	\$ 502,431	563,253	(9,971)	553,282
Net investment income				244,287	67,700	311,987
Net realized gains (losses)				237,545	24,826	262,371
Net impairment losses recognized in earnings				(1,358)	—	(1,358)
Equity in net income (loss) of investment funds accounted for using the equity method				79,403	—	79,403
Other income (loss)				2,212	—	2,212
Corporate expenses (2)				(32,845)	—	(32,845)
Transaction costs and other (2)				(3,368)	—	(3,368)
Amortization of intangible assets				(40,211)	—	(40,211)
Interest expense				(46,857)	(11,488)	(58,345)
Net foreign exchange gains (losses)				(1,015)	(412)	(1,427)
Income before income taxes				1,001,046	70,655	1,071,701
Income tax (expense) benefit				(90,338)	(20)	(90,358)
Net income				910,708	70,635	981,343
Dividends attributable to redeemable noncontrolling interests				—	(9,178)	(9,178)
Amounts attributable to nonredeemable noncontrolling interests				—	(54,683)	(54,683)
Net income available to Arch				910,708	6,774	917,482
Preferred dividends				(20,806)	—	(20,806)
Net income available to Arch common shareholders				\$ 889,902	\$ 6,774	\$ 896,676
Underwriting Ratios						
Loss ratio	65.1%	67.4%	5.5%	49.9%	74.7%	52.5%
Acquisition expense ratio	15.2%	15.6%	9.5%	13.8%	19.7%	14.4%
Other operating expense ratio	19.5%	9.8%	11.8%	14.7%	9.3%	14.1%
Combined ratio	99.8%	92.8%	26.8%	78.4%	103.7%	81.0%
Net premiums written to gross premiums written	67.1%	67.4%	87.3%	71.0%	75.9%	74.0%

- (1) Certain amounts included in the gross premiums written of each segment are related to intersegment transactions and are included in the gross premiums written of each segment. 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 'Transaction costs and other.' See 'Comments on Regulation G' for a further discussion of such items.

Arch Capital Group Ltd. and Subsidiaries
Segment Information

(U.S. Dollars in thousands)

	Six Months Ended June 30, 2018					
	Insurance	Reinsurance	Mortgage	Sub-total (Core)	Other	Total
Gross premiums written (1)	\$ 1,592,750	\$ 1,067,810	\$ 652,168	\$ 3,312,807	\$ 389,045	\$ 3,534,758
Premiums ceded	(492,445)	(331,977)	(97,004)	(921,505)	(68,907)	(823,318)
Net premiums written	1,100,305	735,833	555,164	2,391,302	320,138	2,711,440
Change in unearned premiums	(15,119)	(116,343)	15,556	(115,906)	(23,872)	(139,778)
Net premiums earned	1,085,186	619,490	570,720	2,275,396	296,266	2,571,662
Other underwriting income (loss)	—	1,103	6,731	7,834	1,389	9,223
Losses and loss adjustment expenses	(711,195)	(371,631)	(65,057)	(1,147,883)	(215,130)	(1,363,013)
Acquisition expenses	(175,839)	(98,461)	(54,304)	(328,604)	(65,610)	(394,214)
Other operating expenses	(184,654)	(71,249)	(77,500)	(333,403)	(17,793)	(351,196)
Underwriting income (loss)	\$ 13,498	\$ 79,252	\$ 380,590	473,340	(878)	472,462
Net investment income				208,004	54,388	262,392
Net realized gains (losses)				(171,404)	(16,205)	(187,609)
Net impairment losses recognized in earnings				(632)	—	(632)
Equity in net income (loss) of investment funds accounted for using the equity method				36,541	—	36,541
Other income (loss)				3,187	—	3,187
Corporate expenses (2)				(30,086)	—	(30,086)
Transaction costs and other (2)				(7,738)	—	(7,738)
Amortization of intangible assets				(53,208)	—	(53,208)
Interest expense				(51,965)	(9,015)	(60,980)
Net foreign exchange gains (losses)				31,172	2,813	33,985
Income before income taxes				437,211	31,103	468,314
Income tax (expense) benefit				(45,556)	(27)	(45,583)
Net income				391,655	31,076	422,731
Dividends attributable to redeemable noncontrolling interests				—	(9,170)	(9,170)
Amounts attributable to nonredeemable noncontrolling interests				—	(19,492)	(19,492)
Net income available to Arch				391,655	2,414	394,069
Preferred dividends				(20,840)	—	(20,840)
Loss on redemption of preferred shares				(2,710)	—	(2,710)
Net income available to Arch common shareholders				\$ 368,105	\$ 2,414	\$ 370,519
Underwriting Ratios						
Loss ratio	65.5%	60.0%	11.4%	50.4%	72.6%	53.0%
Acquisition expense ratio	16.2%	15.9%	9.5%	14.4%	22.1%	15.3%
Other operating expense ratio	17.0%	11.5%	13.6%	14.7%	6.0%	13.7%
Combined ratio	98.7%	87.4%	34.5%	79.5%	100.7%	82.0%
Net premiums written to gross premiums written	69.1%	68.9%	85.1%	72.2%	82.3%	76.7%

- (1) Certain amounts included in the gross premiums written of each segment are related to intersegment transactions and are included in the gross premiums written of each segment. 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 'Transaction costs and other.' See 'Comments on Regulation G' for a further discussion of such items.

Arch Capital Group Ltd. and Subsidiaries
Segment Information — Insurance Segment

(U.S. Dollars in thousands)

	Three Months Ended					Six Months Ended	
	June 30, 2019	March 31, 2019	December 31, 2018	September 30, 2018	June 30, 2018	June 30, 2019	June 30, 2018
Gross premiums written	\$ 919,925	\$ 941,954	\$ 832,762	\$ 836,820	\$ 769,372	\$ 1,861,879	\$ 1,592,750
Premiums ceded	(292,095)	(320,622)	(297,794)	(259,968)	(245,265)	(612,717)	(492,445)
Net premiums written	627,830	621,332	534,968	576,852	524,107	1,249,162	1,100,305
Change in unearned premiums	(35,388)	(67,827)	24,449	(15,794)	22,342	(103,215)	(15,119)
Net premiums earned	592,442	553,505	559,417	561,058	546,449	1,145,947	1,085,186
Losses and loss adjustment expenses	(389,172)	(356,723)	(400,050)	(409,435)	(357,465)	(745,895)	(711,195)
Acquisition expenses	(91,094)	(82,824)	(85,608)	(88,255)	(90,670)	(173,918)	(175,839)
Other operating expenses	(109,523)	(113,396)	(89,403)	(90,081)	(92,680)	(222,919)	(184,654)
Underwriting income (loss)	\$ 2,653	\$ 562	\$ (15,644)	\$ (26,713)	\$ 5,634	\$ 3,215	\$ 13,498
Underwriting Ratios							
Loss ratio	65.7 %	64.4 %	71.5 %	73.0 %	65.4 %	65.1 %	65.5 %
Acquisition expense ratio	15.4 %	15.0 %	15.3 %	15.7 %	16.6 %	15.2 %	16.2 %
Other operating expense ratio	18.5 %	20.5 %	16.0 %	16.1 %	17.0 %	19.5 %	17.0 %
Combined ratio	99.6 %	99.9 %	102.8 %	104.8 %	99.0 %	99.8 %	98.7 %
Catastrophic activity and prior year development:							
Current accident year catastrophic events, net of reinsurance and reinstatement premiums	0.4 %	0.0 %	6.0 %	5.8 %	1.4 %	0.2 %	0.8 %
Net (favorable) adverse development in prior year loss reserves, net of related adjustments	(0.2)%	(0.3)%	(1.5)%	(1.2)%	(0.9)%	(0.3)%	(0.6)%
Combined ratio excluding catastrophic activity and prior year development (1)	99.4 %	100.2 %	98.3 %	100.2 %	98.5 %	99.9 %	98.5 %
Net premiums written to gross premiums written	68.2 %	66.0 %	64.2 %	68.9 %	68.1 %	67.1 %	69.1 %

(1) See 'Comments on Regulation G' for further discussion.

Arch Capital Group Ltd. and Subsidiaries
Segment Information — Insurance Segment

(U.S. Dollars in thousands)

