UNITED STATES SECURITIES AND EXCHANGE COMMISSION

WASHINGTON, D.C. 20549

FORM 10-Q

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

For the quarterly period ended March 31, 2024

Or

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

Commission file number: 001-16209

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ARCH CAPITAL GROUP LTD.

(Exact name of registrant as specified in its charter)

Bermuda 98-0374481

(State or other jurisdiction of incorporation or organization)

(I.R.S. Employer Identification No.)

Waterloo House, Ground Floor

100 Pitts Bay

Road, Pembroke HM 08, Bermuda

(441) 278-9250

(Address of principal executive offices) (Registrant's telephone number, including area code)

Securities registered pursuant to Section 12(b) of the Exchange Act:

	Trading	Name of each exchange on which
Title of each class	Symbol (s)	registered
Common shares, \$0.0011 par value per share	ACGL	NASDAQ Stock Market
Depositary shares, each representing a 1/1000th interest in a 5.45% Series F preferred share	ACGLO	NASDAQ Stock Market
Depositary shares, each representing a 1/1000th interest in a 4.55% Series G preferred share	ACGLN	NASDAQ Stock Market

Indicate by check mark whether the registrant (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days. Yes \square No \square
Indicate by check mark whether the registrant has submitted electronically every Interactive Data File required to be submitted pursuant to Rule 405 of Regulation S-T (\S 232.405 of this chapter) during the preceding 12 months (or for such shorter period that the registrant was required to submit such files). Yes \square No \square
Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, a smaller reporting company, or an emerging growth company. See the definitions of "large accelerated filer," "accelerated filer," "smaller reporting company," and "emerging growth company" in Rule 12b-2 of the Exchange Act.
Large Accelerated Filer \square Accelerated Filer \square Non-accelerated Filer \square Smaller reporting company \square Emerging growth company \square
If an emerging growth company, indicate by check mark if the Registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards provided pursuant to Section 13(a) of the Exchange Act. \Box
Indicate by check mark whether the Registrant is a shell company (as defined in Rule 12b-2 of the Exchange Act). Yes \square No \square
As of May 3, 2024, there were 375,494,237 common shares, \$0.0011 par value per share, of the registrant outstanding.

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PART I. FINANCIAL INFORMATION

Cautionary Note Regarding Forward-Looking Statements

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

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

- our ability to successfully implement our business strategy during "soft" as well as "hard" markets;
- acceptance of our business strategy, security and financial condition by rating agencies and regulators, as well as by brokers and our insureds and reinsureds;
- our ability to consummate acquisitions and integrate the business we have acquired or may acquire into our existing operations;
- our ability to maintain or improve our ratings, which may be affected by our ability to raise
 additional equity or debt financings, by ratings agencies' existing or new policies and
 practices, as well as other factors described herein;
- general economic and market conditions (including inflation, interest rates, unemployment, housing prices, foreign currency exchange rates, prevailing credit terms and the depth and duration of a recession, including those resulting from COVID-19) and conditions specific to the reinsurance and insurance markets in which we operate;
- competition, including increased competition, on the basis of pricing, capacity (including alternative sources of capital), coverage terms, or other factors;
- developments in the world's financial and capital markets and our access to such markets;
- our ability to successfully enhance, integrate and maintain operating procedures (including information technology) to effectively support our current and new business;
- · the loss and addition of key personnel;
- material differences between actual and expected assessments for guaranty funds and mandatory pooling arrangements;
- accuracy of those estimates and judgments utilized in the preparation of our financial statements, including those related to revenue recognition, insurance and other reserves,

reinsurance recoverables, investment valuations, intangible assets, bad debts, income taxes, deferred income tax assets, contingencies and litigation, and any determination to use the deposit method of accounting;

- greater than expected loss ratios on business written by us and adverse development on claim and/or claim expense liabilities related to business written by our insurance, reinsurance and mortgage subsidiaries;
- the adequacy of the Company's loss reserves;
- · severity and/or frequency of losses;
- greater frequency or severity of unpredictable natural and man-made catastrophic events;
- claims for natural or man-made catastrophic events or severe economic events in our insurance, reinsurance and mortgage businesses could cause large losses and substantial volatility in our results of operations;
- · the effect of climate change on our business;
- the effect of contagious diseases (including COVID-19) on our business;

