



Arch Capital Group Ltd.

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Financial Supplement

September 30, 2023

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

This report is for informational purposes only. It should be read in conjunction with documents filed by Arch 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.archgroup.com for further information describing Arch.

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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, 2022 is derived from or agrees to audited financial information. Unless otherwise noted, all amounts are in millions, except for per share amounts and ratio information. Amounts presented have been rounded for presentation purposes and may not reconcile due to rounding differences.

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 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 and addition 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; including pandemics such as COVID-19; 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; a disruption caused by cyber-attacks or other technology breaches or failures on the Company or the Company’s business partners and service providers, which could negatively impact the Company’s business and/or expose the Company to litigation; 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:

(U.S. Dollars and shares in millions, except per share data)

	Three Months Ended			Nine Months Ended		
	September 30,			September 30,		
	2023	2022	Change	2023	2022	Change
Underwriting results:						
Gross premiums written	\$ 4,527	\$ 3,861	17.2 %	\$ 14,152	\$ 11,532	22.7 %
Net premiums written	3,355	2,724	23.2 %	10,207	8,043	26.9 %
Net premiums earned	3,248	2,471	31.4 %	9,096	6,918	31.5 %
Underwriting income (loss) (1)	721	68	960.3 %	1,897	1,062	78.6 %
Loss ratio	50.7 %	68.1 %	(17.4)	50.7 %	54.7 %	(4.0)
Acquisition expense ratio	17.7 %	18.1 %	(0.4)	18.3 %	17.9 %	0.4
Other operating expense ratio	9.5 %	11.1 %	(1.6)	10.4 %	12.2 %	(1.8)
Combined ratio	77.9 %	97.3 %	(19.4)	79.4 %	84.8 %	(5.4)
Net investment income	\$ 269	\$ 129	108.5 %	\$ 710	\$ 315	125.4 %
<i>Per diluted share</i>	\$ 0.71	\$ 0.34	108.8 %	\$ 1.88	\$ 0.83	126.5 %
Net income available to Arch common shareholders	\$ 713	\$ 7	10,085.7 %	\$ 2,079	\$ 587	254.2 %
<i>Per diluted share</i>	\$ 1.88	\$ 0.02	9,300.0 %	\$ 5.50	\$ 1.55	254.8 %
After-tax operating income available to Arch common shareholders (1)	\$ 876	\$ 106	726.4 %	\$ 2,256	\$ 1,034	118.2 %
<i>Per diluted share</i>	\$ 2.31	\$ 0.28	725.0 %	\$ 5.96	\$ 2.73	118.3 %
Comprehensive income (loss) available to Arch	\$ 589	\$ (617)	n/m	\$ 2,302	\$ (1,210)	n/m
Net cash provided by operating activities	\$ 1,970	\$ 1,380	42.8 %	\$ 4,084	\$ 2,834	44.1 %
Weighted average common shares and common share equivalents outstanding — diluted	379.4	373.7	1.5 %	378.3	378.4	— %
Financial measures:						
Change in book value per common share during period	4.3 %	(5.4)%	9.7	18.4 %	(11.5)%	29.9
Annualized net income return on average common equity	20.2 %	0.2 %	20.0	20.9 %	6.6 %	14.3
Annualized operating return on average common equity (1)	24.8 %	3.8 %	21.0	22.7 %	11.6 %	11.1
Total return on investments (2)	(0.40)%	(3.01)%	261 bps	2.68 %	(8.83)%	1151 bps

- (1) 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.
- (2) Total return on investments includes 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 and shares in millions, except per share data)

	Three Months Ended				Nine Months Ended		
	September 30, 2023	June 30, 2023	March 31, 2023	December 31, 2022	September 30, 2022	September 30, 2023	September 30, 2022
Revenues							
Net premiums earned	\$ 3,248	\$ 2,965	\$ 2,883	\$ 2,761	\$ 2,471	\$ 9,096	\$ 6,918
Net investment income	269	242	199	181	129	710	315
Net realized gains (losses)	(248)	(123)	17	80	(184)	(354)	(743)
Other underwriting income	5	6	10	1	3	21	12
Equity in net income (loss) of investment funds accounted for using the equity method	59	69	48	40	(19)	176	75
Other income (loss)	(4)	3	11	8	(14)	10	(35)
Total revenues	3,329	3,162	3,168	3,071	2,386	9,659	6,542
Expenses							
Losses and loss adjustment expenses	(1,647)	(1,491)	(1,471)	(1,241)	(1,683)	(4,609)	(3,787)
Acquisition expenses	(575)	(561)	(533)	(501)	(448)	(1,669)	(1,239)
Other operating expenses	(310)	(313)	(319)	(286)	(275)	(942)	(842)
Corporate expenses	(20)	(21)	(30)	(17)	(18)	(71)	(78)
Amortization of intangible assets	(24)	(24)	(23)	(26)	(26)	(71)	(80)
Interest expense	(34)	(33)	(32)	(32)	(33)	(99)	(99)
Net foreign exchange gains (losses)	22	(5)	(18)	(81)	91	(1)	183
Total expenses	(2,588)	(2,448)	(2,426)	(2,184)	(2,392)	(7,462)	(5,942)
Income (loss) before income taxes and income (loss) from operating affiliates	741	714	742	887	(6)	2,197	600
Income tax (expense) benefit	(72)	(67)	(64)	(61)	15	(203)	(19)
Income (loss) from operating affiliates	54	22	39	36	9	115	39
Net income (loss)	723	669	717	862	18	2,109	620
Net (income) loss attributable to noncontrolling interests	—	2	(2)	(3)	(1)	—	(3)
Net income (loss) attributable to Arch	723	671	715	859	17	2,109	617
Preferred dividends	(10)	(10)	(10)	(10)	(10)	(30)	(30)
Net income (loss) available to Arch common shareholders	\$ 713	\$ 661	\$ 705	\$ 849	\$ 7	\$ 2,079	\$ 587
Comprehensive income (loss) available to Arch	\$ 589	\$ 649	\$ 1,064	\$ 1,105	\$ (617)	\$ 2,302	\$ (1,210)
Net income (loss) per common share and common share equivalent							
Basic	\$ 1.93	\$ 1.79	\$ 1.92	\$ 2.32	\$ 0.02	\$ 5.64	\$ 1.59
Diluted	\$ 1.88	\$ 1.75	\$ 1.87	\$ 2.26	\$ 0.02	\$ 5.50	\$ 1.55
Weighted average common shares and common share equivalents outstanding							
Basic	369.2	368.7	367.3	365.9	365.2	368.4	369.5
Diluted	379.4	378.4	377.6	375.9	373.7	378.3	378.4

Arch Capital Group Ltd. and Subsidiaries
Consolidated Balance Sheets

(U.S. Dollars and shares in millions, except per share data)

	September 30, 2023	June 30, 2023	March 31, 2023	December 31, 2022	September 30, 2022
Assets					
Investments:					
Fixed maturities available for sale, at fair value	\$ 22,485	\$ 21,434	\$ 20,692	\$ 19,683	\$ 18,121
Short-term investments available for sale, at fair value	1,682	1,702	1,553	1,332	1,941
Equity securities, at fair value	894	911	859	860	810
Other investments	2,068	1,846	1,776	1,644	1,578
Investments accounted for using the equity method	4,251	4,073	3,896	3,774	3,566
Total investments	31,380	29,966	28,776	27,293	26,016
Cash	859	904	803	855	814
Accrued investment income	217	233	163	159	116
Investment in operating affiliates	1,000	973	1,015	965	891
Premiums receivable	4,937	5,296	4,513	3,625	3,579
Reinsurance recoverable on unpaid and paid losses and loss adjustment expenses	6,821	6,717	6,612	6,564	6,356
Contractholder receivables	1,805	1,761	1,750	1,731	1,736
Ceded unearned premiums	2,444	2,459	2,116	1,799	2,116
Deferred acquisition costs	1,483	1,452	1,355	1,264	1,123
Receivable for securities sold	59	97	84	12	27
Goodwill and intangible assets	739	775	785	804	807
Other assets	3,483	3,223	3,131	2,919	2,756
Total assets	\$ 55,227	\$ 53,856	\$ 51,103	\$ 47,990	\$ 46,337
Liabilities					
Reserve for losses and loss adjustment expenses	\$ 21,836	\$ 21,268	\$ 20,758	\$ 20,032	\$ 19,288
Unearned premiums	9,074	9,052	8,218	7,337	7,271
Reinsurance balances payable	2,215	2,191	1,819	1,530	1,669
Contractholder payables	1,807	1,764	1,752	1,734	1,738
Collateral held for insured obligations	274	275	252	249	255
Senior notes	2,726	2,726	2,726	2,725	2,725
Payable for securities purchased	417	526	262	95	175
Other liabilities	1,637	1,411	1,317	1,367	1,411
Total liabilities	39,986	39,213	37,104	35,069	34,532
Redeemable noncontrolling interests	2	2	11	11	9
Shareholders' equity					
Non-cumulative preferred shares	830	830	830	830	830
Common shares	1	1	1	1	1
Additional paid-in capital	2,297	2,278	2,260	2,211	2,187
Retained earnings	17,971	17,258	16,597	15,892	15,043
Accumulated other comprehensive income (loss), net of deferred income tax	(1,453)	(1,319)	(1,297)	(1,646)	(1,892)
Common shares held in treasury, at cost	(4,407)	(4,407)	(4,403)	(4,378)	(4,373)
Total shareholders' equity	15,239	14,641	13,988	12,910	11,796
Total liabilities, noncontrolling interests and shareholders' equity	\$ 55,227	\$ 53,856	\$ 51,103	\$ 47,990	\$ 46,337
Common shares and common share equivalents outstanding, net of treasury shares	373.1	372.9	372.2	370.3	369.3
Book value per common share (1)	\$ 38.62	\$ 37.04	\$ 35.35	\$ 32.62	\$ 29.69

(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 millions)

	Three Months Ended				Nine Months Ended	
	September 30, 2023	June 30, 2023	March 31, 2023	December 31, 2022	September 30, 2022	September 30, 2022
Non-cumulative preferred shares						
Balance at beginning and end of period	\$ 830	\$ 830	\$ 830	\$ 830	\$ 830	\$ 830
Common shares						
Balance at beginning and end of period	1	1	1	1	1	1
Additional paid-in capital						
Balance at beginning of period	2,278	2,260	2,211	2,187	2,170	2,211
Amortization of share-based compensation	15	17	41	8	14	73
All other	4	1	8	16	3	13
Balance at end of period	2,297	2,278	2,260	2,211	2,187	2,297
Retained earnings						
Balance at beginning of period	17,258	16,597	15,892	15,043	15,036	15,892
Net income	723	669	717	862	18	2,109
Amounts attributable to noncontrolling interests	—	2	(2)	(3)	(1)	—
Preferred share dividends	(10)	(10)	(10)	(10)	(10)	(30)
Balance at end of period	17,971	17,258	16,597	15,892	15,043	17,971
Accumulated other comprehensive income (loss), net of deferred income tax						
Balance at beginning of period	(1,319)	(1,297)	(1,646)	(1,892)	(1,258)	(1,646)
Change in unrealized appreciation (decline) in value of available-for-sale investments	(94)	(24)	344	161	(564)	226
Change in foreign currency translation adjustments	(40)	2	5	85	(70)	(33)
Balance at end of period	(1,453)	(1,319)	(1,297)	(1,646)	(1,892)	(1,453)
Common shares held in treasury, at cost						
Balance at beginning of period	(4,407)	(4,403)	(4,378)	(4,373)	(4,361)	(4,378)
Shares repurchased for treasury	—	(4)	(25)	(5)	(12)	(29)
Balance at end of period	(4,407)	(4,407)	(4,403)	(4,378)	(4,373)	(4,407)
Total shareholders' equity	\$ 15,239	\$ 14,641	\$ 13,988	\$ 12,910	\$ 11,796	\$ 15,239