(U.S. Dollars in thousands)	Three Months Ended										Six Months Ended										
	June 30, 2019			March 31, 2019		December 31, 2018		September 30, 2018		June 30, 2018		June 30, 2019		June 30, 2018							
Net premiums written																					
Professional lines (1)	\$	121,679	19.4%	\$	129,234	20.8%	\$	109,219	20.4%	\$	113,100	19.6%	\$	108,298	20.7%	\$	250,913	20.1%	\$	228,087	20.7%
Programs		108,671	17.3%		101,172	16.3%		92,601	17.3%		103,928	18.0%		100,178	19.1%		209,843	16.8%		196,734	17.9%
Property, energy, marine and aviation		103,819	16.5%		70,486	11.3%		44,017	8.2%		60,909	10.6%		62,121	11.9%		174,305	14.0%		114,248	10.4%
Travel, accident and health		76,537	12.2%		88,104	14.2%		67,205	12.6%		79,450	13.8%		63,222	12.1%		164,641	13.2%		143,746	13.1%
Construction and national accounts		60,888	9.7%		95,355	15.3%		84,237	15.7%		71,888	12.5%		66,384	12.7%		156,243	12.5%		164,812	15.0%
Excess and surplus casualty (2)		58,466	9.3%		45,165	7.3%		41,674	7.8%		44,829	7.8%		40,042	7.6%		103,631	8.3%		81,964	7.4%
Lenders products		22,373	3.6%		22,415	3.6%		25,825	4.8%		25,995	4.5%		22,290	4.3%		44,788	3.6%		44,274	4.0%
Other (3)		75,397	12.0%		69,401	11.2%		70,190	13.1%		76,753	13.3%		61,572	11.7%		144,798	11.6%		126,440	11.5%
Total	\$	627,830	100.0%	\$	621,332	100.0%	\$	534,968	100.0%	\$	576,852	100.0%	\$	524,107	100.0%	\$	1,249,162	100.0%	\$	1,100,305	100.0%
Underwriting location																					
United States	\$	471,664	75.1%	\$	471,811	75.9%	\$	422,372	79.0%	\$	448,910	77.8%	\$	415,375	79.3%	\$	943,475	75.5%	\$	865,369	78.6%
Europe		129,869	20.7%		132,651	21.3%		92,658	17.3%		110,557	19.2%		87,783	16.7%		262,520	21.0%		198,759	18.1%
Other		26,297	4.2%		16,870	2.7%		19,938	3.7%		17,385	3.0%		20,949	4.0%		43,167	3.5%		36,177	3.3%
Total	\$	627,830	100.0%	\$	621,332	100.0%	\$	534,968	100.0%	\$	576,852	100.0%	\$	524,107	100.0%	\$	1,249,162	100.0%	\$	1,100,305	100.0%
Net premiums earned																					
Professional lines (1)	\$	115,667	19.5%	\$	114,791	20.7%	\$	114,910	20.5%	\$	115,271	20.5%	\$	112,226	20.5%	\$	230,458	20.1%	\$	228,244	21.0%
Programs		102,687	17.3%		97,486	17.6%		100,333	17.9%		96,509	17.2%		97,333	17.8%		200,173	17.5%		192,344	17.7%
Property, energy, marine and aviation		68,995	11.6%		59,638	10.8%		51,769	9.3%		53,857	9.6%		50,840	9.3%		128,633	11.2%		99,443	9.2%
Travel, accident and health		83,636	14.1%		71,575	12.9%		74,153	13.3%		81,405	14.5%		74,754	13.7%		155,211	13.5%		141,589	13.0%
Construction and national accounts		76,795	13.0%		75,931	13.7%		83,063	14.8%		80,381	14.3%		81,784	15.0%		152,726	13.3%		158,996	14.7%
Excess and surplus casualty (2)		47,858	8.1%		42,369	7.7%		42,430	7.6%		43,401	7.7%		40,049	7.3%		90,227	7.9%		86,593	8.0%
Lenders products		23,570	4.0%		23,232	4.2%		24,017	4.3%		24,254	4.3%		23,161	4.2%		46,802	4.1%		45,977	4.2%
Other (3)		73,234	12.4%		68,483	12.4%		68,742	12.3%		65,980	11.8%		66,302	12.1%		141,717	12.4%		132,000	12.2%
Total	\$	592,442	100.0%	\$	553,505	100.0%	\$	559,417	100.0%	\$	561,058	100.0%	\$	546,449	100.0%	\$	1,145,947	100.0%	\$	1,085,186	100.0%

(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.

Arch Capital Group Ltd. and Subsidiaries
Segment Information — Reinsurance Segment

(U.S. Dollars in thousands)

	Three Months Ended					Six Months Ended	
	June 30, 2019	March 31, 2019	December 31, 2018	September 30, 2018	June 30, 2018	June 30, 2019	June 30, 2018
Gross premiums written	\$ 545,547	\$ 682,855	\$ 409,316	\$ 435,396	\$ 490,327	\$ 1,228,402	\$ 1,067,810
Premiums ceded	(169,457)	(231,567)	(84,268)	(123,705)	(136,247)	(401,024)	(331,977)
Net premiums written	376,090	451,288	325,048	311,691	354,080	827,378	735,833
Change in unearned premiums	(8,906)	(104,923)	23,405	(18,418)	(13,762)	(113,829)	(116,343)
Net premiums earned	367,184	346,365	348,453	293,273	340,318	713,549	619,490
Other underwriting income (loss)	1,224	4,377	(3,172)	1,387	(129)	5,601	1,103
Losses and loss adjustment expenses	(240,958)	(239,810)	(291,838)	(183,413)	(229,956)	(480,768)	(371,631)
Acquisition expenses	(56,785)	(54,326)	(62,452)	(50,367)	(50,142)	(111,111)	(98,461)
Other operating expenses	(33,960)	(35,704)	(32,165)	(29,936)	(35,678)	(69,664)	(71,249)
Underwriting income (loss)	\$ 36,705	\$ 20,902	\$ (41,174)	\$ 30,944	\$ 24,413	\$ 57,607	\$ 79,252
Underwriting Ratios							
Loss ratio	65.6 %	69.2%	83.8 %	62.5 %	67.6 %	67.4 %	60.0 %
Acquisition expense ratio	15.5 %	15.7%	17.9 %	17.2 %	14.7 %	15.6 %	15.9 %
Other operating expense ratio	9.2 %	10.3%	9.2 %	10.2 %	10.5 %	9.8 %	11.5 %
Combined ratio	90.3 %	95.2%	110.9 %	89.9 %	92.8 %	92.8 %	87.4 %
Catastrophic activity and prior year development:							
Current accident year catastrophic events, net of reinsurance and reinstatement premiums	1.2 %	2.3%	24.3 %	8.7 %	2.2 %	1.7 %	1.3 %
Net (favorable) adverse development in prior year loss reserves, net of related adjustments	(3.1)%	0.5%	(9.6)%	(11.3)%	(9.4)%	(1.4)%	(11.0)%
Combined ratio excluding catastrophic activity and prior year development (1)	92.2 %	92.4%	96.2 %	92.5 %	100.0 %	92.5 %	97.1 %
Net premiums written to gross premiums written	68.9 %	66.1%	79.4 %	71.6 %	72.2 %	67.4 %	68.9 %

(1) See 'Comments on Regulation G' for further discussion.

Arch Capital Group Ltd. and Subsidiaries
Segment Information — Reinsurance Segment

(U.S. Dollars in thousands)

(U.S. Dollars in thousands)		Three Months Ended										Six Months Ended									
		June 30, 2019		March 31, 2019		December 31, 2018		September 30, 2018		June 30, 2018		June 30, 2019		June 30, 2018							
Net premiums written																					
Other specialty (1)	\$	129,174	34.3%	\$	140,477	31.1%	\$	108,363	33.3%	\$	105,535	33.9%	\$	155,081	43.8%	\$	269,651	32.6%	\$	294,073	40.0%
Casualty (2)		78,025	20.7%		168,484	37.3%		103,101	31.7%		98,788	31.7%		68,113	19.2%		246,509	29.8%		198,289	26.9%
Property excluding property catastrophe		96,050	25.5%		102,740	22.8%		64,025	19.7%		83,222	26.7%		77,876	22.0%		198,790	24.0%		163,046	22.2%
Property catastrophe		46,594	12.4%		3,383	0.7%		27,894	8.6%		9,053	2.9%		35,045	9.9%		49,977	6.0%		42,677	5.8%
Marine and aviation		15,619	4.2%		15,958	3.5%		11,929	3.7%		6,011	1.9%		10,061	2.8%		31,577	3.8%		20,073	2.7%
Other (3)		10,628	2.8%		20,246	4.5%		9,736	3.0%		9,082	2.9%		7,904	2.2%		30,874	3.7%		17,675	2.4%
Total	\$	376,090	100.0%	\$	451,288	100.0%	\$	325,048	100.0%	\$	311,691	100.0%	\$	354,080	100.0%	\$	827,378	100.0%	\$	735,833	100.0%
Underwriting location																					
Bermuda	\$	159,147	42.3%	\$	111,499	24.7%	\$	146,013	44.9%	\$	117,228	37.6%	\$	145,568	41.1%	\$	270,646	32.7%	\$	224,282	30.5%
United States		109,296	29.1%		156,413	34.7%		94,661	29.1%		103,006	33.0%		100,271	28.3%		265,709	32.1%		215,883	29.3%
Europe and other		107,647	28.6%		183,376	40.6%		84,374	26.0%		91,457	29.3%		108,241	30.6%		291,023	35.2%		295,668	40.2%
Total	\$	376,090	100.0%	\$	451,288	100.0%	\$	325,048	100.0%	\$	311,691	100.0%	\$	354,080	100.0%	\$	827,378	100.0%	\$	735,833	100.0%
Net premiums earned																					
Other specialty (1)	\$	136,573	37.2%	\$	121,521	35.1%	\$	112,892	32.4%	\$	108,311	36.9%	\$	149,648	44.0%	\$	258,094	36.2%	\$	253,365	40.9%
Casualty (2)		103,164	28.1%		91,624	26.5%		115,157	33.0%		77,496	26.4%		85,009	25.0%		194,788	27.3%		154,381	24.9%
Property excluding property catastrophe		85,479	23.3%		83,792	24.2%		76,827	22.0%		71,358	24.3%		70,849	20.8%		169,271	23.7%		139,603	22.5%
Property catastrophe		18,537	5.0%		18,732	5.4%		22,956	6.6%		18,190	6.2%		15,716	4.6%		37,269	5.2%		34,103	5.5%
Marine and aviation		12,498	3.4%		11,059	3.2%		11,088	3.2%		8,672	3.0%		10,089	3.0%		23,557	3.3%		19,478	3.1%
Other (3)		10,933	3.0%		19,637	5.7%		9,533	2.7%		9,246	3.2%		9,007	2.6%		30,570	4.3%		18,560	3.0%
Total	\$	367,184	100.0%	\$	346,365	100.0%	\$	348,453	100.0%	\$	293,273	100.0%	\$	340,318	100.0%	\$	713,549	100.0%	\$	619,490	100.0%

(1) Includes proportional motor, surety, accident and health, workers' compensation catastrophe, agriculture, trade credit and other.

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

(3) Includes life, casualty clash and other.