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- acts of terrorism, political unrest and other hostilities or other unforecasted and unpredictable events;
- availability to us of reinsurance to manage our gross and net exposures and the cost of such reinsurance;
- the failure of reinsurers, managing general agents, third party administrators or others to meet their obligations to us;
- the timing of loss payments being faster or the receipt of reinsurance recoverables being slower than anticipated by us;
- our investment performance, including legislative or regulatory developments that may adversely affect the fair value of our investments;
- changes in general economic conditions, including sovereign debt concerns or downgrades
 of U.S. securities by credit rating agencies, which could affect our business, financial
 condition and results of operations;
- the volatility of our shareholders' equity from foreign currency fluctuations, which could increase due to us not matching portions of our projected liabilities in foreign currencies with investments in the same currencies;
- changes in accounting principles or policies or in our application of such accounting principles or policies;
- changes in the political environment of certain countries in which we operate or underwrite business;
- an incident, disruption in operations or other cyber event caused by cyber attacks, the use
 of artificial intelligence technologies or other technology on our systems or those of our
 business partners and service providers, which could negatively impact our business and/
 or expose us to litigation;
- statutory or regulatory developments, including as to tax matters and insurance and other
 regulatory matters such as the adoption of proposed legislation that would affect
 Bermuda-headquartered companies and/or Bermuda-based insurers or reinsurers and/or
 changes in regulations or tax laws applicable to us, our subsidiaries, brokers or customers,
 including the implementation of the Organization for Economic Cooperation and
 Development ("OECD") Pillar I and Pillar II initiatives and the possible enactment of a
 recently proposed Bermuda corporate income tax; and
- the other matters set forth under Item 1A "Risk Factors," Item 7 "Management's Discussion and Analysis of Financial Condition and Results of Operations" and other sections of our Annual Report on Form 10-K for the year ended December 31, 2023, as well as the other factors set forth in our other documents on file with the SEC, and management's response to any of the aforementioned factors.

All subsequent written and oral forward-looking statements attributable to us or persons acting on our behalf are expressly qualified in their entirety by these cautionary statements. The foregoing review of important factors should not be construed as exhaustive and should be read in conjunction with other cautionary statements that are included herein or elsewhere. The Company's forward-looking statements speak only as of the date of this

report or as of the date they are made, and we undertake no obligation to publicly update or revise any forward-looking statement, whether as a result of new information, future events or otherwise.

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ARCH CAPITAL GROUP LTD. AND SUBSIDIARIES CONSOLIDATED BALANCE SHEETS (U.S. dollars and shares in millions)

(Unaudited)

	М	larch 31, 2024	D	ecember 31, 2023
Assets				
Investments:				
Fixed maturities available for sale, at fair value (amortized cost: \$24,338 and \$24,131;				
net of allowance for credit losses: \$32 and \$28)	\$	23,628	\$	23,553
Short-term investments available for sale, at fair value (amortized cost: \$2,143 and				
\$2,064; net of allowance for credit losses: \$0 and \$0)		2,142		2,063
Equity securities, at fair value		1,720		1,186
Other investments, at fair value		2,886		2,488
Investments accounted for using the equity method		4,842		4,566
Total investments		35,218		33,856
Cash		993		917
Accrued investment income		236		236
Investment in operating affiliates		1,174		1,119
Premiums receivable (net of allowance for credit losses: \$32 and \$34)		5,765		4,644
Reinsurance recoverable on unpaid and paid losses and loss adjustment expenses (net of allowance for credit losses: $\$16$ and $\$21$)		7,509		7,064
Contractholder receivables (net of allowance for credit losses: \$3 and \$3)		1,907		1,814
Ceded unearned premiums		2,717		2,170
Deferred acquisition costs		1,625		1,531
Receivable for securities sold		166		63
Goodwill and intangible assets		778		731
Other assets		4,680		4,761
Total assets	\$	62,768	\$	58,906
Liabilities				
Reserve for losses and loss adjustment expenses	\$	23,705	\$	22,752
Unearned premiums		9,971		8,808
Reinsurance balances payable		2,497		2,000
Contractholder payables		1,910		1,817
Collateral held for insured obligations		263		259
Senior notes		2,727		2,726
Payable for securities purchased		433		247
Other liabilities		1,905		1,942
Total liabilities		43,411		40,551
Commitments and contingencies (refer to <u>Note 10</u>)				
Redeemable noncontrolling interests		2		2
Shareholders' Equity				
Non-cumulative preferred shares		830		830
Common shares (\$0.0011 par, shares issued: 594.3 and 591.9)		1		1
Additional paid-in capital		2,401		2,327

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ARCH CAPITAL GROUP LTD. AND SUBSIDIARIES CONSOLIDATED STATEMENTS OF INCOME

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

(Unaudited)