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

(U.S. Dollars in millions)

	Three Months Ended				Nine Months Ended		
	September 30, 2023	June 30, 2023	March 31, 2023	December 31, 2022	September 30, 2022	September 30, 2022	
Operating Activities							
Net income (loss)	\$ 723	\$ 669	\$ 717	\$ 862	\$ 18	\$ 2,109	\$ 620
Adjustments to reconcile net income to net cash provided by operating activities:							
Net realized (gains) losses	257	127	(17)	(91)	187	367	742
Equity in net (income) or loss of investment funds accounted for using the equity method and other income or loss	(55)	17	(66)	47	63	(104)	107
Amortization of intangible assets	24	24	23	26	26	71	80
Share-based compensation	15	17	41	8	14	73	80
Changes in:							
Reserve for losses and loss adjustment expenses, net	584	417	603	336	919	1,604	1,554
Unearned premiums, net	107	463	541	274	253	1,111	1,125
Premiums receivable	315	(777)	(871)	(14)	(10)	(1,333)	(1,096)
Deferred acquisition costs	(38)	(77)	(75)	(132)	(68)	(190)	(242)
Reinsurance balances payable	40	373	279	(164)	56	692	128
Other items, net	(2)	(102)	(212)	(170)	(78)	(316)	(264)
Net cash provided by operating activities	<u>1,970</u>	<u>1,151</u>	<u>963</u>	<u>982</u>	<u>1,380</u>	<u>4,084</u>	<u>2,834</u>
Investing Activities							
Purchases of fixed maturity investments	(4,184)	(4,939)	(3,901)	(3,325)	(3,359)	(13,024)	(13,065)
Purchases of equity securities	(72)	(96)	(8)	(10)	(131)	(176)	(787)
Purchases of other investments	(555)	(291)	(266)	(450)	(350)	(1,112)	(1,270)
Proceeds from sales of fixed maturity investments	2,576	4,045	3,034	1,854	1,911	9,655	9,990
Proceeds from sales of equity securities	55	86	75	14	50	216	1,540
Proceeds from sales, redemptions and maturities of other investments	144	105	96	145	212	345	1,075
Proceeds from redemptions and maturities of fixed maturity investments	221	188	180	137	134	589	578
Net settlements of derivative instruments	(115)	32	14	37	(62)	(69)	(106)
Net (purchases) sales of short-term investments	10	(125)	(208)	619	288	(323)	(152)
Purchases of fixed assets	(11)	(15)	(11)	(13)	(14)	(37)	(37)
Other	(4)	5	(1)	(3)	30	—	128
Net cash provided by (used for) investing activities	<u>(1,935)</u>	<u>(1,005)</u>	<u>(996)</u>	<u>(995)</u>	<u>(1,291)</u>	<u>(3,936)</u>	<u>(2,106)</u>
Financing Activities							
Purchases of common shares under share repurchase program	—	—	—	—	(10)	—	(586)
Proceeds from common shares issued, net	5	18	(18)	9	1	5	(3)
Change in third party investment in redeemable noncontrolling interests	—	(22)	—	—	—	(22)	—
Other	(2)	(1)	(2)	(1)	(3)	(5)	(85)
Preferred dividends paid	(10)	(10)	(10)	(10)	(10)	(30)	(30)
Net cash provided by (used for) financing activities	<u>(7)</u>	<u>(15)</u>	<u>(30)</u>	<u>(2)</u>	<u>(22)</u>	<u>(52)</u>	<u>(704)</u>
Effects of exchange rate changes on foreign currency cash and restricted cash	(26)	7	5	30	(37)	(14)	(80)
Increase (decrease) in cash and restricted cash	2	138	(58)	15	30	82	(56)
Cash and restricted cash, beginning of period	1,353	1,215	1,273	1,258	1,228	1,273	1,314
Cash and restricted cash, end of period	<u>\$ 1,355</u>	<u>\$ 1,353</u>	<u>\$ 1,215</u>	<u>\$ 1,273</u>	<u>\$ 1,258</u>	<u>\$ 1,355</u>	<u>\$ 1,258</u>
Income taxes paid (received)	\$ 54	\$ 69	\$ 4	\$ 53	\$ 73	\$ 127	\$ 202
Interest paid	\$ —	\$ 63	\$ —	\$ 63	\$ —	\$ 63	\$ 65

Arch Capital Group Ltd. and Subsidiaries Segment Information — Overview

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 Chief Executive Officer, the Chief Financial Officer and Treasurer and the President and Chief Underwriting Officer. The chief operating decision makers do not assess performance, measure return on equity or make resource allocation decisions on a line of business basis. Management measures segment performance for its three underwriting segments based on underwriting income or loss. The Company does not manage its assets by underwriting segment 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 for middle market and large construction accounts, a comprehensive range of products for middle market accounts in specialty industries and casualty solutions for large national accounts, including loss sensitive primary insurance programs (large deductible, self-insured retention and retrospectively rated programs).
- *Excess and surplus casualty:* primary and excess casualty insurance coverages written on a non-admitted basis.
- *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, cyber insurance, and medical professional and general liability insurance coverages for the healthcare industry. The business is predominately written on a claims-made basis.
- *Programs:* primarily targeting program managers with unique expertise and niche products offering some combination of general liability, commercial automobile, property, inland marine, umbrella and workers' compensation.
- *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, cargo, war, specie and liability. Aviation, standalone terrorism and political risks are also offered. Coverage may be provided for operational and construction risk.
- *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.
- *Warranty and lenders solutions:* 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.
- *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, commercial and transactional surety coverages.

Reinsurance Segment

The reinsurance segment consists of the Company's reinsurance underwriting units which offer specialty product lines on a worldwide basis. Reinsurance agreements are typically offered on a proportional and/or excess of loss basis and provide coverage to ceding company clients for specific underlying written policies. Product lines include:

- *Casualty:* provides coverage on third party liability exposures including, among others, executive assurance, professional liability, excess and umbrella liability, excess motor and healthcare business, and workers' compensation. Business is assumed primarily on a treaty basis, with some facultative coverages also offered.
- *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 for proportional motor reinsurance, whole account multi-line treaties, cyber, trade credit and surety, accident and health, workers' compensation catastrophe, agriculture and political risk, among others.
- *Property catastrophe:* provides protection for most types of catastrophic losses, including hurricane, earthquake, flood, tornado, hail and fire, and for other perils on a case-by-case basis. Excess of loss coverages are triggered 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 personal lines and/or 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 either a treaty or facultative basis.
- *Other:* includes life reinsurance business, 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 underwriting units which offer mortgage insurance and reinsurance products on a worldwide basis. Underwriting units include:

- *U.S. primary mortgage insurance:* offers private mortgage insurance through Arch Mortgage Insurance Company and United Guaranty Residential Insurance Company (combined "Arch MI U.S."), both approved eligible mortgage insurers by Fannie Mae and Freddie Mac. Arch MI U.S. also includes Arch Mortgage Guaranty Company, which is not a government sponsored enterprise ("GSE") approved entity.
- *U.S. credit risk transfer ("CRT") and other:* underwrites CRT transactions, which are predominantly with GSEs, and other U.S. reinsurance transactions.
- *International mortgage insurance/reinsurance:* underwrites mortgage insurance and reinsurance outside of the U.S.

Corporate Segment

The corporate segment results include net investment income, net realized gains or losses (which includes realized and unrealized changes in the fair value of equity securities and assets accounted for using the fair value option, realized and unrealized gains and losses on derivative instruments and changes in the allowance for credit losses on financial assets), equity in net income or loss of investment funds accounted for using the equity method, other income (loss), corporate expenses, transaction costs and other, amortization of intangible assets, interest expense, net foreign exchange gains or losses, income taxes items, income or loss from operating affiliates and items related to the Company's non cumulative preferred shares.

Arch Capital Group Ltd. and Subsidiaries
Segment Information

(U.S. Dollars in millions)

	Three Months Ended September 30, 2023			
	Insurance	Reinsurance	Mortgage	Total
Gross premiums written (1)	\$ 2,043	\$ 2,138	\$ 347	\$ 4,527
Premiums ceded	(521)	(576)	(76)	(1,172)
Net premiums written	1,522	1,562	271	3,355
Change in unearned premiums	(110)	(19)	22	(107)
Net premiums earned	1,412	1,543	293	3,248
Other underwriting income (loss)	—	2	3	5
Losses and loss adjustment expenses	(812)	(870)	35	(1,647)
Acquisition expenses	(269)	(304)	(2)	(575)
Other operating expenses	(202)	(61)	(47)	(310)
Underwriting income (loss)	\$ 129	\$ 310	\$ 282	721
Net investment income				269
Net realized gains (losses)				(248)
Equity in net income (loss) of investment funds accounted for using the equity method				59
Other income (loss)				(4)
Corporate expenses (2)				(20)
Transaction costs and other (2)				—
Amortization of intangible assets				(24)
Interest expense				(34)
Net foreign exchange gains (losses)				22
Income (loss) before income taxes and income (loss) from operating affiliates				741
Income tax (expense) benefit				(72)
Income (loss) from operating affiliates				54
Net income (loss)				723
Net (income) loss attributable to noncontrolling interests				—
Net income (loss) available to Arch				723
Preferred dividends				(10)
Net income (loss) available to Arch common shareholders				\$ 713
Underwriting Ratios				
Loss ratio	57.5 %	56.4 %	(12.1)%	50.7 %
Acquisition expense ratio	19.1 %	19.7 %	0.6 %	17.7 %
Other operating expense ratio	14.3 %	3.9 %	16.2 %	9.5 %
Combined ratio	90.9 %	80.0 %	4.7 %	77.9 %
Net premiums written to gross premiums written	74.5 %	73.1 %	78.1 %	74.1 %
Total investable assets				\$ 31,881
Total assets				55,227
Total liabilities				39,986

- (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 millions)