Arch Capital Group Ltd. and Subsidiaries
Segment Information — Mortgage Segment

(U.S. Dollars in thousands)

	Three Months Ended					Six Months Ended	
	June 30, 2019	March 31, 2019	December 31, 2018	September 30, 2018	June 30, 2018	June 30, 2019	June 30, 2018
Gross premiums written	\$ 364,465	\$ 356,050	\$ 357,981	\$ 350,559	\$ 330,990	\$ 720,515	\$ 652,168
Premiums ceded	(42,857)	(48,798)	(48,603)	(57,226)	(50,867)	(91,655)	(97,004)
Net premiums written	321,608	307,252	309,378	293,333	280,123	628,860	555,164
Change in unearned premiums	31,175	15,650	5,214	7,591	10,355	46,825	15,556
Net premiums earned	352,783	322,902	314,592	300,924	290,478	675,685	570,720
Other underwriting income (1)	4,056	3,856	2,569	3,733	3,315	7,912	6,731
Losses and loss adjustment expenses	(25,997)	(11,149)	(6,617)	(9,615)	(21,591)	(37,146)	(65,057)
Acquisition expenses	(32,654)	(31,672)	(30,930)	(33,361)	(27,737)	(64,326)	(54,304)
Other operating expenses	(39,819)	(39,875)	(33,810)	(31,122)	(38,729)	(79,694)	(77,500)
Underwriting income	\$ 258,369	\$ 244,062	\$ 245,804	\$ 230,559	\$ 205,736	\$ 502,431	\$ 380,590
Underwriting Ratios							
Loss ratio	7.4 %	3.5 %	2.1 %	3.2 %	7.4 %	5.5 %	11.4 %
Acquisition expense ratio	9.3 %	9.8 %	9.8 %	11.1 %	9.5 %	9.5 %	9.5 %
Other operating expense ratio	11.3 %	12.3 %	10.7 %	10.3 %	13.3 %	11.8 %	13.6 %
Combined ratio	28.0 %	25.6 %	22.6 %	24.6 %	30.2 %	26.8 %	34.5 %
Net (favorable) adverse development in prior year loss reserves, net of related adjustments	(6.5)%	(11.3)%	(10.4)%	(12.5)%	(8.0)%	(8.8)%	(6.4)%
Combined ratio excluding prior year development (2)	34.5 %	36.9 %	33.0 %	37.1 %	38.2 %	35.6 %	40.9 %
Net premiums written to gross premiums written	88.2 %	86.3 %	86.4 %	83.7 %	84.6 %	87.3 %	85.1 %
Net premiums written by underwriting location							
United States	\$ 258,774	\$ 255,380	\$ 256,472	\$ 240,959	\$ 229,715	\$ 514,154	\$ 450,892
Other	62,834	51,872	52,906	52,374	50,408	114,706	104,272
Total	\$ 321,608	\$ 307,252	\$ 309,378	\$ 293,333	\$ 280,123	\$ 628,860	\$ 555,164
United States %	80.5 %	83.1 %	82.9 %	82.1 %	82.0 %	81.8 %	81.2 %
Other %	19.5 %	16.9 %	17.1 %	17.9 %	18.0 %	18.2 %	18.8 %

(1) Primarily related to income earned on various risk-sharing products offered to government sponsored enterprises and mortgage lenders.

(2) See 'Comments on Regulation G' for further discussion.

Arch Capital Group Ltd. and Subsidiaries
Segment Information — Mortgage Segment

(U.S. Dollars in millions)	June 30, 2019		March 31, 2019		December 31, 2018		September 30, 2018		June 30, 2018	
Insurance In Force (IIF) (1)										
U.S. primary mortgage insurance	\$ 279,297	69.1 %	\$ 276,699	70.9 %	\$ 276,538	72.1 %	\$ 272,409	73.1 %	\$ 262,889	73.1 %
Mortgage reinsurance	26,286	6.5 %	26,487	6.8 %	25,975	6.8 %	26,500	7.1 %	26,302	7.3 %
Other (2)	98,335	24.3 %	87,190	22.3 %	81,147	21.2 %	73,903	19.8 %	70,677	19.6 %
Total	<u>\$ 403,918</u>	<u>100.0 %</u>	<u>\$ 390,376</u>	<u>100.0 %</u>	<u>\$ 383,660</u>	<u>100.0 %</u>	<u>\$ 372,812</u>	<u>100.0 %</u>	<u>\$ 359,868</u>	<u>100.0 %</u>
Risk In Force (RIF) (3)										
U.S. primary mortgage insurance	\$ 71,760	91.8 %	\$ 71,114	92.2 %	\$ 70,995	92.3 %	\$ 69,764	92.5 %	\$ 67,271	92.4 %
Mortgage reinsurance	2,182	2.8 %	2,204	2.9 %	2,217	2.9 %	2,264	3.0 %	2,282	3.1 %
Other (2)	4,260	5.4 %	3,772	4.9 %	3,728	4.8 %	3,425	4.5 %	3,237	4.4 %
Total	<u>\$ 78,202</u>	<u>100.0 %</u>	<u>\$ 77,090</u>	<u>100.0 %</u>	<u>\$ 76,940</u>	<u>100.0 %</u>	<u>\$ 75,453</u>	<u>100.0 %</u>	<u>\$ 72,790</u>	<u>100.0 %</u>
Supplemental disclosures for U.S. primary mortgage insurance:										
<u>Total RIF by credit quality (FICO score):</u>										
>=740	\$ 41,333	57.6 %	\$ 41,053	57.7 %	\$ 41,066	57.8 %	\$ 40,466	58.0 %	\$ 39,038	58.0 %
680-739	24,488	34.1 %	24,122	33.9 %	23,954	33.7 %	23,371	33.5 %	22,325	33.2 %
620-679	5,494	7.7 %	5,476	7.7 %	5,485	7.7 %	5,413	7.8 %	5,235	7.8 %
<620	445	0.6 %	463	0.7 %	490	0.7 %	514	0.7 %	673	1.0 %
Total	<u>\$ 71,760</u>	<u>100.0 %</u>	<u>\$ 71,114</u>	<u>100.0 %</u>	<u>\$ 70,995</u>	<u>100.0 %</u>	<u>\$ 69,764</u>	<u>100.0 %</u>	<u>\$ 67,271</u>	<u>100.0 %</u>
Weighted average FICO score	743		743		743		743		743	
<u>Total RIF by Loan-To-Value (LTV):</u>										
95.01% and above	\$ 8,535	11.9 %	\$ 8,175	11.5 %	\$ 7,918	11.2 %	\$ 7,506	10.8 %	\$ 6,915	10.3 %
90.01% to 95.00%	39,777	55.4 %	39,500	55.5 %	39,370	55.5 %	38,748	55.5 %	37,488	55.7 %
85.01% to 90.00%	20,419	28.5 %	20,418	28.7 %	20,643	29.1 %	20,464	29.3 %	19,904	29.6 %
85.00% and below	3,029	4.2 %	3,021	4.2 %	3,064	4.3 %	3,046	4.4 %	2,964	4.4 %
Total	<u>\$ 71,760</u>	<u>100.0 %</u>	<u>\$ 71,114</u>	<u>100.0 %</u>	<u>\$ 70,995</u>	<u>100.0 %</u>	<u>\$ 69,764</u>	<u>100.0 %</u>	<u>\$ 67,271</u>	<u>100.0 %</u>
Weighted average LTV	93.1%		93.1%		93.0%		93.0%		92.9%	
<u>Total RIF by State:</u>										
Texas	\$ 5,509	7.7 %	\$ 5,488	7.7 %	\$ 5,491	7.7 %	\$ 5,406	7.7 %	\$ 5,260	7.8 %
California	4,736	6.6 %	4,574	6.4 %	4,505	6.3 %	4,310	6.2 %	4,066	6.0 %
Florida	3,699	5.2 %	3,601	5.1 %	3,541	5.0 %	3,395	4.9 %	3,186	4.7 %
Virginia	2,916	4.1 %	2,915	4.1 %	2,931	4.1 %	2,914	4.2 %	2,844	4.2 %
Georgia	2,599	3.6 %	2,565	3.6 %	2,573	3.6 %	2,542	3.6 %	2,453	3.6 %
Illinois	2,536	3.5 %	2,492	3.5 %	2,482	3.5 %	2,442	3.5 %	2,351	3.5 %
North Carolina	2,462	3.4 %	2,477	3.5 %	2,505	3.5 %	2,500	3.6 %	2,456	3.7 %
Minnesota	2,434	3.4 %	2,404	3.4 %	2,400	3.4 %	2,365	3.4 %	2,268	3.4 %
Washington	2,421	3.4 %	2,408	3.4 %	2,408	3.4 %	2,370	3.4 %	2,297	3.4 %
Maryland	2,420	3.4 %	2,404	3.4 %	2,407	3.4 %	2,369	3.4 %	2,298	3.4 %
Others	40,028	55.8 %	39,786	55.9 %	39,752	56.0 %	39,151	56.1 %	37,792	56.2 %
Total	<u>\$ 71,760</u>	<u>100.0 %</u>	<u>\$ 71,114</u>	<u>100.0 %</u>	<u>\$ 70,995</u>	<u>100.0 %</u>	<u>\$ 69,764</u>	<u>100.0 %</u>	<u>\$ 67,271</u>	<u>100.0 %</u>
Weighted average coverage (end of period RIF divided by IIF)	25.7%		25.7%		25.7%		25.6%		25.6%	
U.S. mortgage insurance total RIF, net of reinsurance (4)	\$ 56,562		\$ 55,957		\$ 55,755		\$ 54,558		\$ 52,167	
Analysts' persistency (5)	80.9%		81.3%		81.5%		82.0%		81.7%	
Risk-to-capital ratio -- Arch MI U.S. (6)	11.5:1		12.2:1		13.0:1		11.4:1		11.6:1	
PMIER sufficiency ratio -- Arch MI U.S. (7)	163%		146%		141%		151%		134%	

(1) 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) 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 risk-sharing or reinsurance transactions.

(4) Total RIF for the U.S. mortgage insurance operations (see note 3) after external reinsurance.

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

(6) Represents total current (non-delinquent) RIF, net of reinsurance, divided by total statutory capital (estimate for June 30, 2019).

(7) Calculated as available assets divided by required assets as defined within PMIERs (estimate for June 30, 2019).