Three Months Ended				
March 31,				
2024	2023			

	2024		2023	
Revenues				
Net premiums earned	\$ 3,422	\$	2,883	
Net investment income	327		199	
Net realized gains (losses)	67		17	
Other underwriting income	12		10	
Equity in net income (loss) of investment funds accounted for using the equity method	99		48	
Other income (loss)	14		11	
Total revenues	3,941		3,168	
Expenses				
Losses and loss adjustment expenses	1,728		1,471	
Acquisition expenses	607		533	
Other operating expenses	363		319	
Corporate expenses	53		30	
Amortization of intangible assets	21		23	
Interest expense	34		32	
Net foreign exchange (gains) losses	 (31)		18	
Total expenses	 2,775		2,426	
Income (loss) before income taxes and income (loss) from operating affiliates	1,166		742	
Income tax (expense) benefit	(101)		(64)	
Income (loss) from operating affiliates	55		39	
Net income (loss)	\$ 1,120	\$	717	
Net (income) loss attributable to noncontrolling interests			(2)	
Net income (loss) available to Arch	1,120		715	
Preferred dividends	(10)		(10)	
Net income (loss) available to Arch common shareholders	\$ 1,110	\$	705	
Net income per common share and common share equivalent				
Basic	\$ 2.99	\$	1.92	
Diluted	\$ 2.92	\$	1.87	
Weighted average common shares and common share equivalents outstanding				
Basic	370.9		367.3	
Diluted	380.5		377.6	

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

(Unaudited)

Three Months Ended

	March 31,			•
		2024		2023
Comprehensive Income				
Net income (loss)	\$	1,120	\$	717
Other comprehensive income (loss), net of deferred income tax				
Unrealized appreciation (decline) in value of available-for-sale investments:				
Unrealized holding gains (losses) arising during period		(141)		245
Reclassification of net realized (gains) losses, included in net income (loss)		29		99
Foreign currency translation adjustments		(33)		5
Comprehensive income (loss)		975		1,066
Net (income) loss attributable to noncontrolling interests				(2)
Comprehensive income (loss) available to Arch	\$	975	\$	1,064

See Notes to Consolidated Financial Statements

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

(Unaudited)

Three Months Ended

	Marc	:h 31,
	2024	2023
Non-cumulative preferred shares		
Balance at beginning and end of period	\$ 830	\$ 830
Common shares		
Balance at beginning and end of period	1	1
Additional paid-in capital		
Balance at beginning of period	2,327	2,211
Amortization of share-based compensation	68	41
Other changes	6	8
Balance at end of period	2,401	2,260
Retained earnings		
Balance at beginning of period	20,295	15,892
Net income (loss)	1,120	717
Net (income) loss attributable to noncontrolling interests	_	(2)
Preferred share dividends	(10)	(10)
Balance at end of period	21,405	16,597
Accumulated other comprehensive income (loss), net of deferred income tax		
Balance at beginning of period	(676)	(1,646)
Unrealized appreciation (decline) in value of available-for-sale investments, net of deferred income tax:		
Balance at beginning of period	(565)	(1,512)
Unrealized holding gains (losses) during period, net of reclassification adjustment	(112)	344
Balance at end of period	(677)	(1,168)
Foreign currency translation adjustments, net of deferred income tax:		
Balance at beginning of period	(111)	(134)
Foreign currency translation adjustments	(33)	5
Balance at end of period	(144)	(129)
Balance at end of period	(821)	(1,297)
Common shares held in treasury, at cost		
Balance at beginning of period	(4,424)	(4,378)
Shares repurchased for treasury	(37)	(25)
Balance at end of period	(4,461)	(4,403)
Total shareholders' equity	\$19,355	\$13,988

See Notes to Consolidated Financial Statements

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

(Unaudited) Three Months Ended

March 31,

	2024	2023
Operating Activities		
Net income (loss)	\$ 1,120	\$ 717
Adjustments to reconcile net income (loss) to net cash provided by operating activities:		
Net realized (gains) losses	(52)	(17)
Equity in net (income) or loss of investment funds accounted for using the equity method and other income or loss	(112)	(66)
Amortization of intangible assets	21	23
Share-based compensation	68	41
Changes in:		
Reserve for losses and loss adjustment expenses, net of unpaid losses and loss adjustment expenses recoverable	660	603
Unearned premiums, net of ceded unearned premiums	663	541
Premiums receivable	(1,159)	(871)
Deferred acquisition costs	(82)	(75)
Reinsurance balances payable	521	279
Deferred income tax assets, net	24	34
Other items, net	 (108)	(246)
Net cash provided by operating activities	1,564	963
Investing Activities	 	
Purchases of fixed maturity investments	(8,325)	(3,901)
Purchases of equity securities	(509)	(8)
Purchases of other investments	(494)	(266)
Proceeds from sales of fixed maturity investments	7,529	3,034
Proceeds from sales of equity securities	65	75
Proceeds from sales, redemptions and maturities of other investments	116	96
Proceeds from redemptions and maturities of fixed maturity investments	363	180
Net settlements of derivative instruments	5	14
Net (purchases) sales of short-term investments	(90)	(208)
Purchases of fixed assets	(15)	(11)
Other	 (54)	 (1)
Net cash used for investing activities	(1,409)	(996)
Financing Activities		
Proceeds from common shares issued, net	(32)	(18)
Other	_	(2)
Preferred dividends paid	 (10)	(10)
Net cash used for financing activities	(42)	(30)
Effects of exchange rate changes on foreign currency cash and restricted cash	(11)	5
Increase (decrease) in cash and restricted cash	102	(58)
Cash and restricted cash, beginning of year	1,498	1,273
Cash and restricted cash, end of period	\$ 1,600	\$ 1,215
Income taxes paid (received)	(6)	4

See Notes to Consolidated Financial Statements

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

1. Basis of Presentation and Recent Accounting Pronouncements

General

Arch Capital Group Ltd. ("Arch Capital") is a publicly listed Bermuda exempted company which provides insurance, reinsurance and mortgage insurance on a worldwide basis through its wholly-owned subsidiaries. As used herein, the "Company" means Arch Capital and its subsidiaries.