	Three Months Ended September 30, 2022			
	Insurance	Reinsurance	Mortgage	Total
Gross premiums written (1)	\$ 1,862	\$ 1,639	\$ 362	\$ 3,861
Premiums ceded	(493)	(560)	(86)	(1,137)
Net premiums written	1,369	1,079	276	2,724
Change in unearned premiums	(182)	(77)	6	(253)
Net premiums earned	1,187	1,002	282	2,471
Other underwriting income (loss)	—	—	3	3
Losses and loss adjustment expenses	(823)	(928)	68	(1,683)
Acquisition expenses	(233)	(208)	(7)	(448)
Other operating expenses	(165)	(63)	(47)	(275)
Underwriting income (loss)	\$ (34)	\$ (197)	\$ 299	68
Net investment income				129
Net realized gains (losses)				(184)
Equity in net income (loss) of investment funds accounted for using the equity method				(19)
Other income (loss)				(14)
Corporate expenses (2)				(18)
Transaction costs and other (2)				—
Amortization of intangible assets				(26)
Interest expense				(33)
Net foreign exchange gains (losses)				91
Income (loss) before income taxes and income (loss) from operating affiliates				(6)
Income tax (expense) benefit				15
Income (loss) from operating affiliates				9
Net income (loss)				18
Net (income) loss attributable to noncontrolling interests				(1)
Net income (loss) available to Arch				17
Preferred dividends				(10)
Net income (loss) available to Arch common shareholders				\$ 7
Underwriting Ratios				
Loss ratio	69.3 %	92.6 %	(24.1)%	68.1 %
Acquisition expense ratio	19.6 %	20.8 %	2.4 %	18.1 %
Other operating expense ratio	13.9 %	6.3 %	16.5 %	11.1 %
Combined ratio	102.8 %	119.7 %	(5.2)%	97.3 %
Net premiums written to gross premiums written	73.5 %	65.8 %	76.2 %	70.6 %
Total investable assets				\$ 26,682
Total assets				46,337
Total liabilities				34,532

(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 millions)

	Nine Months Ended September 30, 2023			
	Insurance	Reinsurance	Mortgage	Total
Gross premiums written (1)	\$ 5,977	\$ 7,142	\$ 1,037	\$ 14,152
Premiums ceded	(1,564)	(2,145)	(240)	(3,945)
Net premiums written	4,413	4,997	797	10,207
Change in unearned premiums	(416)	(781)	86	(1,111)
Net premiums earned	3,997	4,216	883	9,096
Other underwriting income (loss)	—	9	12	21
Losses and loss adjustment expenses	(2,276)	(2,379)	46	(4,609)
Acquisition expenses	(778)	(875)	(16)	(1,669)
Other operating expenses	(592)	(203)	(147)	(942)
Underwriting income (loss)	\$ 351	\$ 768	\$ 778	1,897
Net investment income				710
Net realized gains (losses)				(354)
Equity in net income (loss) of investment funds accounted for using the equity method				176
Other income (loss)				10
Corporate expenses (2)				(69)
Transaction costs and other (2)				(2)
Amortization of intangible assets				(71)
Interest expense				(99)
Net foreign exchange gains (losses)				(1)
Income (loss) before income taxes and income (loss) from operating affiliates				2,197
Income tax (expense) benefit				(203)
Income (loss) from operating affiliates				115
Net income (loss)				2,109
Net (income) loss attributable to noncontrolling interests				—
Net income (loss) available to Arch				2,109
Preferred dividends				(30)
Net income (loss) available to Arch common shareholders				\$ 2,079
Underwriting Ratios				
Loss ratio	57.0 %	56.4 %	(5.3)%	50.7 %
Acquisition expense ratio	19.5 %	20.7 %	1.8 %	18.3 %
Other operating expense ratio	14.8 %	4.8 %	16.7 %	10.4 %
Combined ratio	91.3 %	81.9 %	13.2 %	79.4 %
Net premiums written to gross premiums written	73.8 %	70.0 %	76.9 %	72.1 %

- (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 millions)

	Nine Months Ended September 30, 2022			
	Insurance	Reinsurance	Mortgage	Total
Gross premiums written (1)	\$ 5,287	\$ 5,151	\$ 1,099	\$ 11,532
Premiums ceded	(1,483)	(1,770)	(241)	(3,489)
Net premiums written	3,804	3,381	858	8,043
Change in unearned premiums	(488)	(647)	10	(1,125)
Net premiums earned	3,316	2,734	868	6,918
Other underwriting income (loss)	—	6	6	12
Losses and loss adjustment expenses	(2,054)	(1,920)	187	(3,787)
Acquisition expenses	(643)	(569)	(27)	(1,239)
Other operating expenses	(493)	(199)	(150)	(842)
Underwriting income (loss)	\$ 126	\$ 52	\$ 884	1,062
Net investment income				315
Net realized gains (losses)				(743)
Equity in net income (loss) of investment funds accounted for using the equity method				75
Other income (loss)				(35)
Corporate expenses (2)				(78)
Transaction costs and other (2)				—
Amortization of intangible assets				(80)
Interest expense				(99)
Net foreign exchange gains (losses)				183
Income (loss) before income taxes and income (loss) from operating affiliates				600
Income tax (expense) benefit				(19)
Income (loss) from operating affiliates				39
Net income (loss)				620
Net (income) loss attributable to noncontrolling interests				(3)
Net income (loss) available to Arch				617
Preferred dividends				(30)
Net income (loss) available to Arch common shareholders				\$ 587
Underwriting Ratios				
Loss ratio	61.9 %	70.2 %	(21.6)%	54.7 %
Acquisition expense ratio	19.4 %	20.8 %	3.2 %	17.9 %
Other operating expense ratio	14.9 %	7.3 %	17.3 %	12.2 %
Combined ratio	96.2 %	98.3 %	(1.1)%	84.8 %
Net premiums written to gross premiums written	72.0 %	65.6 %	78.1 %	69.7 %

- (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 millions)

	Three Months Ended					Nine Months Ended	
	September 30, 2023	June 30, 2023	March 31, 2023	December 31, 2022	September 30, 2022	September 30, 2023	September 30, 2022
Gross premiums written	\$ 2,043	\$ 1,955	\$ 1,979	\$ 1,644	\$ 1,862	\$ 5,977	\$ 5,287
Premiums ceded	(521)	(501)	(542)	(427)	(493)	(1,564)	(1,483)
Net premiums written	1,522	1,454	1,437	1,217	1,369	4,413	3,804
Change in unearned premiums	(110)	(126)	(180)	27	(182)	(416)	(488)
Net premiums earned	1,412	1,328	1,257	1,244	1,187	3,997	3,316
Losses and loss adjustment expenses	(812)	(761)	(703)	(730)	(823)	(2,276)	(2,054)
Acquisition expenses	(269)	(264)	(245)	(244)	(233)	(778)	(643)
Other operating expenses	(202)	(195)	(195)	(172)	(165)	(592)	(493)
Underwriting income (loss)	\$ 129	\$ 108	\$ 114	\$ 98	\$ (34)	\$ 351	\$ 126
Underwriting Ratios							
Loss ratio	57.5 %	57.3 %	55.9 %	58.7 %	69.3 %	57.0 %	61.9 %
Acquisition expense ratio	19.1 %	19.9 %	19.5 %	19.6 %	19.6 %	19.5 %	19.4 %
Other operating expense ratio	14.3 %	14.7 %	15.5 %	13.8 %	13.9 %	14.8 %	14.9 %
Combined ratio	90.9 %	91.9 %	90.9 %	92.1 %	102.8 %	91.3 %	96.2 %
Catastrophic activity and prior year development:							
Current accident year catastrophic events, net of reinsurance and reinstatement premiums	2.6 %	2.6 %	1.6 %	2.8 %	13.4 %	2.3 %	6.2 %
Net (favorable) adverse development in prior year loss reserves, net of related adjustments	(0.8)%	(0.5)%	(0.5)%	(0.3)%	(0.1)%	(0.6)%	(0.2)%
Combined ratio excluding catastrophic activity and prior year development (1)	89.1 %	89.8 %	89.8 %	89.6 %	89.5 %	89.6 %	90.2 %
Net premiums written to gross premiums written	74.5 %	74.4 %	72.6 %	74.0 %	73.5 %	73.8 %	72.0 %

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

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

(U.S. Dollars in millions)

	Three Months Ended												Nine Months Ended			
	September 30, 2023		June 30, 2023		March 31, 2023		December 31, 2022		September 30, 2022		September 30, 2023		September 30, 2022			
Net Premiums Written by Underwriting Unit																
Professional lines	\$ 375	24.6 %	\$ 342	23.5 %	\$ 328	22.8 %	\$ 393	32.3 %	\$ 412	30.1 %	\$ 1,045	23.7 %	\$ 1,109	29.2 %		
Property, energy, marine and aviation Programs	342	22.5 %	320	22.0 %	275	19.1 %	190	15.6 %	241	17.6 %	937	21.2 %	688	18.1 %		
Excess and surplus casualty	202	13.3 %	210	14.4 %	141	9.8 %	130	10.7 %	189	13.8 %	553	12.5 %	481	12.6 %		
Construction and national accounts	130	8.5 %	135	9.3 %	131	9.1 %	129	10.6 %	111	8.1 %	396	9.0 %	332	8.7 %		
Travel, accident and health	129	8.5 %	144	9.9 %	173	12.0 %	135	11.1 %	98	7.2 %	446	10.1 %	335	8.8 %		
Warranty and lenders solutions	126	8.3 %	126	8.7 %	180	12.5 %	106	8.7 %	107	7.8 %	432	9.8 %	378	9.9 %		
Other	51	3.4 %	42	2.9 %	89	6.2 %	36	3.0 %	42	3.1 %	182	4.1 %	103	2.7 %		
Total	\$ 1,522	100.0 %	\$ 1,454	100.0 %	\$ 1,437	100.0 %	\$ 1,217	100.0 %	\$ 1,369	100.0 %	\$ 4,413	100.0 %	\$ 3,804	100.0 %		
Net Premiums Written by Underwriting Location																
United States	\$ 986	64.8 %	\$ 965	66.4 %	\$ 893	62.1 %	\$ 788	64.7 %	\$ 916	66.9 %	\$ 2,844	64.4 %	\$ 2,554	67.1 %		
Europe	455	29.9 %	416	28.6 %	480	33.4 %	351	28.8 %	380	27.8 %	1,351	30.6 %	1,054	27.7 %		
Other	81	5.3 %	73	5.0 %	64	4.5 %	78	6.4 %	73	5.3 %	218	4.9 %	196	5.2 %		
Total	\$ 1,522	100.0 %	\$ 1,454	100.0 %	\$ 1,437	100.0 %	\$ 1,217	100.0 %	\$ 1,369	100.0 %	\$ 4,413	100.0 %	\$ 3,804	100.0 %		
Net Premiums Earned by Underwriting Unit																
Professional lines	\$ 363	25.7 %	\$ 355	26.7 %	\$ 349	27.8 %	\$ 368	29.6 %	\$ 342	28.8 %	\$ 1,067	26.7 %	\$ 946	28.5 %		
Property, energy, marine and aviation Programs	288	20.4 %	237	17.8 %	227	18.1 %	215	17.3 %	202	17.0 %	752	18.8 %	557	16.8 %		
Excess and surplus casualty	167	11.8 %	162	12.2 %	144	11.5 %	151	12.1 %	150	12.6 %	473	11.8 %	439	13.2 %		
Construction and national accounts	126	8.9 %	116	8.7 %	111	8.8 %	104	8.4 %	100	8.4 %	353	8.8 %	289	8.7 %		
Travel, accident and health	147	10.4 %	133	10.0 %	126	10.0 %	126	10.1 %	110	9.3 %	406	10.2 %	306	9.2 %		
Warranty and lenders solutions	148	10.5 %	147	11.1 %	128	10.2 %	124	10.0 %	133	11.2 %	423	10.6 %	368	11.1 %		
Other	43	3.0 %	49	3.7 %	50	4.0 %	36	2.9 %	33	2.8 %	142	3.6 %	92	2.8 %		
Total	\$ 1,412	100.0 %	\$ 1,328	100.0 %	\$ 1,257	100.0 %	\$ 1,244	100.0 %	\$ 1,187	100.0 %	\$ 3,997	100.0 %	\$ 3,316	100.0 %		