Arch Capital Group Ltd. and Subsidiaries
Segment Information — Mortgage Segment

(U.S. Dollars in millions, except policy/loan/claim count)

(U.S. Dollars in millions, except policy/loan/claim count)		Three Months Ended													
		June 30, 2019		March 31, 2019		December 31, 2018		September 30, 2018		June 30, 2018					
Supplemental disclosures for U.S. primary mortgage insurance:															
Total new insurance written (NIW) (1)	\$	17,161		\$	11,207		\$	16,741		\$	21,425		\$	19,944	
Total NIW by credit quality (FICO score):															
>=740	\$	9,862	57.5%	\$	6,350	56.7%	\$	9,358	55.9%	\$	12,013	56.1%	\$	11,308	56.7%
680-739		6,139	35.8%		4,041	36.1%		6,080	36.3%		7,728	36.1%		7,182	36.0%
620-679		1,160	6.8%		816	7.3%		1,303	7.8%		1,684	7.9%		1,454	7.3%
Total	\$	17,161	100.0%	\$	11,207	100.0%	\$	16,741	100.0%	\$	21,425	100.0%	\$	19,944	100.0%
Total NIW by LTV:															
95.01% and above	\$	2,530	14.7%	\$	1,808	16.1%	\$	2,672	16.0%	\$	3,231	15.1%	\$	2,835	14.2%
90.01% to 95.00%		7,497	43.7%		4,975	44.4%		7,452	44.5%		9,689	45.2%		9,205	46.2%
85.01% to 90.00%		5,026	29.3%		3,149	28.1%		4,841	28.9%		6,264	29.2%		5,910	29.6%
85.00% and below		2,108	12.3%		1,275	11.4%		1,776	10.6%		2,241	10.5%		1,994	10.0%
Total	\$	17,161	100.0%	\$	11,207	100.0%	\$	16,741	100.0%	\$	21,425	100.0%	\$	19,944	100.0%
Total NIW monthly vs. single:															
Monthly	\$	15,935	92.9%	\$	10,263	91.6%	\$	15,299	91.4%	\$	19,842	92.6%	\$	18,814	94.3%
Single		1,226	7.1%		944	8.4%		1,442	8.6%		1,583	7.4%		1,130	5.7%
Total	\$	17,161	100.0%	\$	11,207	100.0%	\$	16,741	100.0%	\$	21,425	100.0%	\$	19,944	100.0%
Total NIW purchase vs. refinance:															
Purchase	\$	14,992	87.4%	\$	10,289	91.8%	\$	15,868	94.8%	\$	20,397	95.2%	\$	18,871	94.6%
Refinance		2,169	12.6%		918	8.2%		873	5.2%		1,028	4.8%		1,073	5.4%
Total	\$	17,161	100.0%	\$	11,207	100.0%	\$	16,741	100.0%	\$	21,425	100.0%	\$	19,944	100.0%
Ending number of policies in force (PIF) (3)		1,292,215			1,286,877			1,289,295			1,270,728			1,239,565	
Rollforward of insured loans in default:															
Beginning delinquent number of loans		19,827			20,665			20,361			21,037			24,062	
Plus: new notices		8,906			9,711			10,052			9,466			8,152	
Less: cures		(9,201)			(9,706)			(8,785)			(9,246)			(10,273)	
Less: paid claims		(771)			(843)			(963)			(896)			(904)	
Ending delinquent number of loans (3)		18,761			19,827			20,665			20,361			21,037	
Ending percentage of loans in default (3)		1.45%			1.54%			1.60%			1.60%			1.70%	
Losses:															
Number of claims paid		771			843			963			896			904	
Total paid claims (in thousands)	\$	32,025		\$	33,494		\$	40,982		\$	34,958		\$	35,889	
Average per claim (in thousands)	\$	41.5		\$	39.7		\$	42.6		\$	39.0		\$	39.7	
Severity (2)		95.1%			98.9%			101.9%			102.9%			97.9%	
Average reserve per default (in thousands)	\$	16.1		\$	16.6		\$	17.4		\$	18.1		\$	19.3	

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

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

(3) Includes first lien primary and pool policies.

Arch Capital Group Ltd. and Subsidiaries
Segment Information — Mortgage Segment

Supplemental disclosures for U.S. primary mortgage insurance:

(U.S. Dollars in millions)

	June 30, 2019						December 31, 2018					
	Loss Reserves, Net (1)	Primary IIF (2)		Primary RIF (3)		Delinquency Rate	Loss Reserves, Net (1)	Primary IIF (2)		Primary RIF (3)		Delinquency Rate
	% of Total	Total	% of Total	Total	% of Total		% of Total	Total	% of Total	Total	% of Total	
<u>Policy year:</u>												
2009 and prior	66.7%	\$ 19,182	6.9%	4,397	6.1%	8.23%	73.4%	\$ 21,210	7.7%	4,900	6.9%	8.90%
2010	0.5%	519	0.2%	139	0.2%	2.45%	0.5%	646	0.2%	175	0.2%	2.62%
2011	0.9%	2,091	0.7%	582	0.8%	1.59%	0.9%	2,530	0.9%	701	1.0%	1.57%
2012	1.4%	7,613	2.7%	2,122	3.0%	0.83%	1.5%	9,650	3.5%	2,664	3.8%	0.78%
2013	3.2%	14,800	5.3%	4,125	5.7%	0.84%	3.5%	16,823	6.1%	4,676	6.6%	0.89%
2014	2.6%	16,251	5.8%	4,454	6.2%	0.98%	2.6%	18,274	6.6%	4,947	7.0%	0.97%
2015	3.4%	30,289	10.8%	8,003	11.2%	0.73%	3.3%	33,781	12.2%	8,849	12.5%	0.69%
2016	7.4%	47,334	16.9%	12,233	17.0%	0.79%	7.0%	52,324	18.9%	13,407	18.9%	0.77%
2017	8.1%	50,603	18.1%	12,918	18.0%	0.65%	6.0%	54,287	19.6%	13,793	19.4%	0.55%
2018	5.7%	62,753	22.5%	15,831	22.1%	0.37%	1.1%	67,013	24.2%	16,883	23.8%	0.15%
2019	0.2%	27,862	10.0%	6,956	9.7%	0.05%						
Total	100.0%	\$ 279,297	100.0%	\$ 71,760	100.0%	1.45%	100.0%	\$ 276,538	100.0%	\$ 70,995	100.0%	1.60%

- (1) Total reserves for losses and loss adjustment expenses, net of recoverables, was \$330.1 million at June 30, 2019, compared to \$375.8 million at December 31, 2018.
- (2) The aggregate dollar amount of each insured mortgage loan's current principal balance.
- (3) 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 risk-sharing transactions.

Arch Capital Group Ltd. and Subsidiaries
Segment Information - Consolidated Excluding the 'Other' Segment (Sub-Total (Core))

(U.S. Dollars in thousands)

	Three Months Ended					Six Months Ended	
	June 30, 2019	March 31, 2019	December 31, 2018	September 30, 2018	June 30, 2018	June 30, 2019	June 30, 2018
Gross premiums written	\$ 1,829,829	\$ 1,980,453	\$ 1,599,085	\$ 1,622,532	\$ 1,591,202	\$ 3,810,282	\$ 3,312,807
Premiums ceded	(504,301)	(600,581)	(429,691)	(440,656)	(432,892)	(1,104,882)	(921,505)
Net premiums written	1,325,528	1,379,872	1,169,394	1,181,876	1,158,310	2,705,400	2,391,302
Change in unearned premiums	(13,119)	(157,100)	53,068	(26,621)	18,935	(170,219)	(115,906)
Net premiums earned	1,312,409	1,222,772	1,222,462	1,155,255	1,177,245	2,535,181	2,275,396
Other underwriting income (loss)	5,280	8,233	(603)	5,120	3,186	13,513	7,834
Losses and loss adjustment expenses	(656,127)	(607,682)	(698,505)	(602,463)	(609,012)	(1,263,809)	(1,147,883)
Acquisition expenses	(180,533)	(168,822)	(178,990)	(171,983)	(168,549)	(349,355)	(328,604)
Other operating expenses	(183,302)	(188,975)	(155,378)	(151,139)	(167,087)	(372,277)	(333,403)
Underwriting income	\$ 297,727	\$ 265,526	\$ 188,986	\$ 234,790	\$ 235,783	\$ 563,253	\$ 473,340
Underwriting Ratios							
Loss ratio	50.0 %	49.7 %	57.1 %	52.1 %	51.7 %	49.9 %	50.4 %
Acquisition expense ratio	13.8 %	13.8 %	14.6 %	14.9 %	14.3 %	13.8 %	14.4 %
Other operating expense ratio	14.0 %	15.5 %	12.7 %	13.1 %	14.2 %	14.7 %	14.7 %
Combined ratio	77.8 %	79.0 %	84.4 %	80.1 %	80.2 %	78.4 %	79.5 %
Catastrophic activity and prior year development:							
Current accident year catastrophic events, net of reinsurance and reinstatement premiums	0.5 %	0.6 %	9.7 %	5.0 %	1.3 %	0.6 %	0.7 %
Net (favorable) adverse development in prior year loss reserves, net of related adjustments	(2.7)%	(3.0)%	(6.1)%	(6.7)%	(5.1)%	(2.8)%	(4.9)%
Combined ratio excluding catastrophic activity and prior year development (1)	80.0 %	81.4 %	80.8 %	81.8 %	84.0 %	80.6 %	83.7 %
Net premiums written to gross premiums written	72.4 %	69.7 %	73.1 %	72.8 %	72.8 %	71.0 %	72.2 %

(1) See 'Comments on Regulation G' for further discussion.

Arch Capital Group Ltd. and Subsidiaries
Segment Information — Selected Information on Losses and Loss Adjustment Expenses

(U.S. Dollars in thousands)