Basis of Presentation

The interim consolidated financial statements have been prepared in conformity with accounting principles generally accepted in the United States of ("GAAP"). significant America ΑII intercompany transactions and balances have been eliminated in consolidation. The preparation of financial statements conformity with GAAP requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities at the date of the financial statements and the reported amounts of revenues and expenses during the reporting period. Actual results could differ materially from those estimates and assumptions. In opinion of management, the accompanying unaudited interim consolidated financial statements reflect all adjustments (consisting of normally recurring accruals) necessary for a fair statement of results on an interim basis. The results of any interim period are not necessarily indicative of the results for a full any future periods. vear or Certain information footnote and disclosures normally included in financial statements prepared in accordance with GAAP have been condensed or omitted: however. management believes that the disclosures are adequate to make the information presented not misleading. This report should be read in conjunction with the Company's Annual Report on Form 10-K for the year ended December 31, 2023 ("2023 Form 10including the Company's consolidated financial statements related notes.

The reclassified Company has the presentation of certain prior vear information to conform to the current presentation. Such reclassifications had no effect on the Company's net income, comprehensive income, shareholders' equity or cash flows. All amounts are in millions, except per share amounts, unless otherwise noted.

Recent Accounting Pronouncements

For information regarding additional accounting standards that the Company has not yet adopted, see note 3(t), "Significant Accounting Policies—Recent Accounting Pronouncements," of the notes to consolidated financial statements in the Company's 2023 Form 10-K.

2. Share Transactions

Share-Based Compensation

During the 2024 first quarter, the Company granted 0.4 million stock options, 0.5 million performance share awards and performance share units ("PSAs/PSUs") and 0.7 million restricted shares and units to certain employees. The stock options were valued at the grant date using the Black-Scholes option pricing model. The weighted average grant-date fair value of the stock options, PSAs/PSUs and restricted shares and units granted during the 2024 first quarter were approximately \$30.73, \$93.28 and \$87.22 per share, respectively. Such values are over being amortized the respective substantive vesting period.

During the 2023 first quarter, the Company granted 0.5 million stock options, 0.6 million PSAs/PSUs and 0.8 million restricted shares and units to certain employees. The stock options were valued at the grant date using the Black-Scholes option pricing model. The weighted average grant-date fair value of the stock options, PSAs/PSUs and restricted shares and units granted during the 2023 first quarter were approximately \$23.49, \$74.06 and \$69.25 per share, respectively. Such values are being amortized over the respective substantive vesting period.

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

3. Earnings Per Common Share

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

	Т	hree Mor	nths	Ended
	March 31,		,	
		2024		2023
Numerator:				
Net income (loss)	\$	1,120	\$	717
Net (income) loss attributable to noncontrolling interests				(2)
Net income (loss) available to Arch		1,120		715
Preferred dividends		(10)		(10)
Net income (loss) available to Arch common shareholders	\$	1,110	\$	705
Denominator:				
Weighted average common shares and common share equivalents outstanding — basic		370.9		367.3
Effect of dilutive common share equivalents:				
Nonvested restricted shares		2.3		2.8
Stock options (1)		7.3		7.5
Weighted average common shares and common share equivalents outstanding — diluted		380.5		377.6
Earnings per common share:				
Basic	\$	2.99	\$	1.92
Diluted	\$	2.92	\$	1.87

⁽¹⁾ Certain stock options were not included in the computation of diluted earnings per share where the exercise price of the stock options exceeded the average market price and would have been anti-dilutive or where, when applying the treasury stock method to in-the-money options, the sum of the proceeds, including unrecognized compensation, exceeded the average market price and would have been anti-dilutive. For the 2024 first quarter and 2023 first quarter, the number of stock options excluded were 0.6 million and 0.5 million, respectively.

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

4. Segment Information

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

The Company determined its reportable segments using the management approach described in accounting guidance regarding disclosures about segments of an enterprise and related information. The accounting policies of the segments are the same as those used for the preparation of the consolidated financial Company's statements. Intersegment business is allocated to the segment accountable for the underwriting results.