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

(U.S. Dollars in millions)

	Three Months Ended				Nine Months Ended		
	September 30, 2023	June 30, 2023	March 31, 2023	December 31, 2022	September 30, 2022	September 30, 2023	September 30, 2022
Gross premiums written	\$ 2,138	\$ 2,544	\$ 2,460	\$ 1,797	\$ 1,639	\$ 7,142	\$ 5,151
Premiums ceded	(576)	(835)	(734)	(254)	(560)	(2,145)	(1,770)
Net premiums written	1,562	1,709	1,726	1,543	1,079	4,997	3,381
Change in unearned premiums	(19)	(366)	(396)	(318)	(77)	(781)	(647)
Net premiums earned	1,543	1,343	1,330	1,225	1,002	4,216	2,734
Other underwriting income (loss)	2	3	4	(1)	—	9	6
Losses and loss adjustment expenses	(870)	(743)	(766)	(648)	(928)	(2,379)	(1,920)
Acquisition expenses	(304)	(290)	(281)	(244)	(208)	(875)	(569)
Other operating expenses	(61)	(68)	(74)	(69)	(63)	(203)	(199)
Underwriting income (loss)	\$ 310	\$ 245	\$ 213	\$ 263	\$ (197)	\$ 768	\$ 52
Underwriting Ratios							
Loss ratio	56.4 %	55.3 %	57.6 %	52.9 %	92.6 %	56.4 %	70.2 %
Acquisition expense ratio	19.7 %	21.6 %	21.1 %	19.9 %	20.8 %	20.7 %	20.8 %
Other operating expense ratio	3.9 %	5.0 %	5.6 %	5.6 %	6.3 %	4.8 %	7.3 %
Combined ratio	80.0 %	81.9 %	84.3 %	78.4 %	119.7 %	81.9 %	98.3 %
Catastrophic activity and prior year development:							
Current accident year catastrophic events, net of reinsurance and reinstatement premiums	9.3 %	6.3 %	4.4 %	— %	39.1 %	6.8 %	18.7 %
Net (favorable) adverse development in prior year loss reserves, net of related adjustments	(2.8)%	(1.8)%	(3.4)%	(4.5)%	(4.9)%	(2.7)%	(4.2)%
Combined ratio excluding catastrophic activity and prior year development (1)	73.5 %	77.4 %	83.3 %	82.9 %	85.5 %	77.8 %	83.8 %
Net premiums written to gross premiums written	73.1 %	67.2 %	70.2 %	85.9 %	65.8 %	70.0 %	65.6 %

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

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

(U.S. Dollars in millions)

	Three Months Ended										Nine Months Ended			
	September 30, 2023		June 30, 2023		March 31, 2023		December 31, 2022		September 30, 2022		September 30, 2023		September 30, 2022	
Net Premiums Written by Underwriting Unit														
Property excluding property catastrophe	\$ 593	38.0 %	\$ 457	26.7 %	\$ 446	25.8 %	\$ 340	22.0 %	\$ 342	31.7 %	\$ 1,496	29.9 %	\$ 936	27.7 %
Other specialty	527	33.7 %	479	28.0 %	619	35.9 %	803	52.0 %	381	35.3 %	1,625	32.5 %	1,180	34.9 %
Casualty	273	17.5 %	231	13.5 %	283	16.4 %	264	17.1 %	230	21.3 %	787	15.7 %	709	21.0 %
Property catastrophe	76	4.9 %	469	27.4 %	257	14.9 %	55	3.6 %	78	7.2 %	802	16.0 %	361	10.7 %
Marine and aviation	54	3.5 %	55	3.2 %	99	5.7 %	51	3.3 %	29	2.7 %	208	4.2 %	116	3.4 %
Other	39	2.5 %	18	1.1 %	22	1.3 %	30	1.9 %	19	1.8 %	79	1.6 %	79	2.3 %
Total	\$ 1,562	100.0 %	\$ 1,709	100.0 %	\$ 1,726	100.0 %	\$ 1,543	100.0 %	\$ 1,079	100.0 %	\$ 4,997	100.0 %	\$ 3,381	100.0 %
Net Premiums Written by Underwriting Location														
Bermuda	\$ 708	45.3 %	\$ 958	56.1 %	\$ 899	52.1 %	\$ 910	59.0 %	\$ 521	48.3 %	\$ 2,565	51.3 %	\$ 1,651	48.8 %
United States	461	29.5 %	408	23.9 %	421	24.4 %	377	24.4 %	312	28.9 %	1,290	25.8 %	870	25.7 %
Europe and other	393	25.2 %	343	20.1 %	406	23.5 %	256	16.6 %	246	22.8 %	1,142	22.9 %	860	25.4 %
Total	\$ 1,562	100.0 %	\$ 1,709	100.0 %	\$ 1,726	100.0 %	\$ 1,543	100.0 %	\$ 1,079	100.0 %	\$ 4,997	100.0 %	\$ 3,381	100.0 %
Net Premiums Earned by Underwriting Unit														
Property excluding property catastrophe	\$ 449	29.1 %	\$ 358	26.7 %	\$ 354	26.6 %	\$ 310	25.3 %	\$ 282	28.1 %	\$ 1,161	27.5 %	\$ 780	28.5 %
Other specialty	505	32.7 %	483	36.0 %	511	38.4 %	532	43.4 %	330	32.9 %	1,499	35.6 %	846	30.9 %
Casualty	264	17.1 %	258	19.2 %	253	19.0 %	220	18.0 %	222	22.2 %	775	18.4 %	635	23.2 %
Property catastrophe	219	14.2 %	169	12.6 %	139	10.5 %	77	6.3 %	118	11.8 %	527	12.5 %	290	10.6 %
Marine and aviation	66	4.3 %	56	4.2 %	51	3.8 %	50	4.1 %	25	2.5 %	173	4.1 %	109	4.0 %
Other	40	2.6 %	19	1.4 %	22	1.7 %	36	2.9 %	25	2.5 %	81	1.9 %	74	2.7 %
Total	\$ 1,543	100.0 %	\$ 1,343	100.0 %	\$ 1,330	100.0 %	\$ 1,225	100.0 %	\$ 1,002	100.0 %	\$ 4,216	100.0 %	\$ 2,734	100.0 %

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

(U.S. Dollars in millions)

	Three Months Ended				Nine Months Ended		
	September 30, 2023	June 30, 2023	March 31, 2023	December 31, 2022	September 30, 2022	September 30, 2022	
Gross premiums written	\$ 347	\$ 347	\$ 343	\$ 356	\$ 362	\$ 1,037	\$ 1,099
Premiums ceded	(76)	(82)	(82)	(81)	(86)	(240)	(241)
Net premiums written	271	265	261	275	276	797	858
Change in unearned premiums	22	29	35	17	6	86	10
Net premiums earned	293	294	296	292	282	883	868
Other underwriting income	3	3	6	2	3	12	6
Losses and loss adjustment expenses	35	13	(2)	137	68	46	187
Acquisition expenses	(2)	(7)	(7)	(13)	(7)	(16)	(27)
Other operating expenses	(47)	(50)	(50)	(45)	(47)	(147)	(150)
Underwriting income	\$ 282	\$ 253	\$ 243	\$ 373	\$ 299	\$ 778	\$ 884
Underwriting Ratios							
Loss ratio	(12.1)%	(4.5)%	0.6 %	(46.9)%	(24.1)%	(5.3)%	(21.6)%
Acquisition expense ratio	0.6 %	2.4 %	2.5 %	4.4 %	2.4 %	1.8 %	3.2 %
Other operating expense ratio	16.2 %	17.1 %	16.9 %	15.4 %	16.5 %	16.7 %	17.3 %
Combined ratio	4.7 %	15.0 %	20.0 %	(27.1)%	(5.2)%	13.2 %	(1.1)%
Net (favorable) adverse development in prior year loss reserves, net of related adjustments	(33.5)%	(28.7)%	(24.6)%	(72.1)%	(45.1)%	(28.9)%	(40.7)%
Combined ratio excluding prior year development (1)	38.2 %	43.7 %	44.6 %	45.0 %	39.9 %	42.1 %	39.6 %
Net premiums written to gross premiums written	78.1 %	76.4 %	76.1 %	77.2 %	76.2 %	76.9 %	78.1 %

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

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

(U.S. Dollars in millions)

	Three Months Ended										Nine Months Ended			
	September 30, 2023		June 30, 2023		March 31, 2023		December 31, 2022		September 30, 2022		September 30, 2023		September 30, 2022	
Net Premiums Written by Underwriting Unit														
U.S. primary mortgage insurance	\$ 190	70.1 %	\$ 186	70.2 %	\$ 186	71.3 %	\$ 187	68.0 %	\$ 185	67.0 %	\$ 562	70.5 %	\$ 582	67.8 %
U.S. credit risk transfer (CRT) and other	57	21.0 %	54	20.4 %	53	20.3 %	53	19.3 %	51	18.5 %	164	20.6 %	143	16.7 %
International mortgage insurance/reinsurance	24	8.9 %	25	9.4 %	22	8.4 %	35	12.7 %	40	14.5 %	71	8.9 %	133	15.5 %
Total	\$ 271	100.0 %	\$ 265	100.0 %	\$ 261	100.0 %	\$ 275	100.0 %	\$ 276	100.0 %	\$ 797	100.0 %	\$ 858	100.0 %
Net Premiums Written by Underwriting Location														
United States	\$ 192	70.8 %	\$ 187	70.6 %	\$ 188	72.0 %	\$ 190	69.1 %	\$ 188	68.1 %	\$ 567	71.1 %	\$ 591	68.9 %
Other	79	29.2 %	78	29.4 %	73	28.0 %	85	30.9 %	88	31.9 %	230	28.9 %	267	31.1 %
Total	\$ 271	100.0 %	\$ 265	100.0 %	\$ 261	100.0 %	\$ 275	100.0 %	\$ 276	100.0 %	\$ 797	100.0 %	\$ 858	100.0 %
Net Premiums Earned by Underwriting Unit														
U.S. primary mortgage insurance	\$ 192	65.5 %	\$ 194	66.0 %	\$ 196	66.2 %	\$ 197	67.5 %	\$ 194	68.8 %	\$ 582	65.9 %	\$ 607	69.9 %
U.S. credit risk transfer (CRT) and other	58	19.8 %	54	18.4 %	53	17.9 %	53	18.2 %	51	18.1 %	165	18.7 %	143	16.5 %
International mortgage insurance/reinsurance	43	14.7 %	46	15.6 %	47	15.9 %	42	14.4 %	37	13.1 %	136	15.4 %	118	13.6 %
Total	\$ 293	100.0 %	\$ 294	100.0 %	\$ 296	100.0 %	\$ 292	100.0 %	\$ 282	100.0 %	\$ 883	100.0 %	\$ 868	100.0 %

(U.S. Dollars in millions)

	September 30, 2023		June 30, 2023		March 31, 2023		December 31, 2022		September 30, 2022	
Insurance In Force (IIF) (1)										
U.S. primary mortgage insurance	\$ 292,903	57.4 %	\$ 293,902	56.6 %	\$ 294,244	57.3 %	\$ 295,651	57.6 %	\$ 294,857	58.8 %
U.S. credit risk transfer (CRT) and other	152,453	29.9 %	154,983	29.9 %	147,731	28.8 %	145,087	28.3 %	143,897	28.7 %
International mortgage insurance/reinsurance	65,107	12.8 %	70,117	13.5 %	71,327	13.9 %	72,315	14.1 %	63,068	12.6 %
Total	\$ 510,463	100.0 %	\$ 519,002	100.0 %	\$ 513,302	100.0 %	\$ 513,053	100.0 %	\$ 501,822	100.0 %
Risk In Force (RIF) (2)										
U.S. primary mortgage insurance	\$ 75,850	84.9 %	\$ 75,941	84.5 %	\$ 75,770	84.8 %	\$ 75,806	84.8 %	\$ 75,343	85.1 %
U.S. credit risk transfer and other	6,478	7.2 %	6,556	7.3 %	6,286	7.0 %	6,245	7.0 %	6,473	7.3 %
International mortgage insurance/reinsurance	7,034	7.9 %	7,385	8.2 %	7,333	8.2 %	7,369	8.2 %	6,727	7.6 %
Total	\$ 89,362	100.0 %	\$ 89,882	100.0 %	\$ 89,389	100.0 %	\$ 89,420	100.0 %	\$ 88,543	100.0 %

(1) The aggregate dollar amount of each insured mortgage loan's current principal balance. Such amounts are shown before external reinsurance.