	Three Months Ended					Six Months Ended	
	June 30, 2019	March 31, 2019	December 31, 2018	September 30, 2018	June 30, 2018	June 30, 2019	June 30, 2018
Components of losses and loss adjustment expenses incurred (1)							
Paid losses and loss adjustment expenses	\$ 494,368	\$ 430,724	\$ 579,106	\$ 503,245	\$ 403,161	\$ 925,092	\$ 899,606
Change in unpaid losses and loss adjustment expenses	161,759	176,958	119,399	99,218	205,851	338,717	248,277
Total losses and loss adjustment expenses	<u>\$ 656,127</u>	<u>\$ 607,682</u>	<u>\$ 698,505</u>	<u>\$ 602,463</u>	<u>\$ 609,012</u>	<u>\$ 1,263,809</u>	<u>\$ 1,147,883</u>
Estimated net (favorable) adverse development in prior year loss reserves, net of related adjustments (1)							
Net impact on underwriting results:							
Insurance	\$ (1,469)	\$ (1,651)	\$ (8,303)	\$ (6,830)	\$ (5,104)	\$ (3,120)	\$ (6,610)
Reinsurance	(11,251)	1,580	(33,479)	(33,162)	(31,882)	(9,671)	(68,040)
Mortgage	(22,797)	(36,622)	(32,667)	(37,631)	(23,314)	(59,419)	(36,291)
Total	<u>\$ (35,517)</u>	<u>\$ (36,693)</u>	<u>\$ (74,449)</u>	<u>\$ (77,623)</u>	<u>\$ (60,300)</u>	<u>\$ (72,210)</u>	<u>\$ (110,941)</u>
Impact on losses and loss adjustment expenses:							
Insurance	\$ (2,607)	\$ (4,426)	\$ (10,278)	\$ (5,949)	\$ (6,058)	\$ (7,033)	\$ (8,168)
Reinsurance	(12,697)	1,668	(34,596)	(34,315)	(33,022)	(11,029)	(69,563)
Mortgage	(22,803)	(36,622)	(32,667)	(38,638)	(23,333)	(59,425)	(36,310)
Total	<u>\$ (38,107)</u>	<u>\$ (39,380)</u>	<u>\$ (77,541)</u>	<u>\$ (78,902)</u>	<u>\$ (62,413)</u>	<u>\$ (77,487)</u>	<u>\$ (114,041)</u>
Impact on acquisition expenses:							
Insurance	\$ 1,138	\$ 2,775	\$ 1,975	\$ (881)	\$ 954	\$ 3,913	\$ 1,558
Reinsurance	1,446	(88)	1,117	1,153	1,140	1,358	1,523
Mortgage	6	—	—	1,007	19	6	19
Total	<u>\$ 2,590</u>	<u>\$ 2,687</u>	<u>\$ 3,092</u>	<u>\$ 1,279</u>	<u>\$ 2,113</u>	<u>\$ 5,277</u>	<u>\$ 3,100</u>
Impact on combined ratio:							
Insurance	(0.2)%	(0.3)%	(1.5)%	(1.2)%	(0.9)%	(0.3)%	(0.6)%
Reinsurance	(3.1)%	0.5 %	(9.6)%	(11.3)%	(9.4)%	(1.4)%	(11.0)%
Mortgage	(6.5)%	(11.3)%	(10.4)%	(12.5)%	(8.0)%	(8.8)%	(6.4)%
Total	(2.7)%	(3.0)%	(6.1)%	(6.7)%	(5.1)%	(2.8)%	(4.9)%
Impact on loss ratio:							
Insurance	(0.4)%	(0.8)%	(1.8)%	(1.1)%	(1.1)%	(0.6)%	(0.8)%
Reinsurance	(3.5)%	0.5 %	(9.9)%	(11.7)%	(9.7)%	(1.5)%	(11.2)%
Mortgage	(6.5)%	(11.3)%	(10.4)%	(12.8)%	(8.0)%	(8.8)%	(6.4)%
Total	(2.9)%	(3.2)%	(6.3)%	(6.8)%	(5.3)%	(3.1)%	(5.0)%
Impact on acquisition expense ratio:							
Insurance	0.2 %	0.5 %	0.3 %	(0.1)%	0.2 %	0.3 %	0.2 %
Reinsurance	0.4 %	0.0 %	0.3 %	0.4 %	0.3 %	0.1 %	0.2 %
Mortgage	0.0 %	0.0 %	0.0 %	0.3 %	0.0 %	0.0 %	0.0 %
Total	0.2 %	0.2 %	0.2 %	0.1 %	0.2 %	0.3 %	0.1 %
Estimated net losses incurred from current accident year catastrophic events (2)							
Insurance	\$ 2,565	\$ 54	\$ 33,320	\$ 32,691	\$ 7,558	\$ 2,619	\$ 8,587
Reinsurance	4,589	7,824	84,846	25,469	7,388	12,413	8,363
Total	<u>\$ 7,154</u>	<u>\$ 7,878</u>	<u>\$ 118,166</u>	<u>\$ 58,160</u>	<u>\$ 14,946</u>	<u>\$ 15,032</u>	<u>\$ 16,950</u>
Impact on combined ratio:							
Insurance	0.4 %	0.0 %	6.0 %	5.8 %	1.4 %	0.2 %	0.8 %
Reinsurance	1.2 %	2.3 %	24.3 %	8.7 %	2.2 %	1.7 %	1.3 %
Total	0.5 %	0.6 %	9.7 %	5.0 %	1.3 %	0.6 %	0.7 %

(1) Presented on a 'core' basis which excludes amounts related to the 'other' segment (*i.e.*, results of Watford Re). See 'Comments on Regulation G' for a further discussion of the presentation of 'core' results.

(2) Equals estimated losses from catastrophic events occurring in the current accident year, net of reinsurance and reinstatement premiums. Amounts shown for the insurance segment are for named catastrophic events only. Amounts shown for the reinsurance segment include (i) named events with over \$5 million of losses incurred by its Bermuda and Europe operations and (ii) all catastrophe losses incurred by its U.S. operations. Amounts not applicable for the mortgage segment.

Arch Capital Group Ltd. and Subsidiaries
Investment Information — Investable Asset Summary and Investment Portfolio Metrics

The following table summarizes the Company's investable assets and portfolio metrics (1):

(U.S. Dollars in thousands)

	June 30, 2019		March 31, 2019		December 31, 2018		September 30, 2018		June 30, 2018	
Investable assets (1) (2):										
Fixed maturities available for sale, at fair value	\$ 15,184,279	73.1 %	\$ 14,627,478	72.9 %	\$ 14,305,659	73.1 %	\$ 14,026,253	71.6 %	\$ 13,849,812	72.2 %
Fixed maturities—fair value option (3)	348,298	1.7 %	366,470	1.8 %	322,743	1.6 %	353,321	1.8 %	374,708	2.0 %
Fixed maturities pledged under securities lending agreements, at fair value	427,217	2.1 %	388,732	1.9 %	253,500	1.3 %	286,691	1.5 %	218,471	1.1 %
Total fixed maturities	<u>15,959,794</u>	<u>76.8 %</u>	<u>15,382,680</u>	<u>76.7 %</u>	<u>14,881,902</u>	<u>76.1 %</u>	<u>14,666,265</u>	<u>74.9 %</u>	<u>14,442,991</u>	<u>75.3 %</u>
Equity securities, at fair value	606,240	2.9 %	430,885	2.1 %	306,693	1.6 %	397,537	2.0 %	471,473	2.5 %
Equity securities—fair value option (3)	47,367	0.2 %	48,587	0.2 %	47,255	0.2 %	62,816	0.3 %	62,080	0.3 %
Equity securities pledged under securities lending agreements, at fair value	13,293	0.1 %	15,530	0.1 %	14,895	0.1 %	12,718	0.1 %	11,593	0.1 %
Total equity securities	<u>666,900</u>	<u>3.2 %</u>	<u>495,002</u>	<u>2.5 %</u>	<u>368,843</u>	<u>1.9 %</u>	<u>473,071</u>	<u>2.4 %</u>	<u>545,146</u>	<u>2.8 %</u>
Other investments—fair value option (3)	1,327,134	6.4 %	1,313,816	6.6 %	1,261,525	6.4 %	1,233,280	6.3 %	1,266,327	6.6 %
Total other investments	<u>1,327,134</u>	<u>6.4 %</u>	<u>1,313,816</u>	<u>6.6 %</u>	<u>1,261,525</u>	<u>6.4 %</u>	<u>1,233,280</u>	<u>6.3 %</u>	<u>1,266,327</u>	<u>6.6 %</u>
Investments accounted for using the equity method (4)	1,581,972	7.6 %	1,563,779	7.8 %	1,493,791	7.6 %	1,524,242	7.8 %	1,428,582	7.5 %
Short-term investments available for sale, at fair value	821,961	4.0 %	706,214	3.5 %	955,880	4.9 %	961,799	4.9 %	1,096,798	5.7 %
Short-term investments—fair value option (3)	25,289	0.1 %	25,429	0.1 %	40,046	0.2 %	24,309	0.1 %	23,179	0.1 %
Total short-term investments	<u>847,250</u>	<u>4.1 %</u>	<u>731,643</u>	<u>3.6 %</u>	<u>995,926</u>	<u>5.1 %</u>	<u>986,108</u>	<u>5.0 %</u>	<u>1,119,977</u>	<u>5.8 %</u>
Cash	536,339	2.6 %	576,799	2.9 %	583,027	3.0 %	586,353	3.0 %	480,984	2.5 %
Securities transactions entered into but not settled at the balance sheet date	(142,726)	(0.7)%	(8,339)	0.0 %	(18,153)	(0.1)%	122,863	0.6 %	(111,997)	(0.6)%
Total investable assets held by the Company	<u>\$ 20,776,663</u>	<u>100.0 %</u>	<u>\$ 20,055,380</u>	<u>100.0 %</u>	<u>\$ 19,566,861</u>	<u>100.0 %</u>	<u>\$ 19,592,182</u>	<u>100.0 %</u>	<u>\$ 19,172,010</u>	<u>100.0 %</u>
Average effective duration (in years)	3.52		3.47		3.38		2.94		2.89	
Average S&P/Moody's credit ratings (5)	AA/Aa2		AA/Aa2		AA/Aa2		AA/Aa2		AA/Aa2	
Embedded book yield (before investment expenses)	2.87%		2.95%		2.89%		2.78%		2.64%	

(1) Presented on a 'core' basis which excludes amounts related to the 'other' segment (*i.e.*, results of Watford Re). See 'Comments on Regulation G' for a further discussion of the presentation of 'core' results. Such amounts are summarized as follows:

Investable assets in 'other' segment:					
Cash	\$ 68,977	\$ 56,301	\$ 63,529	\$ 64,684	\$ 45,644
Investments accounted for using the fair value option	1,972,947	2,215,321	2,312,002	2,424,009	2,385,317
Fixed maturities available for sale, at fair value	697,453	549,834	393,351	305,388	279,177
Equity securities, at fair value	64,703	65,010	32,206	46,581	63,009
Securities sold but not yet purchased	(48,823)	(28,737)	(7,790)	(9,065)	(24,529)
Securities transactions entered into but not settled at the balance sheet date	13,209	(33,011)	(35,635)	(99,537)	(100,777)
Total investable assets included in 'other' segment	<u>\$ 2,768,466</u>	<u>\$ 2,824,718</u>	<u>\$ 2,757,663</u>	<u>\$ 2,732,060</u>	<u>\$ 2,647,841</u>

- (2) This table excludes the collateral received and reinvested and includes the securities pledged under securities lending agreements, at fair value.
- (3) Represents investments which are carried at fair value under the fair value option and reflected as "investments accounted for using the fair value option" on the balance sheet.
- (4) Changes in the carrying value of investment funds accounted for using the equity method are recorded as "equity in net income (loss) of investment funds accounted for using the equity method" rather than as an unrealized gain or loss component of accumulated other comprehensive income.
- (5) Average credit ratings on the Company's investment portfolio on securities with ratings assigned by Standard & Poor's ("S&P") and Moody's Investors Service ("Moody's").