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

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

The mortgage segment includes the Company's U.S. primary mortgage insurance business, investment and services related to U.S. credit-risk transfer ("CRT") which are predominately with government sponsored ("GSEs") enterprises and international mortgage insurance and reinsurance operations. Arch Mortgage Insurance Company and United Guaranty Residential Insurance Company (combined "Arch MI U.S.") are approved as eligible mortgage insurers by Federal National Mortgage Association ("Fannie Mae") and Federal Home Loan Mortgage Corporation ("Freddie Mac"), each a GSE. Arch MI U.S. also includes Arch Mortgage Guaranty Company, which is not a GSE-approved entity.

The corporate segment results include net investment income, net realized gains or losses (which includes realized 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 tax items, income or loss from operating affiliates and items related to the Company's non-cumulative preferred shares.

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

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

Three Months Ended

March 31, 2024

	In	surance	Reinsurance		Mortgage		Total	
Gross premiums written (1)	\$	2,126	\$	3,467	\$	341	\$ 5,933	
Premiums ceded (1)		(584)		(1,201)		(64)	(1,848)	
Net premiums written		1,542		2,266		277	4,085	
Change in unearned premiums		(91)		(600)		28	(663)	
Net premiums earned		1,451		1,666		305	3,422	
Other underwriting income (loss)		_		2		10	12	
Losses and loss adjustment expenses		(854)		(883)		9	(1,728)	
Acquisition expenses		(276)		(331)		_	(607)	
Other operating expenses		(235)		(75)		(53)	(363)	
Underwriting income (loss)	\$	86	\$	379	\$	271	736	
Net investment income							327	
Net realized gains (losses)							67	
Equity in net income (loss) of investment funds accounted for using the equity method							99	
Other income (loss)							14	
Corporate expenses (2)							(46)	
Transaction costs and other (2)							(7)	
Amortization of intangible assets							(21)	
Interest expense							(34)	
Net foreign exchange gains (losses)							31	
Income (loss) before income taxes and income (loss) from operating affiliates							1,166	
Income tax (expense) benefit							(101)	
Income (loss) from operating affiliates							55	
Net income (loss) available to Arch							1,120	
Preferred dividends							(10)	
Net income (loss) available to Arch common shareholders							\$ 1,110	
Underwriting Ratios								
Loss ratio		58.9 %		53.0 %		(3.0)%	50.5 %	
Acquisition expense ratio		19.0 %		19.9 %		- %	17.7 %	
Other operating expense ratio		16.2 %		4.5 %		17.5 %	10.6 %	
Combined ratio		94.1 %		77.4 %		14.5 %	78.8 %	
Goodwill and intangible assets	\$	293	\$	121	\$	364	\$ 778	

- (1) Certain assumed and ceded amounts related to intersegment transactions are included in individual segment results. Accordingly, the sum of such transactions for each segment does not agree to the total due to eliminations.
- (2) Certain expenses have been excluded from 'corporate expenses' and reflected in 'transaction costs and other.'

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

Three Months Ended

March 31, 2023

	In	surance	Rei	nsurance	 lortgage	Total
Gross premiums written (1)	\$	1,979	\$	2,460	\$ 343	\$ 4,780
Premiums ceded (1)		(542)		(734)	(82)	(1,356)
Net premiums written		1,437		1,726	261	3,424
Change in unearned premiums		(180)		(396)	35	(541)
Net premiums earned		1,257		1,330	296	2,883
Other underwriting income (loss)		_		4	6	10
Losses and loss adjustment expenses		(703)		(766)	(2)	(1,471)
Acquisition expenses		(245)		(281)	(7)	(533)
Other operating expenses		(195)		(74)	(50)	(319)
Underwriting income (loss)	\$	114	\$	213	\$ 243	570
Net investment income						199
Net realized gains (losses)						17
Equity in net income (loss) of investment funds accounted for using the equity method						48
Other income (loss)						11
Corporate expenses (2)						(29)
Transaction costs and other (2)						(1)
Amortization of intangible assets						(23)
Interest expense						(32)
Net foreign exchange gains (losses)						(18)
Income (loss) before income taxes and income (loss) from operating affiliates						742
Income tax (expense) benefit						(64)
Income (loss) from operating affiliates						 39
Net income (loss)						717
Net (income) loss attributable to noncontrolling interests						(2)
Net income (loss) available to Arch						715
Preferred dividends						(10)
Net income (loss) available to Arch common						
shareholders						\$ 705
Underwriting Ratios						
Loss ratio		55.9 %		57.6 %	0.6 %	51.0 %
Acquisition expense ratio		19.5 %		21.1 %	2.5 %	18.5 %
Other operating expense ratio		15.5 %		5.6 %	16.9 %	11.1 %
Combined ratio		90.9 %		84.3 %	20.0 %	80.6 %
Goodwill and intangible assets	\$	228	\$	142	\$ 415	\$ 785

(1)	Certain	assumed an	d ceded a	amounts	related to int	erseg	ment	transactio	ns are	e inc	luded i	in in	divid	dual s	egme	nt؛
	results.	Accordingly,	the sum	of such	transaction:	s for	each	segment	does	not	agree	to	the	total	due	to
	eliminat	ions.														