(2) 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. Such amounts are shown before external reinsurance.

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

The following table provides supplemental disclosures for the Company's U.S. primary mortgage insurance operations:

(U.S. Dollars in millions)

	September 30, 2023		June 30, 2023		March 31, 2023		December 31, 2022		September 30, 2022	
Total RIF by credit quality (FICO score):										
>=740	\$ 46,990	62.0 %	\$ 46,978	61.9 %	\$ 46,788	61.8 %	\$ 46,812	61.8 %	\$ 46,538	61.8 %
680-739	25,055	33.0 %	25,083	33.0 %	25,016	33.0 %	24,945	32.9 %	24,671	32.7 %
620-679	3,554	4.7 %	3,622	4.8 %	3,699	4.9 %	3,772	5.0 %	3,850	5.1 %
<620	251	0.3 %	258	0.3 %	267	0.4 %	277	0.4 %	284	0.4 %
Total	\$ 75,850	100.0 %	\$ 75,941	100.0 %	\$ 75,770	100.0 %	\$ 75,806	100.0 %	\$ 75,343	100.0 %
Weighted average FICO score	748		748		748		750		748	
Total RIF by Loan-To-Value (LTV):										
95.01% and above	\$ 7,113	9.4 %	\$ 7,151	9.4 %	\$ 7,215	9.5 %	\$ 7,289	9.6 %	\$ 7,334	9.7 %
90.01% to 95.00%	44,675	58.9 %	44,496	58.6 %	44,066	58.2 %	43,681	57.6 %	43,049	57.1 %
85.01% to 90.00%	20,565	27.1 %	20,627	27.2 %	20,665	27.3 %	20,851	27.5 %	20,876	27.7 %
85.00% and below	3,497	4.6 %	3,667	4.8 %	3,824	5.0 %	3,985	5.3 %	4,084	5.4 %
Total	\$ 75,850	100.0 %	\$ 75,941	100.0 %	\$ 75,770	100.0 %	\$ 75,806	100.0 %	\$ 75,343	100.0 %
Weighted average LTV	93.0 %		93.0 %		92.9 %		92.8 %		92.9 %	
Total RIF by State:										
California	\$ 6,235	8.2 %	\$ 6,317	8.3 %	\$ 6,369	8.4 %	\$ 6,341	8.4 %	\$ 6,219	8.3 %
Texas	6,081	8.0 %	6,159	8.1 %	6,179	8.2 %	6,151	8.1 %	6,080	8.1 %
North Carolina	3,258	4.3 %	3,239	4.3 %	3,191	4.2 %	3,160	4.2 %	3,139	4.2 %
Georgia	3,116	4.1 %	3,155	4.2 %	3,167	4.2 %	3,169	4.2 %	3,150	4.2 %
Florida	3,086	4.1 %	3,167	4.2 %	3,225	4.3 %	3,268	4.3 %	3,275	4.3 %
Minnesota	3,060	4.0 %	3,023	4.0 %	2,994	4.0 %	3,003	4.0 %	2,996	4.0 %
Illinois	2,994	3.9 %	3,010	4.0 %	3,054	4.0 %	3,081	4.1 %	3,087	4.1 %
Massachusetts	2,841	3.7 %	2,834	3.7 %	2,822	3.7 %	2,809	3.7 %	2,771	3.7 %
Michigan	2,722	3.6 %	2,661	3.5 %	2,626	3.5 %	2,618	3.5 %	2,587	3.4 %
Virginia	2,605	3.4 %	2,619	3.4 %	2,634	3.5 %	2,656	3.5 %	2,647	3.5 %
Other	39,852	52.5 %	39,757	52.4 %	39,509	52.1 %	39,550	52.2 %	39,392	52.3 %
Total	\$ 75,850	100.0 %	\$ 75,941	100.0 %	\$ 75,770	100.0 %	\$ 75,806	100.0 %	\$ 75,343	100.0 %
Weighted average coverage (end of period RIF divided by IIF)	25.9 %		25.8 %		25.8 %		25.6 %		25.6 %	
U.S. mortgage insurance total RIF, net of reinsurance (1)	\$ 56,946		\$ 57,019		\$ 57,001		\$ 57,151		\$ 56,890	
Analysts' persistency (2)	83.9 %		83.0 %		81.7 %		79.5 %		75.4 %	
Risk-to-capital ratio -- Arch MI U.S. (3)	6.6:1		6.9:1		6.9:1		7.2:1		7.6:1	
PMIER sufficiency ratio -- Arch MI U.S. (4)	245 %		245 %		248 %		236 %		237 %	

(1) Total RIF for the U.S. mortgage insurance operations after external reinsurance.

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

(3) Represents current (non-delinquent) RIF, net of reinsurance, divided by statutory capital (estimate for September 30, 2023).

(4) Calculated as available assets divided by required assets as defined within PMIERS (estimate for September 30, 2023). There was approximately \$2.3 billion of excess available assets at September 30, 2023.

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

The following table provides supplemental disclosures for the Company's U.S. primary mortgage insurance operations:

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

	Three Months Ended									
	September 30, 2023		June 30, 2023		March 31, 2023		December 31, 2022		September 30, 2022	
Total new insurance written (NIW) (1)	\$ 11,494		\$ 12,292		\$ 10,394		\$ 11,413		\$ 17,425	
<u>Total NIW by credit quality (FICO score):</u>										
>=740	\$ 7,646	66.5 %	\$ 8,151	66.3 %	\$ 6,672	64.2 %	\$ 7,155	62.7 %	\$ 11,615	66.7 %
680-739	3,520	30.6 %	3,832	31.2 %	3,490	33.6 %	3,992	35.0 %	5,322	30.5 %
620-679	326	2.8 %	308	2.5 %	229	2.2 %	265	2.3 %	485	2.8 %
<620	2	0.0 %	1	0.0 %	3	0.0 %	1	0.0 %	3	0.0 %
Total	<u>\$ 11,494</u>		<u>\$ 12,292</u>		<u>\$ 10,394</u>		<u>\$ 11,413</u>		<u>\$ 17,425</u>	
<u>Total NIW by LTV:</u>										
95.01% and above	\$ 880	7.7 %	\$ 635	5.2 %	\$ 519	5.0 %	\$ 555	4.9 %	\$ 973	5.6 %
90.01% to 95.00%	6,306	54.9 %	6,855	55.8 %	6,043	58.1 %	6,725	58.9 %	9,916	56.9 %
85.01% to 90.00%	3,126	27.2 %	3,516	28.6 %	2,772	26.7 %	3,040	26.6 %	4,839	27.8 %
85.00% and below	1,182	10.3 %	1,286	10.5 %	1,060	10.2 %	1,093	9.6 %	1,697	9.7 %
Total	<u>\$ 11,494</u>		<u>\$ 12,292</u>		<u>\$ 10,394</u>		<u>\$ 11,413</u>		<u>\$ 17,425</u>	
<u>Total NIW monthly vs. single:</u>										
Monthly	\$ 10,712	93.2 %	\$ 11,870	96.6 %	\$ 10,106	97.2 %	\$ 11,090	97.2 %	\$ 16,911	97.1 %
Single	782	6.8 %	422	3.4 %	288	2.8 %	323	2.8 %	514	2.9 %
Total	<u>\$ 11,494</u>		<u>\$ 12,292</u>		<u>\$ 10,394</u>		<u>\$ 11,413</u>		<u>\$ 17,425</u>	
<u>Total NIW purchase vs. refinance:</u>										
Purchase	\$ 11,334	98.6 %	\$ 12,063	98.1 %	\$ 10,201	98.1 %	\$ 11,202	98.2 %	\$ 17,159	98.5 %
Refinance	160	1.4 %	229	1.9 %	193	1.9 %	211	1.8 %	266	1.5 %
Total	<u>\$ 11,494</u>		<u>\$ 12,292</u>		<u>\$ 10,394</u>		<u>\$ 11,413</u>		<u>\$ 17,425</u>	
Ending number of policies in force (PIF) (2)	1,129,351		1,138,681		1,147,081		1,160,219		1,168,735	
<u>Rollforward of insured loans in default:</u>										
Beginning delinquent number of loans	18,286		18,975		20,567		20,214		20,692	
Plus: new notices	10,138		9,028		9,476		10,068		9,515	
Less: cures	(9,545)		(9,505)		(10,853)		(9,564)		(9,832)	
Less: paid claims	(235)		(212)		(215)		(151)		(161)	
Ending delinquent number of loans (2)	<u>18,644</u>		<u>18,286</u>		<u>18,975</u>		<u>20,567</u>		<u>20,214</u>	
Ending percentage of loans in default (2)	1.65 %		1.61 %		1.65 %		1.77 %		1.73 %	
<u>Losses:</u>										
Number of claims paid	235		212		215		151		161	
Total paid claims (in thousands)	\$ 6,602		\$ 5,715		\$ 7,185		\$ 4,547		\$ 5,223	
Average per claim (in thousands)	\$ 28.1		\$ 27.0		\$ 33.4		\$ 30.1		\$ 32.4	
Severity (3)	64.0 %		61.5 %		81.8 %		69.5 %		72.3 %	
Average case reserve per default (in thousands)	\$ 21.2		\$ 23.1		\$ 23.0		\$ 21.1		\$ 27.7	

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

(2) Includes first lien primary and pool policies.