Arch Capital Group Ltd. and Subsidiaries
Investment Information — Composition of Net Investment Income, Yield and Total Return

The following table summarizes the Company's net investment income, yield and total return (1):

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

	Three Months Ended					Six Months Ended	
	June 30, 2019	March 31, 2019	December 31, 2018	September 30, 2018	June 30, 2018	June 30, 2019	June 30, 2018
Composition of net investment income (1):							
Fixed maturities	\$ 111,335	\$ 110,651	\$ 108,791	\$ 103,252	\$ 98,968	\$ 221,986	\$ 191,406
Equity securities (dividends)	3,494	2,246	2,242	3,426	4,232	5,740	6,982
Short-term investments	3,448	4,298	5,211	4,417	4,225	7,746	8,174
Other (2)	20,115	22,944	14,445	18,030	19,242	43,059	38,471
Gross investment income	138,392	140,139	130,689	129,125	126,667	278,531	245,033
Investment expenses	(15,354)	(18,890)	(15,063)	(14,797)	(18,906)	(34,244)	(37,029)
Net investment income	\$ 123,038	\$ 121,249	\$ 115,626	\$ 114,328	\$ 107,761	\$ 244,287	\$ 208,004
Per share	\$ 0.30	\$ 0.30	\$ 0.28	\$ 0.28	\$ 0.26	\$ 0.60	\$ 0.50
Investment income yield, at amortized cost (1) (3):							
Pre-tax	2.62%	2.67%	2.49%	2.45%	2.32 %	2.64%	2.23 %
After-tax	2.37%	2.41%	2.21%	2.22%	2.12 %	2.38%	2.03 %
Total return on investments (1) (4)	2.37%	2.70%	0.51%	0.31%	(0.19)%	5.14%	(0.51)%

- (1) Presented on a 'core' basis which excludes amounts related to the 'other' segment (*i.e.*, results of Watford Re). See 'Comments on Regulation G' for a further discussion of the presentation of 'core' results.
- (2) Amounts include dividends and other distributions on investment funds, term loan investments funds held balances, cash balances and other.
- (3) Presented on an annualized basis and excluding the impact of investments for which returns are not included within investment income, such as investments accounted for using the equity method and certain equities.
- (4) Total return on investments includes net 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 or losses and is calculated on a pre-tax basis and before investment expenses. See 'Comments on Regulation G' for a further discussion of the presentation of total return on investments.

Arch Capital Group Ltd. and Subsidiaries
Investment Information — Composition of Fixed Maturities

The following table summarizes the Company's fixed maturities and fixed maturities pledged under securities lending agreements (1):

(U.S. Dollars in thousands)

	Fair Value	Gross Unrealized Gains	Gross Unrealized Losses	Net Unrealized Gains (Losses)	Amortized Cost	Fair Value / Amortized Cost	Fair Value % of Total
<u>At June 30, 2019</u>							
Corporates	\$ 6,281,897	\$ 164,921	\$ (19,750)	\$ 145,171	\$ 6,136,726	102.4%	39.4%
U.S. government and government agencies	4,545,169	64,663	(2,018)	62,645	4,482,524	101.4%	28.5%
Municipal bonds	581,378	21,710	(58)	21,652	559,726	103.9%	3.6%
Non-U.S. government securities	1,847,023	43,815	(32,752)	11,063	1,835,960	100.6%	11.6%
Asset-backed securities	1,503,860	27,581	(3,030)	24,551	1,479,309	101.7%	9.4%
Commercial mortgage-backed securities	686,707	21,272	(228)	21,044	665,663	103.2%	4.3%
Residential mortgage-backed securities	513,760	11,227	(169)	11,058	502,702	102.2%	3.2%
Total	<u>\$ 15,959,794</u>	<u>\$ 355,189</u>	<u>\$ (58,005)</u>	<u>\$ 297,184</u>	<u>\$ 15,662,610</u>	101.9%	100.0%
<u>At December 31, 2018</u>							
Corporates	\$ 5,735,526	\$ 14,457	\$ (104,223)	\$ (89,766)	\$ 5,825,292	98.5%	38.5%
U.S. government and government agencies	3,601,269	26,517	(8,347)	18,170	3,583,099	100.5%	24.2%
Municipal bonds	1,012,308	5,366	(11,891)	(6,525)	1,018,833	99.4%	6.8%
Non-U.S. government securities	1,713,891	13,807	(48,089)	(34,282)	1,748,173	98.0%	11.5%
Asset-backed securities	1,553,703	7,988	(13,447)	(5,459)	1,559,162	99.6%	10.4%
Commercial mortgage-backed securities	729,442	2,650	(10,751)	(8,101)	737,543	98.9%	4.9%
Residential mortgage-backed securities	535,763	3,974	(3,134)	840	534,923	100.2%	3.6%
Total	<u>\$ 14,881,902</u>	<u>\$ 74,759</u>	<u>\$ (199,882)</u>	<u>\$ (125,123)</u>	<u>\$ 15,007,025</u>	99.2%	100.0%

(1) Presented on a 'core' basis which excludes amounts related to the 'other' segment (*i.e.*, results of Watford Re). See 'Comments on Regulation G' for a further discussion of the presentation of 'core' results.

Arch Capital Group Ltd. and Subsidiaries
Investment Information — Credit Quality Distribution and Maturity Profile

The following table summarizes the credit quality distribution and maturity profile of the Company's fixed maturities and fixed maturities pledged under securities lending agreements (1):

(U.S. Dollars in thousands)

(U.S. Dollars in thousands)	June 30, 2019		March 31, 2019		December 31, 2018		September 30, 2018		June 30, 2018	
Credit quality distribution of total fixed maturities (2) (3):										
U.S. government and government agencies (4)	\$ 5,030,769	31.5 %	\$ 4,895,315	31.8 %	\$ 4,194,676	28.2 %	\$ 3,672,429	25.0 %	\$ 3,196,856	22.1 %
AAA	3,325,260	20.8 %	3,096,530	20.1 %	3,551,039	23.9 %	3,691,522	25.2 %	3,897,441	27.0 %
AA	1,831,265	11.5 %	1,886,690	12.3 %	2,129,336	14.3 %	2,047,332	14.0 %	2,139,794	14.8 %
A	3,439,690	21.6 %	3,213,166	20.9 %	3,069,656	20.6 %	3,163,536	21.6 %	3,114,115	21.6 %
BBB	1,465,219	9.2 %	1,437,907	9.3 %	1,251,205	8.4 %	1,317,999	9.0 %	1,373,644	9.5 %
BB	361,389	2.3 %	363,887	2.4 %	275,201	1.8 %	288,178	2.0 %	240,114	1.7 %
B	226,885	1.4 %	231,544	1.5 %	183,614	1.2 %	219,667	1.5 %	185,066	1.3 %
Lower than B	60,858	0.4 %	60,577	0.4 %	61,271	0.4 %	61,001	0.4 %	64,858	0.4 %
Not rated	218,459	1.4 %	197,064	1.3 %	165,904	1.1 %	204,601	1.4 %	231,103	1.6 %
Total fixed maturities, at fair value	<u>\$ 15,959,794</u>	<u>100.0 %</u>	<u>\$ 15,382,680</u>	<u>100.0 %</u>	<u>\$ 14,881,902</u>	<u>100.0 %</u>	<u>\$ 14,666,265</u>	<u>100.0 %</u>	<u>\$ 14,442,991</u>	<u>100.0 %</u>
Maturity profile of total fixed maturities (2):										
Due in one year or less	\$ 457,207	2.9 %	\$ 465,467	3.0 %	\$ 328,296	2.2 %	\$ 374,027	2.6 %	\$ 387,178	2.7 %
Due after one year through five years	9,559,981	59.9 %	9,261,391	60.2 %	8,553,446	57.5 %	8,287,813	56.5 %	8,131,505	56.3 %
Due after five years through ten years	2,992,411	18.7 %	2,932,045	19.1 %	2,937,729	19.7 %	2,929,793	20.0 %	2,737,358	19.0 %
Due after 10 years	245,868	1.5 %	202,377	1.3 %	243,523	1.6 %	307,655	2.1 %	276,245	1.9 %
	13,255,467	83.1 %	12,861,280	83.6 %	12,062,994	81.1 %	11,899,288	81.1 %	11,532,286	79.8 %
Mortgage-backed securities	513,760	3.2 %	492,255	3.2 %	535,763	3.6 %	477,547	3.3 %	498,759	3.5 %
Commercial mortgage-backed securities	686,707	4.3 %	610,754	4.0 %	729,442	4.9 %	682,516	4.7 %	590,198	4.1 %
Asset-backed securities	1,503,860	9.4 %	1,418,391	9.2 %	1,553,703	10.4 %	1,606,914	11.0 %	1,821,748	12.6 %
Total fixed maturities, at fair value	<u>\$ 15,959,794</u>	<u>100.0 %</u>	<u>\$ 15,382,680</u>	<u>100.0 %</u>	<u>\$ 14,881,902</u>	<u>100.0 %</u>	<u>\$ 14,666,265</u>	<u>100.0 %</u>	<u>\$ 14,442,991</u>	<u>100.0 %</u>

(1) Presented on a 'core' basis which excludes amounts related to the 'other' segment (*i.e.*, results of Watford Re). See 'Comments on Regulation G' for a further discussion of the presentation of 'core' results.

(2) This table excludes the collateral received and reinvested and includes the fixed maturities pledged under securities lending agreements, at fair value.

(3) 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.