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	2)	(errain ex	nenses r	าลงค	neen	exciliaec	Trom	'corporate	eynenses:	ann	retiected	ıın	rransaci	าดก	costs and	OTHER
\ 4	-,	CCI tuill CA	PCHISCS	IUVC	occi,	CACIGGE		corporate	CAPCHISCS	ana	CHECKE		ciuiisac		COSES and	Othich.

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

5. Reserve for Losses and Loss Adjustment Expenses

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

	-	Three Mor	nths	Ended
		h 3	1,	
		2024		2023
Reserve for losses and loss adjustment expenses at beginning of period	\$	22,752	\$	20,032
Unpaid losses and loss adjustment expenses recoverable		6,690		6,280
Net reserve for losses and loss adjustment expenses at beginning of period		16,062		13,752
Net incurred losses and loss adjustment expenses relating to losses occurring in:				
Current year		1,852		1,607
Prior years		(124)		(136)
Total net incurred losses and loss adjustment expenses		1,728		1,471
Net foreign exchange (gains) losses and other		(84)		55
Net paid losses and loss adjustment expenses relating to losses occurring in:				
Current year		(92)		(140)
Prior years		(978)		(727)
Total net paid losses and loss adjustment expenses		(1,070)		(867)
Net reserve for losses and loss adjustment expenses at end of period Unpaid losses and loss adjustment expenses recoverable		16,636 7,069		14,411 6,347
Reserve for losses and loss adjustment expenses at end of period	\$	23,705	\$	20,758

Development on Prior Year Loss Reserves

2024 First Quarter

During the 2024 first quarter, the Company recorded net favorable development on prior year loss reserves of \$124 million, which consisted of \$10 million from the insurance segment, \$40 million from the reinsurance segment and \$74 million from the mortgage segment.

The insurance segment's net favorable development of \$10 million, or 0.7 loss ratio points, for the 2024 first quarter consisted of \$30 million of net favorable development in short-tailed and long-tailed lines and \$20 million of net adverse development in medium-tailed lines. Net favorable development in short-tailed lines included \$18 million of favorable development in property (excluding marine), primarily from the 2019, 2022 and 2023 accident years (i.e., the year in which a loss occurred), and \$10 million of favorable development related to travel and accident business, primarily from the 2022 and 2023 accident years. Net favorable development in long-tailed lines included \$7 million of favorable development in executive assurance business, primarily from the 2018 to 2021 accident years, and \$3 million of favorable development in alternative markets business, primarily from 2020 and prior accident years, which was partially offset by \$7 million of adverse development in construction and national accounts, primarily

from the 2023 accident year. Net adverse development in medium-tailed lines included \$17 million of adverse development in marine business, primarily from the 2022 accident year.

The reinsurance segment's net favorable development of \$40 million, or 2.4 loss ratio points, for the 2024 first quarter consisted of \$44 million of net favorable development in short-tailed lines and \$4 million of net adverse development in medium and longtailed lines. Net favorable development in short-tailed lines included \$33 million of favorable development related to other specialty business, primarily from the 2019 underwriting years 2023 (i.e., premiums and losses attributable to contracts having an inception or renewal date within the given twelve-month period), and \$21 million of favorable development related to property other than property catastrophe business, primarily from the 2022 and 2023 underwriting years, which was partially offset by \$8 million of adverse development from property catastrophe business, primarily from the underwriting year. Net adverse development in medium-tailed lines included \$2 million in marine and aviation lines, primarily from the 2020 and 2023 underwriting years, while net adverse development in long-tailed lines reflected \$2 million of adverse development in casualty business, primarily from the 2017 underwriting year.

The mortgage segment's net favorable development was \$74 million, or 24.4 loss ratio points, for the 2024 first quarter. Such amounts were primarily related to reductions on reserves for delinquent loans associated with the U.S. first lien portfolio from the accident years. 2022 and 2023 Company's credit risk transfer and international businesses also contributed to the favorable development.

2023 First Quarter

During the 2023 first quarter, the Company recorded net favorable development on prior year loss reserves of \$136 million, which consisted of \$12 million from the insurance segment, \$53 million from the reinsurance segment and \$71 million from the mortgage segment.