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

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

The following table provides supplemental disclosures for the Company's U.S. primary mortgage insurance operations:

(U.S. Dollars in millions)

Policy year:	September 30, 2023						December 31, 2022					
	Reserves, Net (1)	Primary IIF (2)		Primary RIF (3)		Delinquency Rate	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	
2013 and prior	31.8 %	\$ 11,263	3.8 %	\$ 2,842	3.7 %	6.52 %	36.1 %	\$ 12,931	4.4 %	\$ 3,222	4.3 %	7.07 %
2014	1.4 %	2,759	0.9 %	742	1.0 %	2.43 %	1.9 %	3,696	1.3 %	1,012	1.3 %	2.61 %
2015	2.0 %	5,113	1.7 %	1,366	1.8 %	1.88 %	2.4 %	6,236	2.1 %	1,680	2.2 %	2.08 %
2016	5.1 %	7,970	2.7 %	2,148	2.8 %	2.51 %	5.8 %	10,225	3.5 %	2,744	3.6 %	2.66 %
2017	7.2 %	8,016	2.7 %	2,132	2.8 %	2.96 %	9.1 %	9,508	3.2 %	2,521	3.3 %	3.06 %
2018	9.6 %	8,908	3.0 %	2,302	3.0 %	3.66 %	11.6 %	10,260	3.5 %	2,625	3.5 %	4.11 %
2019	9.3 %	16,572	5.7 %	4,250	5.6 %	2.22 %	10.2 %	19,096	6.5 %	4,840	6.4 %	2.36 %
2020	12.0 %	54,238	18.5 %	13,997	18.5 %	1.06 %	11.3 %	65,141	22.0 %	16,414	21.7 %	1.20 %
2021	14.0 %	80,045	27.3 %	20,567	27.1 %	1.00 %	9.9 %	89,621	30.3 %	22,740	30.0 %	0.95 %
2022	7.1 %	65,065	22.2 %	17,038	22.5 %	0.72 %	1.7 %	68,937	23.3 %	18,008	23.8 %	0.20 %
2023	0.5 %	32,954	11.3 %	8,466	11.2 %	0.15 %						
Total	100.0 %	\$ 292,903	100.0 %	\$ 75,850	100.0 %	1.65 %	100.0 %	\$ 295,651	100.0 %	\$ 75,806	100.0 %	1.77 %

(1) Total reserves for losses and loss adjustment expenses, net of recoverables, was \$376.5 million at September 30, 2023, compared to \$415.2 million at December 31, 2022.

(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

(U.S. Dollars in millions)

	Three Months Ended					Nine Months Ended	
	September 30, 2023	June 30, 2023	March 31, 2023	December 31, 2022	September 30, 2022	September 30, 2023	September 30, 2022
Gross premiums written	\$ 4,527	\$ 4,845	\$ 4,780	\$ 3,795	\$ 3,861	\$ 14,152	\$ 11,532
Premiums ceded	(1,172)	(1,417)	(1,356)	(760)	(1,137)	(3,945)	(3,489)
Net premiums written	3,355	3,428	3,424	3,035	2,724	10,207	8,043
Change in unearned premiums	(107)	(463)	(541)	(274)	(253)	(1,111)	(1,125)
Net premiums earned	3,248	2,965	2,883	2,761	2,471	9,096	6,918
Other underwriting income (loss)	5	6	10	1	3	21	12
Losses and loss adjustment expenses	(1,647)	(1,491)	(1,471)	(1,241)	(1,683)	(4,609)	(3,787)
Acquisition expenses	(575)	(561)	(533)	(501)	(448)	(1,669)	(1,239)
Other operating expenses	(310)	(313)	(319)	(286)	(275)	(942)	(842)
Underwriting income (loss) (1)	\$ 721	\$ 606	\$ 570	\$ 734	\$ 68	\$ 1,897	\$ 1,062
Underwriting Ratios							
Loss ratio	50.7 %	50.3 %	51.0 %	45.0 %	68.1 %	50.7 %	54.7 %
Acquisition expense ratio	17.7 %	18.9 %	18.5 %	18.1 %	18.1 %	18.3 %	17.9 %
Other operating expense ratio	9.5 %	10.6 %	11.1 %	10.4 %	11.1 %	10.4 %	12.2 %
Combined ratio	77.9 %	79.8 %	80.6 %	73.5 %	97.3 %	79.4 %	84.8 %
Catastrophic activity and prior year development:							
Current accident year catastrophic events, net of reinsurance and reinstatement premiums	5.6 %	4.0 %	2.7 %	1.3 %	22.3 %	4.2 %	10.4 %
Net (favorable) adverse development in prior year loss reserves, net of related adjustments	(4.7)%	(3.9)%	(4.3)%	(9.8)%	(7.2)%	(4.3)%	(6.9)%
Combined ratio excluding catastrophic activity and prior year development (1)	77.0 %	79.7 %	82.2 %	82.0 %	82.2 %	79.5 %	81.3 %
Components of losses and loss adjustment expenses incurred							
Paid losses and loss adjustment expenses	\$ 1,058	\$ 1,072	\$ 867	\$ 904	\$ 765	\$ 2,997	\$ 2,237
Change in unpaid losses and loss adjustment expenses	589	419	604	337	918	1,612	1,550
Total losses and loss adjustment expenses	\$ 1,647	\$ 1,491	\$ 1,471	\$ 1,241	\$ 1,683	\$ 4,609	\$ 3,787
Net premiums written to gross premiums written	74.1 %	70.8 %	71.6 %	80.0 %	70.6 %	72.1 %	69.7 %

(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 millions)

	Three Months Ended				Nine Months Ended		
	September 30, 2023	June 30, 2023	March 31, 2023	December 31, 2022	September 30, 2022	September 30, 2023	September 30, 2022
Estimated net (favorable) adverse development in prior year loss reserves, net of related adjustments							
Net impact on underwriting results:							
Insurance	\$ (11)	\$ (7)	\$ (7)	\$ (4)	\$ (1)	\$ (25)	\$ (7)
Reinsurance	(43)	(25)	(46)	(55)	(49)	(114)	(112)
Mortgage	(98)	(84)	(73)	(211)	(127)	(255)	(353)
Total	<u>\$ (152)</u>	<u>\$ (116)</u>	<u>\$ (126)</u>	<u>\$ (270)</u>	<u>\$ (177)</u>	<u>\$ (394)</u>	<u>\$ (472)</u>
Impact on losses and loss adjustment expenses:							
Insurance	\$ (10)	\$ (12)	\$ (12)	\$ (6)	\$ (5)	\$ (34)	\$ (19)
Reinsurance	(44)	(29)	(53)	(63)	(49)	(126)	(127)
Mortgage	(92)	(80)	(71)	(208)	(126)	(243)	(346)
Total	<u>\$ (146)</u>	<u>\$ (121)</u>	<u>\$ (136)</u>	<u>\$ (277)</u>	<u>\$ (180)</u>	<u>\$ (403)</u>	<u>\$ (492)</u>
Impact on acquisition expenses:							
Insurance	\$ (1)	\$ 5	\$ 5	\$ 2	\$ 4	\$ 9	\$ 12
Reinsurance	1	4	7	8	—	12	15
Mortgage	(6)	(4)	(2)	(3)	(1)	(12)	(7)
Total	<u>\$ (6)</u>	<u>\$ 5</u>	<u>\$ 10</u>	<u>\$ 7</u>	<u>\$ 3</u>	<u>\$ 9</u>	<u>\$ 20</u>
Impact on combined ratio:							
Insurance	(0.8)%	(0.5)%	(0.5)%	(0.3)%	(0.1)%	(0.6)%	(0.2)%
Reinsurance	(2.8)%	(1.8)%	(3.4)%	(4.5)%	(4.9)%	(2.7)%	(4.2)%
Mortgage	(33.5)%	(28.7)%	(24.6)%	(72.1)%	(45.1)%	(28.9)%	(40.7)%
Total	<u>(4.7)%</u>	<u>(3.9)%</u>	<u>(4.3)%</u>	<u>(9.8)%</u>	<u>(7.2)%</u>	<u>(4.3)%</u>	<u>(6.9)%</u>
Impact on loss ratio:							
Insurance	(0.7)%	(0.9)%	(0.9)%	(0.5)%	(0.5)%	(0.8)%	(0.6)%
Reinsurance	(2.8)%	(2.2)%	(4.0)%	(5.2)%	(4.9)%	(3.0)%	(4.7)%
Mortgage	(31.4)%	(27.2)%	(23.9)%	(71.1)%	(44.7)%	(27.5)%	(39.9)%
Total	<u>(4.5)%</u>	<u>(4.1)%</u>	<u>(4.7)%</u>	<u>(10.0)%</u>	<u>(7.3)%</u>	<u>(4.4)%</u>	<u>(7.1)%</u>
Impact on acquisition expense ratio:							
Insurance	(0.1)%	0.4 %	0.4 %	0.2 %	0.4 %	0.2 %	0.4 %
Reinsurance	0.0 %	0.4 %	0.6 %	0.7 %	0.0 %	0.3 %	0.5 %
Mortgage	(2.1)%	(1.5)%	(0.7)%	(1.0)%	(0.4)%	(1.4)%	(0.8)%
Total	<u>(0.2)%</u>	<u>0.2 %</u>	<u>0.4 %</u>	<u>0.2 %</u>	<u>0.1 %</u>	<u>0.1 %</u>	<u>0.2 %</u>
Estimated net losses incurred from current accident year catastrophic events (1)							
Insurance	\$ 37	\$ 35	\$ 20	\$ 34	\$ 159	\$ 92	\$ 207
Reinsurance	143	84	59	—	392	286	512
Total	<u>\$ 180</u>	<u>\$ 119</u>	<u>\$ 79</u>	<u>\$ 34</u>	<u>\$ 551</u>	<u>\$ 378</u>	<u>\$ 719</u>
Impact on combined ratio:							
Insurance	2.6 %	2.6 %	1.6 %	2.8 %	13.4 %	2.3 %	6.2 %
Reinsurance	9.3 %	6.3 %	4.4 %	0.0 %	39.1 %	6.8 %	18.7 %
Total	<u>5.6 %</u>	<u>4.0 %</u>	<u>2.7 %</u>	<u>1.3 %</u>	<u>22.3 %</u>	<u>4.2 %</u>	<u>10.4 %</u>

(1) Equals estimated losses from catastrophic events occurring in the current accident year (e.g. natural catastrophes, man-made events, pandemic events), net of reinsurance and reinstatement premiums. As regards the natural catastrophe estimates included within, amounts shown for the insurance segment are for named catastrophic events only, while 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:

(U.S. Dollars in millions)	September 30, 2023		June 30, 2023		March 31, 2023		December 31, 2022		September 30, 2022	
Investable assets:										
Fixed maturities available for sale, at fair value	\$ 22,485	70.5 %	\$ 21,434	70.4 %	\$ 20,692	70.4 %	\$ 19,683	70.1 %	\$ 18,121	67.9 %
Fixed maturities—fair value option (1)	644	2.0 %	659	2.2 %	631	2.1 %	554	2.0 %	530	2.0 %
Total fixed maturities	<u>23,129</u>	<u>72.5 %</u>	<u>22,093</u>	<u>72.6 %</u>	<u>21,323</u>	<u>72.5 %</u>	<u>20,237</u>	<u>72.1 %</u>	<u>18,651</u>	<u>69.9 %</u>
Equity securities, at fair value	894	2.8 %	911	3.0 %	859	2.9 %	860	3.1 %	810	3.0 %
Equity securities—fair value option (1)	7	0.0 %	7	0.0 %	7	0.0 %	14	0.0 %	14	0.1 %
Total equity securities	<u>901</u>	<u>2.8 %</u>	<u>918</u>	<u>3.0 %</u>	<u>866</u>	<u>2.9 %</u>	<u>874</u>	<u>3.1 %</u>	<u>824</u>	<u>3.1 %</u>
Other investments—fair value option (1)	1,404	4.4 %	1,172	3.9 %	1,121	3.8 %	1,043	3.7 %	1,006	3.8 %
Investments accounted for using the equity method (2)	4,251	13.3 %	4,073	13.4 %	3,896	13.3 %	3,774	13.4 %	3,566	13.4 %
Short-term investments available for sale, at fair value	1,682	5.3 %	1,702	5.6 %	1,553	5.3 %	1,332	4.7 %	1,941	7.3 %
Short-term investments—fair value option (1)	13	0.0 %	8	0.0 %	17	0.1 %	33	0.1 %	28	0.1 %
Total short-term investments	<u>1,695</u>	<u>5.3 %</u>	<u>1,710</u>	<u>5.6 %</u>	<u>1,570</u>	<u>5.3 %</u>	<u>1,365</u>	<u>4.9 %</u>	<u>1,969</u>	<u>7.4 %</u>
Cash	859	2.7 %	904	3.0 %	803	2.7 %	855	3.0 %	814	3.1 %
Securities transactions entered into but not settled at the balance sheet date	(358)	(1.1)%	(429)	(1.4)%	(178)	(0.6)%	(83)	(0.3)%	(148)	(0.6)%
Total investable assets held by the Company	<u>\$ 31,881</u>	<u>100.0 %</u>	<u>\$ 30,441</u>	<u>100.0 %</u>	<u>\$ 29,401</u>	<u>100.0 %</u>	<u>\$ 28,065</u>	<u>100.0 %</u>	<u>\$ 26,682</u>	<u>100.0 %</u>
Average effective duration (in years)	2.97		3.03		2.89		2.89		2.84	
Average S&P/Moody's credit ratings (3)	AA-/Aa3		AA-/Aa3		AA-/Aa3		AA-/Aa3		AA/Aa2	

(1) Included in "other investments" on the balance sheet.