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

Arch Capital Group Ltd. and Subsidiaries
Investment Information — Analysis of Corporate Exposures

The following table summarizes the Company's corporate bonds by sector (1):

(U.S. Dollars in thousands)	June 30, 2019		March 31, 2019		December 31, 2018		September 30, 2018		June 30, 2018	
Sector:										
Industrials	\$ 3,311,161	52.7 %	\$ 3,212,269	53.1 %	\$ 3,125,524	54.5 %	\$ 3,137,412	53.6 %	\$ 2,979,178	51.8 %
Financials	2,671,207	42.5 %	2,543,207	42.0 %	2,269,651	39.6 %	2,312,600	39.5 %	2,373,628	41.3 %
Utilities	245,068	3.9 %	223,399	3.7 %	228,676	4.0 %	274,062	4.7 %	238,343	4.1 %
Covered bonds	2,461	0.0 %	7,713	0.1 %	21,301	0.4 %	24,662	0.4 %	44,267	0.8 %
All other (2)	52,000	0.8 %	67,526	1.1 %	90,374	1.6 %	104,376	1.8 %	115,616	2.0 %
Total fixed maturities, at fair value	<u>\$ 6,281,897</u>	<u>100.0 %</u>	<u>\$ 6,054,114</u>	<u>100.0 %</u>	<u>\$ 5,735,526</u>	<u>100.0 %</u>	<u>\$ 5,853,112</u>	<u>100.0 %</u>	<u>\$ 5,751,032</u>	<u>100.0 %</u>
Credit quality distribution (3):										
AAA	\$ 91,266	1.5 %	\$ 135,630	2.2 %	\$ 166,052	2.9 %	\$ 194,408	3.3 %	\$ 216,636	3.8 %
AA	1,053,860	16.8 %	1,083,024	17.9 %	1,248,479	21.8 %	1,197,710	20.5 %	1,170,565	20.4 %
A	3,089,233	49.2 %	2,874,706	47.5 %	2,685,973	46.8 %	2,696,128	46.1 %	2,609,642	45.4 %
BBB	1,344,247	21.4 %	1,286,351	21.2 %	1,101,579	19.2 %	1,163,210	19.9 %	1,203,104	20.9 %
BB	334,068	5.3 %	336,354	5.6 %	253,253	4.4 %	257,785	4.4 %	203,978	3.5 %
B	217,324	3.5 %	217,043	3.6 %	167,205	2.9 %	200,116	3.4 %	156,646	2.7 %
Lower than B	22,758	0.4 %	25,901	0.4 %	26,645	0.5 %	22,578	0.4 %	22,152	0.4 %
Not rated	129,141	2.1 %	95,105	1.6 %	86,340	1.5 %	121,177	2.1 %	168,309	2.9 %
Total fixed maturities, at fair value	<u>\$ 6,281,897</u>	<u>100.0 %</u>	<u>\$ 6,054,114</u>	<u>100.0 %</u>	<u>\$ 5,735,526</u>	<u>100.0 %</u>	<u>\$ 5,853,112</u>	<u>100.0 %</u>	<u>\$ 5,751,032</u>	<u>100.0 %</u>

(1) Presented on a 'core' basis which excludes amounts related to the 'other' segment (*i.e.*, results of Watford Re). See 'Comments on Regulation G' for a further discussion of the presentation of 'core' results.

(2) Includes sovereign securities, supranational securities and other.

(3) 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.

The following table summarizes the Company's top ten exposures to fixed income corporate issuers by fair value at June 30, 2019 (1):

(U.S. Dollars in thousands)	Fair Value	% of Asset Class	% of Investable Assets	Credit Quality (2)
Issuer:				
Bank of America Corporation	\$ 234,672	3.7%	1.1%	A-/A2
JPMorgan Chase & Co.	228,144	3.6%	1.1%	A-/A2
Wells Fargo & Company	216,814	3.5%	1.0%	A/A1
Citigroup Inc.	207,673	3.3%	1.0%	A/A1
Apple Inc.	144,498	2.3%	0.7%	AA+/Aa1
Morgan Stanley	117,638	1.9%	0.6%	BBB+/A3
Nestle S.A.	112,919	1.8%	0.5%	AA-/Aa2
American Express Company	112,584	1.8%	0.5%	BBB+/A3
BP P.L.C.	109,805	1.7%	0.5%	A-/A1
The Goldman Sachs Group, Inc.	108,946	1.7%	0.5%	BBB+/A3
Total	<u>\$ 1,593,693</u>	<u>25.4%</u>	<u>7.7%</u>	

(1) Presented on a 'core' basis which excludes amounts related to the 'other' segment (*i.e.*, results of Watford Re). See 'Comments on Regulation G' for a further discussion of the presentation of 'core' results.

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

Arch Capital Group Ltd. and Subsidiaries
Investment Information — Structured Securities

The following table provides the composition of the Company's structured securities at June 30, 2019 (1):

(U.S. Dollars in thousands)

	<u>Agencies</u>	<u>AAA</u>	<u>AA</u>	<u>A</u>	<u>BBB</u>	<u>Non- Investment Grade</u>	<u>Total</u>
Residential mortgage-backed securities	\$ 381,380	\$ 54,483	\$ 39,957	\$ 251	\$ 332	\$ 37,357	\$ 513,760
Commercial mortgage-backed securities	104,220	523,025	5,095	11,543	20,939	21,885	686,707
Asset-backed securities	—	1,162,495	61,824	171,568	35,425	72,548	1,503,860
Total	<u>\$ 485,600</u>	<u>\$ 1,740,003</u>	<u>\$ 106,876</u>	<u>\$ 183,362</u>	<u>\$ 56,696</u>	<u>\$ 131,790</u>	<u>\$ 2,704,327</u>

(1) Presented on a 'core' basis which excludes amounts related to the 'other' segment (*i.e.*, results of Watford Re). See 'Comments on Regulation G' for a further discussion of the presentation of 'core' results.

Arch Capital Group Ltd. and Subsidiaries

Comments on Regulation G

Throughout this financial supplement, the Company presents its operations in the way it believes will be the most meaningful and useful to investors, analysts, rating agencies and others who use the Company's financial information in evaluating the performance of the 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, transaction costs and other and loss on redemption of preferred shares, net of 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 on the following page.

The Company believes 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, Transaction costs and other and loss on redemption of preferred shares in any particular period are not indicative of the performance of, or trends in, the Company's business performance. 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 the Company's 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 the Company's 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 the Company's investments represent other-than-temporary declines in expected recovery values on securities without actual realization. The use of the equity method on certain of the Company's 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 the Company's proportionate share of the net income or loss of the funds (which include changes in the fair value of the underlying securities in the funds). This method of accounting is different from the way the Company accounts for its 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. Transaction costs and other include advisory, financing, legal, severance, incentive compensation and other transaction costs related to acquisitions and Watford Re's non-recurring listing expenses. The Company believes that 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 the Company's Series C preferred shares in January 2018 and had no impact on shareholders' equity or cash flows. Due to these reasons, the Company excludes 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, transaction costs and other and loss on redemption of preferred shares from the calculation of after-tax operating income or loss available to Arch common shareholders.

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

In addition, the Company's presentation includes the use of information prepared on a 'core' basis, which excludes amounts related to the 'other' segment (i.e., results of Watford Re). Information provided on a 'core' basis are non-GAAP financial measures as defined in Regulation G. Pursuant to generally accepted accounting principles, Watford Re is considered a variable interest entity and the Company concluded that it is the primary beneficiary of Watford Re. As such, the Company consolidates the results of Watford Re in its consolidated financial statements, although it only owns approximately 11% of Watford Re's outstanding common equity. Watford Re has its own management and board of directors that is responsible for its overall profitability. In addition, the Company does not guarantee or provide credit support for Watford Re. Because 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. The Company's financial exposure to Watford Re is limited to its investment in Watford Re's senior notes, common and preferred shares and counterparty credit risk (mitigated by collateral) arising from the reinsurance transactions. The Company believes that presenting information on a 'core' basis enables investors and other users of the Company's financial information to analyze the Company's performance in a manner similar to how the Company's management analyzes performance. See 'Segment Information' for a further discussion of segment results and a reconciliation of core and consolidated results.

The Company's segment information includes the presentation of consolidated underwriting income or loss and a subtotal of underwriting income or loss on a 'core' basis. Such measures represent the pre-tax profitability of the Company's 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 the Company's individual underwriting operations. Underwriting income or loss does not incorporate items included in the Company's corporate (non-underwriting) segment. While these measures are presented in the Segment Information footnote to the Company's Consolidated Financial Statements, they are considered non-GAAP financial measures when presented elsewhere on a consolidated basis. The reconciliations of underwriting income or loss to income before income taxes (the most directly comparable GAAP financial measure) on a consolidated basis and a 'core' basis, in accordance with Regulation G, is shown on pages 10 to 13.

The Company's segment information includes the use of a combined ratio excluding catastrophic activity (if applicable for the segment) and prior year development. These ratios are non-GAAP financial measures as defined in Regulation G. The reconciliation of such measures to the combined ratio (the most directly comparable GAAP financial measure) in accordance with Regulation G are shown on the individual segment pages. The Company's management utilizes the adjusted combined ratio excluding current accident year catastrophic events and favorable or adverse development in prior year loss reserves in its analysis of the core underwriting performance of each of its 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. Management uses total return on investments as a key measure of the return generated to Arch common shareholders on the capital held in its business, and compares the return generated by the Company's investment portfolio against benchmark returns which it measures portfolio returns against during the periods presented.