The insurance segment's net favorable development of \$12 million, or 0.9 loss ratio points, for the 2023 first quarter consisted of \$25 million of net favorable development in short-tailed and long-tailed lines and \$13 million of net adverse development in medium-tailed lines. Net favorable development in short-tailed lines reflected \$9 million of favorable development in property (excluding marine), primarily from 2020 and 2022 accident years, \$8 million of favorable development related to travel and accident business, primarily from the 2020 to 2022 accident years, and \$7 million of favorable development in warranty and lenders solutions, primarily from the 2022 accident year. Net favorable development in long-tailed lines of \$1 million included favorable development in executive business, partially offset by assurance adverse development in casualty healthcare. Net adverse development in medium-tailed lines included \$18 million of adverse development in professional liability business, primarily from the 2017 to 2019 accident years, partially offset by favorable development in marine business of \$7 million, primarily from the 2021 and 2022 accident years.

The reinsurance segment's net favorable development of \$53 million, or 4.0 loss ratio points, for the 2023 first quarter consisted of \$49 million of net favorable development in short-tailed lines and \$3 million of net favorable development in medium-tailed and long-tailed lines. Net favorable development

The mortgage segment's net favorable development was \$71 million, or 23.9 loss ratio points, for the 2023 first quarter. Such amounts were primarily related to reductions on reserves for loans becoming delinquent after the onset of the COVID-19 pandemic. The Company's credit risk transfer and international businesses also contributed to the favorable development.

6. Allowance for Expected Credit Losses

Premiums Receivable

The following table provides a roll forward of the allowance for expected credit losses of the Company's premium receivables:

	Rec	emium eivables, let of owance	Cred	ted lit
Three Months Ended March	31,	2024		
Balance at beginning of period	\$	4,644	\$	34
Change for provision of expecte	ed cre	edit	\$	(2)
losses (1)				(2)
Balance at end of period	\$	5,765	\$	32
Three Months Ended March	31,	2023		
Balance at beginning of period	\$	3,625	\$	35
Change for provision of expecte	ed cre	edit		
losses (1)			\$	1
Balance at end of period	\$	4,513	\$	36

(1) Amounts deemed uncollectible are written-off in operating expenses. For the 2024 first quarter and 2023 first quarter, amounts written off were nil and \$1 million, respectively.

Reinsurance Recoverables

The following table provides a roll forward of the allowance for expected credit losses of the Company's reinsurance recoverables:

	Rec	nsurance overables, Net of lowance	Ex	for pected redit
Three Months Ended Ma	arch 3	1, 2024		
Balance at beginning of				
period	\$	7,064	\$	21

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

The following table summarizes the Company's reinsurance recoverables on paid and unpaid losses (not including ceded unearned premiums):

		December
	March 31,	31
	2024	2023
Reinsurance recoverable on unpaid and paid losses and loss adjustment		
expenses	\$ 7,509	\$ 7,064
% due from carriers with A.M. Best rating of "A-" or better	66.6 %	66.8 %
% due from all other rated carriers	– %	0.1 %
% due from all other carriers with no A.M. Best rating (1)	33.4 %	33.1 %
Largest balance due from any one carrier as % of	7.00	- 2 2 4
total shareholders' equity	7.1 %	7.2 %

(1) At March 31, 2024 and December 31, 2023 over 94% and 95% of such amount were collateralized through reinsurance trusts, funds withheld arrangements, letters of credit or other, respectively.

Contractholder Receivables

The following table provides a roll forward of the allowance for expected credit losses of the Company's contractholder receivables:

	Rec	ontract- nolder eivables, Net of lowance	Exp Cr	wance for ected edit
Three Months Ended Mar	ch 31	L, 2024		
Balance at beginning of period	\$	1,814	\$	3
Change for provision of expelosses	cted	credit		_
Balance at end of period	\$	1,907	\$	3
Three Months Ended Mar	ch 31	L, 2023		
Balance at beginning of period	\$	1,731	\$	3
Change for provision of expe	cted	credit		(1)
Balance at end of period		1,750	\$	2

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

7. Investment Information

Available For Sale Investments

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

	Es	stimated Fair Value	Gross Unrealized Gains		ι	Gross Unrealized Losses	Allowance for Expected Credit Losses		Cost or Amortized Cost
March 31, 2024		_		_					
Fixed maturities:									
Corporate bonds	\$	11,698	\$	98	\$	(442)	\$ (24)	\$	12,066
U.S. government and government agencies		4,370		6		(109)	_		4,473
Asset backed securities		2,762		15		(44)	(5)		2,796
Non-U.S. government securities		2,195		20		(113)	(1)		2,289
Commercial mortgage backed securities		1,197		3		(30)	(2)		1,226
Residential mortgage backed securities		1,179		4		(69)	_		1,244
Municipal bonds		227		1		(18)			244
Total		23,628		147		(825)	(32)		24,338
Short-term investments		2,142		2		(3)			2,143
Total	\$	25,770	\$	149	\$	(828)	\$ (32)	\$	26,481
December 31, 2023									
Fixed maturities:									
Corporate bonds	\$	10,855	\$	157	\$	(464)	\$ (20)	\$	11,182
U.S. government and government agencies		5,814		63		(86)	_		5,837
Asset backed securities		2,250		11		(55)	(5)		2,299
Non-U.S. government securities		2,062		33		(100)	(1)		2,130
Commercial mortgage backed securities		1,213		3		(34)	(2)		1,246
Residential mortgage backed securities		1,103		7		(66)	_		1,162
Municipal bonds		256		1		(20)	_		275
Total		23,553		275		(825)	(28)		24,131
Short-term investments		2,063		1		(2)	_		2,064
Total	\$	25,616	\$	276	\$	(827)	\$ (28)	\$	26,195