(2) 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.

(3) 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:

(U.S. Dollars in millions, except per share data)

	Three Months Ended				Nine Months Ended		
	September 30, 2023	June 30, 2023	March 31, 2023	December 31, 2022	September 30, 2022	September 30, 2023	September 30, 2022
Composition of net investment income:							
Fixed maturities	\$ 243	\$ 214	\$ 188	\$ 158	\$ 124	\$ 645	\$ 311
Equity securities (dividends)	5	6	4	6	4	15	16
Short-term investments	19	15	14	13	9	48	16
Other (1)	22	25	13	18	9	60	29
Gross investment income	289	260	219	195	146	768	372
Investment expenses	(20)	(18)	(20)	(14)	(17)	(58)	(57)
Net investment income	<u>\$ 269</u>	<u>\$ 242</u>	<u>\$ 199</u>	<u>\$ 181</u>	<u>\$ 129</u>	<u>\$ 710</u>	<u>\$ 315</u>
Per share	\$ 0.71	\$ 0.64	\$ 0.53	\$ 0.48	\$ 0.34	\$ 1.88	\$ 0.83
Equity in net income (loss) of investment funds accounted for using the equity method	59	69	48	40	(19)	176	75
Per share	\$ 0.16	\$ 0.18	\$ 0.13	\$ 0.11	\$ (0.05)	\$ 0.47	\$ 0.20
Investment income yield, at amortized cost (2):							
Pre-tax	3.68 %	3.50 %	3.03 %	2.80 %	2.06 %	3.41 %	1.72 %
After-tax	3.18 %	3.05 %	2.58 %	2.41 %	1.77 %	2.95 %	1.46 %
Total return on investments (3)	(0.40)%	0.56 %	2.54 %	2.60 %	(3.01)%	2.68 %	(8.83)%

(1) Amounts include dividends and other distributions on investment funds, term loan investments, funds held balances, cash balances and other.

(2) 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.

(3) 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 (excluding changes in allowance for credit losses on non-investment related financial assets) 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:

(U.S. Dollars in millions)

	Fair Value	Gross Unrealized Gains	Gross Unrealized Losses	Net Unrealized Gains (Losses)	Allowance for Credit Losses	Amortized Cost	Fair Value / Amortized Cost	Fair Value % of Total
At September 30, 2023								
Corporates	\$ 10,684	\$ 33	\$ (747)	\$ (714)	\$ (47)	\$ 11,445	93.4 %	46.2 %
U.S. government and government agencies	5,669	15	(240)	(225)	—	5,894	96.2 %	24.5 %
Asset-backed securities	2,344	10	(76)	(66)	(5)	2,415	97.1 %	10.1 %
Non-U.S. government securities	2,067	9	(173)	(164)	(2)	2,233	92.6 %	8.9 %
Commercial mortgage-backed securities	1,102	—	(46)	(46)	(3)	1,151	95.7 %	4.8 %
Residential mortgage-backed securities	965	5	(100)	(95)	—	1,060	91.0 %	4.2 %
Municipal bonds	298	2	(32)	(30)	—	328	90.9 %	1.3 %
Total	<u>\$ 23,129</u>	<u>\$ 74</u>	<u>\$ (1,414)</u>	<u>\$ (1,340)</u>	<u>\$ (57)</u>	<u>\$ 24,526</u>	94.3 %	100.0 %
At December 31, 2022								
Corporates	\$ 8,563	\$ 55	\$ (781)	\$ (726)	\$ (30)	\$ 9,319	91.9 %	42.3 %
U.S. government and government agencies	5,167	15	(343)	(328)	—	5,495	94.0 %	25.5 %
Asset-backed securities	1,929	1	(107)	(106)	(6)	2,041	94.5 %	9.5 %
Non-U.S. government securities	2,317	9	(238)	(229)	(2)	2,548	90.9 %	11.4 %
Commercial mortgage-backed securities	1,047	1	(58)	(57)	(3)	1,107	94.6 %	5.2 %
Residential mortgage-backed securities	795	5	(87)	(82)	—	877	90.6 %	3.9 %
Municipal bonds	419	3	(33)	(30)	—	449	93.3 %	2.1 %
Total	<u>\$ 20,237</u>	<u>\$ 89</u>	<u>\$ (1,647)</u>	<u>\$ (1,558)</u>	<u>\$ (41)</u>	<u>\$ 21,836</u>	92.7 %	100.0 %

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:

(U.S. Dollars in millions)

	September 30, 2023		June 30, 2023		March 31, 2023		December 31, 2022		September 30, 2022						
Credit quality distribution of total fixed maturities (1):															
U.S. government and government agencies (2)	\$	6,359	27.5 %	\$	5,282	23.9 %	\$	5,274	24.7 %	\$	5,831	28.8 %	\$	5,746	30.8 %
AAA		4,164	18.0 %		3,985	18.0 %		3,826	17.9 %		3,617	17.9 %		3,345	17.9 %
AA		2,061	8.9 %		2,285	10.3 %		2,136	10.0 %		2,214	10.9 %		2,031	10.9 %
A		4,523	19.6 %		4,810	21.8 %		4,540	21.3 %		3,993	19.7 %		3,383	18.1 %
BBB		4,390	19.0 %		4,165	18.9 %		3,875	18.2 %		3,324	16.4 %		3,001	16.1 %
BB		773	3.3 %		770	3.5 %		711	3.3 %		560	2.8 %		532	2.9 %
B		352	1.5 %		366	1.7 %		384	1.8 %		377	1.9 %		358	1.9 %
Lower than B		16	0.1 %		16	0.1 %		18	0.1 %		12	0.1 %		12	0.1 %
Not rated		491	2.1 %		414	1.9 %		559	2.6 %		309	1.5 %		243	1.3 %
Total fixed maturities, at fair value	\$	23,129	100.0 %	\$	22,093	100.0 %	\$	21,323	100.0 %	\$	20,237	100.0 %	\$	18,651	100.0 %
Maturity profile of total fixed maturities:															
Due in one year or less	\$	706	3.1 %	\$	594	2.7 %	\$	505	2.4 %	\$	534	2.6 %	\$	602	3.2 %
Due after one year through five years		13,272	57.4 %		12,399	56.1 %		11,739	55.1 %		11,292	55.8 %		10,284	55.1 %
Due after five years through ten years		4,679	20.2 %		4,630	21.0 %		4,616	21.6 %		4,156	20.5 %		4,032	21.6 %
Due after 10 years		61	0.3 %		123	0.6 %		242	1.1 %		484	2.4 %		312	1.7 %
		18,718	80.9 %		17,746	80.3 %		17,102	80.2 %		16,466	81.4 %		15,230	81.7 %
Residential mortgage-backed securities		965	4.2 %		860	3.9 %		823	3.9 %		795	3.9 %		763	4.1 %
Commercial mortgage-backed securities		1,102	4.8 %		1,082	4.9 %		1,035	4.9 %		1,047	5.2 %		1,064	5.7 %
Asset-backed securities		2,344	10.1 %		2,405	10.9 %		2,363	11.1 %		1,929	9.5 %		1,594	8.5 %
Total fixed maturities, at fair value	\$	23,129	100.0 %	\$	22,093	100.0 %	\$	21,323	100.0 %	\$	20,237	100.0 %	\$	18,651	100.0 %

(1) 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.

(2) 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:

(U.S. Dollars in millions)	September 30, 2023		June 30, 2023		March 31, 2023		December 31, 2022		September 30, 2022	
Sector:										
Industrials	\$ 4,918	46.0 %	\$ 4,988	47.0 %	\$ 4,672	46.6 %	\$ 3,463	40.4 %	\$ 2,926	38.4 %
Financials	4,326	40.5 %	4,334	40.8 %	4,329	43.2 %	4,246	49.6 %	4,093	53.7 %
Utilities	962	9.0 %	927	8.7 %	798	8.0 %	546	6.4 %	483	6.3 %
All other (1)	478	4.5 %	367	3.5 %	223	2.2 %	308	3.6 %	117	1.5 %
Total	\$ 10,684	100.0 %	\$ 10,616	100.0 %	\$ 10,022	100.0 %	\$ 8,563	100.0 %	\$ 7,619	100.0 %
Credit quality distribution (2):										
AAA	\$ 297	2.8 %	\$ 227	2.1 %	\$ 176	1.8 %	\$ 178	2.1 %	\$ 163	2.1 %
AA	938	8.8 %	913	8.6 %	869	8.7 %	767	9.0 %	824	10.8 %
A	3,936	36.8 %	4,197	39.5 %	3,994	39.9 %	3,266	38.1 %	2,741	36.0 %
BBB	4,118	38.5 %	3,885	36.6 %	3,628	36.2 %	3,096	36.2 %	2,834	37.2 %
BB	715	6.7 %	714	6.7 %	658	6.6 %	541	6.3 %	517	6.8 %
B	351	3.3 %	365	3.4 %	383	3.8 %	371	4.3 %	351	4.6 %
Lower than B	16	0.1 %	16	0.2 %	18	0.2 %	12	0.1 %	11	0.1 %
Not rated	313	2.9 %	299	2.8 %	296	3.0 %	332	3.9 %	178	2.3 %
Total	\$ 10,684	100.0 %	\$ 10,616	100.0 %	\$ 10,022	100.0 %	\$ 8,563	100.0 %	\$ 7,619	100.0 %

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

(2) 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 September 30, 2023:

(U.S. Dollars in millions)	Fair Value	% of Asset Class	% of Investable Assets	Credit Quality (1)
Issuer:				
Bank of America Corporation	\$ 360	3.4 %	1.1 %	A-/A1
Morgan Stanley	333	3.1 %	1.0 %	A-/A1
JPMorgan Chase & Co.	315	2.9 %	1.0 %	A-/A1
The Goldman Sachs Group, Inc.	240	2.2 %	0.8 %	BBB+/A2
Citigroup Inc.	222	2.1 %	0.7 %	BBB+/A3
HSBC Holdings plc	167	1.6 %	0.5 %	A-/A2
Blue Owl Capital Inc.	160	1.5 %	0.5 %	BBB-/Baa3
Wells Fargo & Company	149	1.4 %	0.5 %	BBB+/A1
Philip Morris International Inc.	142	1.3 %	0.4 %	A-/A2
Deere & Company	129	1.2 %	0.4 %	A/A2
Total	\$ 2,217	20.8 %	7.0 %	

(1) 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:

(U.S. Dollars in millions)

	Agencies	AAA	AA	A	BBB	Non-Investment Grade	Total
At September 30, 2023							
Residential mortgage-backed securities	\$ 682	\$ 256	\$ 27	\$ —	\$ —	\$ —	\$ 965
Commercial mortgage-backed securities	7	701	181	30	86	97	1,102
Asset-backed securities	—	1,363	229	450	163	139	2,344
Total	<u>\$ 689</u>	<u>\$ 2,320</u>	<u>\$ 437</u>	<u>\$ 480</u>	<u>\$ 249</u>	<u>\$ 236</u>	<u>\$ 4,411</u>
At December 31, 2022							
Residential mortgage-backed securities	\$ 645	\$ 106	\$ 28	\$ —	\$ —	\$ 16	\$ 795
Commercial mortgage-backed securities	18	682	152	32	82	81	1,047
Asset-backed securities	—	1,135	184	350	119	141	1,929
Total	<u>\$ 663</u>	<u>\$ 1,923</u>	<u>\$ 364</u>	<u>\$ 382</u>	<u>\$ 201</u>	<u>\$ 238</u>	<u>\$ 3,771</u>

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 (which includes changes in the allowance for credit losses on financial assets and 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, 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 net income 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, equity in net income or loss of investment funds accounted for using the equity method, net foreign exchange gains or losses and transaction costs and other, in any particular period are not indicative of the performance of, or trends in, the Company's business. Although net realized gains or losses, 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 these items 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, changes in the allowance for credit losses and 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. 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.

Due to these reasons, the Company excludes net realized gains or losses, equity in net income or loss of investment funds accounted for using the equity method, net foreign exchange gains or losses and transaction costs and other 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 that follow the Company and the insurance industry as a whole generally exclude these items from their analyses for the same reasons.

The Company's segment information includes the presentation of consolidated underwriting income or loss and a subtotal of underwriting income or loss. 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 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, in accordance with Regulation G, is shown on pages 9 to 12.

In addition, the Company's segment information includes the use of a combined ratio excluding catastrophic activity and prior year development, for the insurance and reinsurance segments, and a combined ratio excluding prior year development, for the mortgage segment. 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 ratios excluding current accident year catastrophic events and favorable or adverse development in prior year loss reserves in its analysis of the 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 (excluding changes in the allowance for credit losses on non-investment related financial assets) and the change in unrealized gains and losses generated by the Company's investment portfolio. Total return is calculated on a pre-tax basis and before investment expenses, 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, and compares the return generated by the Company's investment portfolio against benchmark returns 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:

(U.S. Dollars and shares in millions, except per share data)

	Three Months Ended				Nine Months Ended		
	September 30, 2023	June 30, 2023	March 31, 2023	December 31, 2022	September 30, 2022	September 30, 2023	September 30, 2022
Net income available to Arch common shareholders	\$ 713	\$ 661	\$ 705	\$ 849	\$ 7	\$ 2,079	\$ 587
Net realized (gains) losses (1)	248	123	(17)	(80)	184	354	743
Equity in net (income) loss of investment funds accounted for using the equity method	(59)	(69)	(48)	(40)	19	(176)	(75)
Net foreign exchange (gains) losses	(22)	6	18	81	(91)	2	(183)
Transaction costs and other	1	2	(1)	—	—	2	—
Income tax expense (benefit) (2)	(5)	3	(3)	(4)	(13)	(5)	(38)
After-tax operating income available to Arch common shareholders	<u>\$ 876</u>	<u>\$ 726</u>	<u>\$ 654</u>	<u>\$ 806</u>	<u>\$ 106</u>	<u>\$ 2,256</u>	<u>\$ 1,034</u>
Diluted per common share results:							
Net income available to Arch common shareholders	\$ 1.88	\$ 1.75	\$ 1.87	\$ 2.26	\$ 0.02	\$ 5.50	\$ 1.55
Net realized (gains) losses (1)	0.65	0.33	(0.05)	(0.22)	0.48	0.93	1.96
Equity in net (income) loss of investment funds accounted for using the equity method	(0.16)	(0.18)	(0.13)	(0.11)	0.05	(0.47)	(0.20)
Net foreign exchange (gains) losses	(0.05)	0.01	0.05	0.22	(0.24)	0.01	(0.48)
Transaction costs and other	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Income tax expense (benefit) (2)	(0.01)	0.01	(0.01)	(0.01)	(0.03)	(0.01)	(0.10)
After-tax operating income available to Arch common shareholders	<u>\$ 2.31</u>	<u>\$ 1.92</u>	<u>\$ 1.73</u>	<u>\$ 2.14</u>	<u>\$ 0.28</u>	<u>\$ 5.96</u>	<u>\$ 2.73</u>
Weighted average common shares and common share equivalents outstanding - diluted	379.4	378.4	377.6	375.9	373.7	378.3	378.4
Beginning common shareholders' equity	\$ 13,811	\$ 13,158	\$ 12,080	\$ 10,966	\$ 11,588	\$ 12,080	\$ 12,716
Ending common shareholders' equity	<u>14,409</u>	<u>13,811</u>	<u>13,158</u>	<u>12,080</u>	<u>10,966</u>	<u>14,409</u>	<u>10,966</u>
Average common shareholders' equity	<u>\$ 14,110</u>	<u>\$ 13,485</u>	<u>\$ 12,619</u>	<u>\$ 11,523</u>	<u>\$ 11,277</u>	<u>\$ 13,245</u>	<u>\$ 11,841</u>
Annualized net income return on average common equity	20.2 %	19.6 %	22.3 %	29.5 %	0.2 %	20.9 %	6.6 %
Annualized operating return on average common equity	24.8 %	21.5 %	20.7 %	28.0 %	3.8 %	22.7 %	11.6 %

(1) Net realized gains or losses include realized and unrealized changes in the fair value of equity securities and assets accounted for using the fair value option, realized and unrealized gains and losses on derivative instruments and changes in the allowance for credit losses on financial assets.

(2) Income tax expense (benefit) on net realized gains or losses, equity in net income (loss) of investment funds accounted for using the equity method, net foreign exchange gains or losses and transaction costs and other 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 millions)

	Three Months Ended				Nine Months Ended		
	September 30, 2023	June 30, 2023	March 31, 2023	December 31, 2022	September 30, 2022	September 30, 2022	
Arch Operating Income Components:							
Income (loss) before income taxes and income (loss) from operating affiliates	\$ 741	\$ 714	\$ 742	\$ 887	\$ (6)	\$ 2,197	\$ 600
Net realized (gains) losses	248	123	(17)	(80)	184	354	743
Equity in net (income) loss of investment funds accounted for using the equity method	(59)	(69)	(48)	(40)	19	(176)	(75)
Net foreign exchange (gains) losses	(22)	5	18	81	(91)	1	(183)
Transaction costs and other	1	5	(3)	(2)	(1)	3	(2)
Income (loss) from operating affiliates	54	22	39	36	9	115	39
Pre-tax operating income available to Arch (b)	963	800	731	882	114	2,494	1,122
Income tax (expense) benefit (a)	(77)	(64)	(67)	(66)	2	(208)	(58)
After-tax operating income available to Arch	886	736	664	816	116	2,286	1,064
Preferred dividends	(10)	(10)	(10)	(10)	(10)	(30)	(30)
After-tax operating income available to Arch common shareholders	\$ 876	\$ 726	\$ 654	\$ 806	\$ 106	\$ 2,256	\$ 1,034
Effective tax rate on pre-tax operating income (loss) available to Arch (a)/(b)	8.0 %	8.0 %	9.2 %	7.5 %	(1.6)%	8.3 %	5.2 %

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

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

(U.S. Dollars and shares in millions, except per share data)

	September 30, 2023	June 30, 2023	March 31, 2023	December 31, 2022	September 30, 2022
Debt:					
Arch senior notes, due May 1, 2034 (\$300 principal, 7.35%)	\$ 300	\$ 300	\$ 300	\$ 300	\$ 300
Arch-U.S. senior notes, due Nov. 1, 2043 (\$500 principal, 5.144%) (1)	500	500	500	500	500
Arch Finance senior notes, due December 15, 2026 (\$500 principal, 4.011%) (2)	500	500	500	500	500
Arch Finance senior notes, due December 15, 2046 (\$450 principal, 5.031%) (2)	450	450	450	450	450
Arch senior notes, due June 30, 2050 (\$1,000 principal, 3.635%)	1,000	1,000	1,000	1,000	1,000
Deferred debt costs on senior notes	(24)	(24)	(24)	(25)	(25)
Revolving credit agreement borrowings, due August 23, 2028	—	—	—	—	—
Total debt	\$ 2,726	\$ 2,726	\$ 2,726	\$ 2,725	\$ 2,725
Shareholders' equity available to Arch:					
Series F non-cumulative preferred shares (5.45%)	330	330	330	330	330
Series G non-cumulative preferred shares (4.55%)	500	500	500	500	500
Common shareholders' equity (a)	14,409	13,811	13,158	12,080	10,966
Total shareholders' equity available to Arch	\$ 15,239	\$ 14,641	\$ 13,988	\$ 12,910	\$ 11,796
Total capital available to Arch	\$ 17,965	\$ 17,367	\$ 16,714	\$ 15,635	\$ 14,521
Common shares outstanding, net of treasury shares (b)	373.1	372.9	372.2	370.3	369.3
Book value per common share (3) (a)/(b)	\$ 38.62	\$ 37.04	\$ 35.35	\$ 32.62	\$ 29.69
Leverage ratios:					
Senior notes/total capital available to Arch	15.2 %	15.7 %	16.3 %	17.4 %	18.8 %
Revolving credit agreement borrowings/total capital available to Arch	— %	— %	— %	— %	— %
Debt/total capital available to Arch	15.2 %	15.7 %	16.3 %	17.4 %	18.8 %
Preferred/total capital available to Arch	4.6 %	4.8 %	5.0 %	5.3 %	5.7 %
Debt and preferred/total capital available to Arch	19.8 %	20.5 %	21.3 %	22.7 %	24.5 %

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

(2) 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.

(3) 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 and shares in millions, except per share data)

	Three Months Ended				Cumulative	
	September 30, 2023	June 30, 2023	March 31, 2023	December 31, 2022	September 30, 2022	September 30, 2023
Effect of share repurchases:						
Aggregate cost of shares repurchased	\$ —	\$ —	\$ —	\$ —	\$ 10	\$ 5,872
Shares repurchased	—	—	—	—	0.2	433.6
Average price per share repurchased	\$ —	\$ —	\$ —	\$ —	\$ 42.96	\$ 13.54
Remaining share repurchase authorization (1)						\$ 1,000

(1) Repurchases under the share repurchase authorization may be effected from time to time in open market or privately negotiated transactions through December 31, 2024.