Arch Capital Group Ltd. and Subsidiaries
Operating Income Reconciliation and Annualized Operating Return on Average Common Equity

The following table summarizes the Company's consolidated financial data, including a reconciliation of net income (loss) available to Arch common shareholders to after-tax operating income (loss) available to Arch common shareholders and related diluted per share results. Each line item reflects the impact of the Company's approximate 11% ownership of Watford Re's outstanding common equity:

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

	Three Months Ended					Six Months Ended	
	June 30, 2019	March 31, 2019	December 31, 2018	September 30, 2018	June 30, 2018	June 30, 2019	June 30, 2018
Net income available to Arch common shareholders	\$ 458,551	\$ 438,125	\$ 126,091	\$ 217,006	\$ 233,243	\$ 896,676	\$ 370,519
Net realized (gains) losses	(124,637)	(115,644)	77,037	47,528	61,426	(240,281)	173,190
Net impairment losses recognized in earnings	49	1,309	1,705	492	470	1,358	632
Equity in net (income) loss of investment funds accounted for using the equity method	(32,536)	(46,867)	6,882	(15,982)	(8,472)	(79,403)	(36,541)
Net foreign exchange (gains) losses	6,054	(4,994)	(20,869)	(7,539)	(47,038)	1,060	(31,482)
Transaction costs and other	2,178	1,190	3,548	1,091	6,908	3,368	7,738
Loss on redemption of preferred shares	—	—	—	—	—	—	2,710
Income tax expense (benefit) (1)	7,774	2,778	(5,223)	(316)	(3,941)	10,552	(9,027)
After-tax operating income available to Arch common shareholders	\$ 317,433	\$ 275,897	\$ 189,171	\$ 242,280	\$ 242,596	\$ 593,330	\$ 477,739
Diluted per common share results:							
Net income available to Arch common shareholders	\$ 1.12	\$ 1.07	\$ 0.31	\$ 0.53	\$ 0.56	\$ 2.19	\$ 0.89
Net realized (gains) losses	(0.31)	(0.29)	0.18	0.12	0.15	(0.59)	0.42
Net impairment losses recognized in earnings	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Equity in net (income) loss of investment funds accounted for using the equity method	(0.08)	(0.11)	0.02	(0.04)	(0.02)	(0.19)	(0.09)
Net foreign exchange (gains) losses	0.01	(0.01)	(0.05)	(0.02)	(0.11)	0.00	(0.08)
Transaction costs and other	0.01	0.00	0.01	0.00	0.02	0.01	0.02
Loss on redemption of preferred shares	—	—	—	—	—	—	0.01
Income tax expense (benefit) (1)	0.02	0.01	(0.01)	0.00	(0.01)	0.03	(0.02)
After-tax operating income available to Arch common shareholders	\$ 0.77	\$ 0.67	\$ 0.46	\$ 0.59	\$ 0.59	\$ 1.45	\$ 1.15
Weighted average common shares and common share equivalents outstanding - diluted	410,899,483	408,971,029	410,112,097	411,721,214	413,111,205	409,755,250	415,460,756
Beginning common shareholders' equity	\$ 9,334,596	\$ 8,659,827	\$ 8,575,148	\$ 8,383,755	\$ 8,370,372	\$ 8,659,827	\$ 8,324,047
Ending common shareholders' equity	9,977,352	9,334,596	8,659,827	8,575,148	8,383,755	9,977,352	8,383,755
Average common shareholders' equity	\$ 9,655,974	\$ 8,997,212	\$ 8,617,488	\$ 8,479,452	\$ 8,377,064	\$ 9,318,590	\$ 8,353,901
Annualized return on average common equity	19.0%	19.5%	5.9%	10.2%	11.1%	19.2%	8.9%
Annualized operating return on average common equity	13.1%	12.3%	8.8%	11.4%	11.6%	12.7%	11.4%

- (1) Income tax expense on net realized gains or losses, net impairment losses recognized in earnings, equity in net income (loss) of investment funds accounted for using the equity method, net foreign exchange gains or losses, 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.

Arch Capital Group Ltd. and Subsidiaries
Operating Income and Effective Tax Rate Calculations

The following table provides a reconciliation of income (loss) before income taxes to after-tax operating income (loss) available to Arch common shareholders and an analysis of the effective tax rate on pre-tax operating income (loss) available to Arch common shareholders:

(U.S. Dollars in thousands)

	Three Months Ended					Six Months Ended	
	June 30, 2019	March 31, 2019	December 31, 2018	September 30, 2018	June 30, 2018	June 30, 2019	June 30, 2018
Arch Operating Income Components (1):							
Income before income taxes	\$ 511,883	\$ 489,163	\$ 182,007	\$ 258,686	\$ 266,283	\$ 1,001,046	\$ 437,211
Net realized (gains) losses	(125,112)	(112,433)	66,015	47,010	59,545	(237,545)	171,404
Net impairment losses recognized in earnings	49	1,309	1,705	492	470	1,358	632
Equity in net (income) loss of investment funds accounted for using the equity method	(32,536)	(46,867)	6,882	(15,982)	(8,472)	(79,403)	(36,541)
Net foreign exchange (gains) losses	6,190	(5,175)	(20,409)	(7,130)	(46,211)	1,015	(31,172)
Transaction costs and other	2,178	1,190	2,557	1,091	6,908	3,368	7,738
Pre-tax operating income	362,652	327,187	238,757	284,167	278,523	689,839	549,272
Arch share of 'other' segment operating income (loss) (2)	1,863	2,222	1,053	2,187	2,062	4,085	3,893
Pre-tax operating income available to Arch (b)	364,515	329,409	239,810	286,354	280,585	693,924	553,165
Income tax expense (a)	(36,679)	(43,109)	(40,236)	(33,672)	(27,586)	(79,788)	(54,586)
After-tax operating income available to Arch	327,836	286,300	199,574	252,682	252,999	614,136	498,579
Preferred dividends	(10,403)	(10,403)	(10,403)	(10,402)	(10,403)	(20,806)	(20,840)
After-tax operating income available to Arch common shareholders	\$ 317,433	\$ 275,897	\$ 189,171	\$ 242,280	\$ 242,596	\$ 593,330	\$ 477,739
Effective tax rate on pre-tax operating income (loss) available to Arch (a)/(b)	10.1%	13.1%	16.8%	11.8%	9.8%	11.5%	9.9%

(1) Line items are presented on a 'core' basis, excluding amounts related to the 'other' segment (*i.e.*, results of Watford Re). See 'Comments on Regulation G' for a further discussion of the presentation of 'core' results.

(2) Balances in the 'other' segment and a calculation of Arch's share of the 'other' segment operating income (loss) is as follows:

(U.S. Dollars in thousands)

	Three Months Ended					Six Months Ended	
	June 30, 2019	March 31, 2019	December 31, 2018	September 30, 2018	June 30, 2018	June 30, 2019	June 30, 2018
Balances in 'other' segment:							
Underwriting income (loss)	\$ (4,593)	\$ (5,378)	\$ (22,031)	\$ (209)	\$ (318)	\$ (9,971)	\$ (878)
Net investment income	32,000	35,700	41,591	29,696	27,907	67,700	54,388
Interest expense	(5,905)	(5,583)	(5,386)	(5,064)	(4,286)	(11,488)	(9,015)
Preferred dividends	(4,590)	(4,588)	(4,588)	(4,599)	(4,585)	(9,178)	(9,170)
Pre-tax operating income (loss) available to common shareholders	16,912	20,151	9,586	19,824	18,718	37,063	35,325
Arch ownership	11%	11%	11%	11%	11%	11%	11%
Arch share of 'Other' segment operating income (loss) (3)	\$ 1,863	\$ 2,222	\$ 1,053	\$ 2,187	\$ 2,062	\$ 4,085	\$ 3,893

(3) Excludes amounts attributable to net realized gains or losses and net foreign exchange gains or losses in the 'other' segment (see 'Segment Information').

Arch Capital Group Ltd. and Subsidiaries
Capital Structure and Share Repurchase Activity

The following table provides an analysis of the Company's capital structure (1):

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

	June 30, 2019	March 31, 2019	December 31, 2018	September 30, 2018	June 30, 2018
Debt:					
Arch Capital senior notes, due May 1, 2034 (\$300,000 principal, 7.35%)	\$ 300,000	\$ 300,000	\$ 300,000	\$ 300,000	\$ 300,000
Arch-U.S. senior notes, due Nov. 1, 2043 (\$500,000 principal, 5.144%) (2)	500,000	500,000	500,000	500,000	500,000
Arch Finance senior notes, due December 15, 2026 (\$500,000 principal, 4.011%) (3)	500,000	500,000	500,000	500,000	500,000
Arch Finance senior notes, due December 15, 2046 (\$450,000 principal, 5.031%) (3)	450,000	450,000	450,000	450,000	450,000
Deferred debt costs on senior notes	(16,135)	(16,306)	(16,472)	(16,636)	(16,789)
Revolving credit agreement borrowings, due October 26, 2021 (variable)	—	—	—	125,000	125,000
Total debt	\$ 1,733,865	\$ 1,733,694	\$ 1,733,528	\$ 1,858,364	\$ 1,858,211
Shareholders' equity available to Arch:					
Series E non-cumulative preferred shares (5.25%)	450,000	450,000	450,000	450,000	450,000
Series F non-cumulative preferred shares (5.45%)	330,000	330,000	330,000	330,000	330,000
Common shareholders' equity (a)	9,977,352	9,334,596	8,659,827	8,575,148	8,383,755
Total shareholders' equity available to Arch	\$ 10,757,352	\$ 10,114,596	\$ 9,439,827	\$ 9,355,148	\$ 9,163,755
Total capital available to Arch	\$ 12,491,217	\$ 11,848,290	\$ 11,173,355	\$ 11,213,512	\$ 11,021,966
Common shares outstanding, net of treasury shares (b)	404,887,534	403,738,764	402,454,834	405,524,360	405,436,637
Book value per common share (4) (a)/(b)	\$ 24.64	\$ 23.12	\$ 21.52	\$ 21.15	\$ 20.68
Leverage ratios:					
Senior notes/total capital available to Arch	13.9%	14.6%	15.5%	15.5%	15.7%
Revolving credit agreement borrowings/total capital available to Arch	—%	—%	—%	1.1%	1.1%
Debt/total capital available to Arch	13.9%	14.6%	15.5%	16.6%	16.9%
Preferred/total capital available to Arch	6.2%	6.6%	7.0%	7.0%	7.1%
Debt and preferred/total capital available to Arch	20.1%	21.2%	22.5%	23.5%	23.9%

(1) Presented on a 'core' basis which excludes amounts related to the 'other' segment (*i.e.*, results of Watford Re). See 'Comments on Regulation G' for a further discussion of the presentation of 'core' results.

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

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

(4) Excludes the effects of stock options, restricted and performance stock units outstanding.

The following table provides the impact of share repurchases under the Company's share repurchase program:

(U.S. Dollars in thousands except share data)

	Three Months Ended					Cumulative
	June 30, 2019	March 31, 2019	December 31, 2018	September 30, 2018	June 30, 2018	June 30, 2019
Effect of share repurchases:						
Aggregate cost of shares repurchased	\$ —	\$ 2,871	\$ 98,233	\$ 10,954	\$ 170,276	\$ 3,968,294
Shares repurchased	—	110,598	3,623,534	413,671	6,404,430	386,341,980
Average price per share repurchased	\$ —	\$ 25.96	\$ 27.11	\$ 26.48	\$ 26.59	\$ 10.27
Remaining share repurchase authorization (1)						\$ 160,867

(1) Repurchases under the share repurchase authorization may be effected from time to time in open market or privately negotiated transactions through December 31, 2019.