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

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

	L	ess than	12 M	onths		12 Months or More			Total				
		timated Fair Value	Uni	Gross realized osses	E	Estimated Fair Value		Gross Unrealized Losses		Estimated Fair Value		Gross Unrealized Losses	
March 31, 2024													
Fixed maturities:													
Corporate bonds	\$	3,314	\$	(50)	\$	4,419	\$	(392)	\$	7,733	\$	(442)	
U.S. government and government agencies		3,093		(36)		763		(73)		3,856		(109)	
Non-U.S. government securities		829		(10)		821		(103)		1,650		(113)	
Residential mortgage backed securities	I	267		(4)		508		(65)		775		(69)	
Asset backed securities		489		(1)		729		(43)		1,218		(44)	
Commercial mortgage backed securities		88		(1)		892		(29)		980		(30)	
Municipal bonds		18		_		197		(18)		215		(18)	
Total		8,098		(102)		8,329		(723)		16,427		(825)	
Short-term investments		727		(3)		_		_		727		(3)	
Total	\$	8,825	\$	(105)	\$	8,329	\$	(723)	\$	17,154	\$	(828)	
December 31, 2023													
Fixed maturities:													
Corporate bonds	\$	1,559	\$	(45)	\$	4,959	\$	(419)	\$	6,518	\$	(464)	
U.S. government and													
government agencies		1,066		(10)		941		(76)		2,007		(86)	
Non-U.S. government securities		365		(4)		897		(96)		1,262		(100)	
Residential mortgage backed	l												
securities		221		(3)		522		(63)		743		(66)	
Asset backed securities		234		(1)		1,112		(54)		1,346		(55)	
Commercial mortgage backed securities		100		(1)		909		(33)		1,009		(34)	
Municipal bonds		20		(1)		215		(19)		235		(20)	
Total		3,565		(65)		9,555		(760)		13,120		(825)	
Short-term investments		302		(2)						302		(2)	
Total	\$	3,867	\$	(67)	¢	9,555	\$	(760)	đ	13,422	\$	(827)	

At March 31, 2024, on a lot level basis, approximately 8,380 security lots out of a total of approximately 16,400 security lots were in an unrealized loss position and the largest single unrealized loss from a single lot in the Company's fixed maturity portfolio was \$5 million. At December 31, 2023, on a lot level basis, approximately 7,100 security lots out of a total of approximately 15,720 security lots were in an unrealized loss position and the largest single unrealized loss from a single lot in the Company's fixed maturity portfolio was \$6 million.

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

	March 31, 2024					December 31, 2023			
Maturity		stimated Fair Value	A	mortized Cost	E	stimated Fair Value	Ar	nortized Cost	
Due in one year or less	\$	536	\$	554	\$	480	\$	499	
Due after one year through five years		12,998		13,299		12,924		13,101	
Due after five years through 10 years		4,632		4,860		5,249		5,450	
Due after 10 years		324		359		334		374	
		18,490		19,072		18,987		19,424	
Residential mortgage backed securities		1,179		1,244		1,103		1,162	
Commercial mortgage backed securities		1,197		1,226		1,213		1,246	
Asset backed securities		2,762		2,796		2,250		2,299	
Total	\$	23,628	\$	24,338	\$	23,553	\$	24,131	

Equity Securities, at Fair Value

At March 31, 2024, the Company held \$1.7 billion of equity securities, at fair value, compared to \$1.2 billion at December 31, 2023. Such holdings include publicly traded common stocks primarily in the consumer cyclical and non-cyclical, technology, communication and financial sectors and exchange-traded funds in fixed income, equity and other sectors.

Other Investments, at Fair Value

The following table summarizes the Company's other investments and other investable assets:

	Ma	arch 31, 2024	December 31, 2023				
Other investments	\$	1,914	\$	1,777			
Fixed maturities		930		683			
Short term investments		35		21			
Equity securities		7		7			
Total	\$	2,886	\$	2,488			

The following table summarizes the Company's other investments, as detailed in the previous table, by strategy:

			De	cember
	Ma	arch 31,		31,
		2024		2023
Lending	\$	442	\$	427
Investment grade fixed				
income		799		754
Term loan investments		344		272
Private equity		191		182
Credit related funds		120		124
Energy		18		18
Total	\$	1,914	\$	1,777

Net Investment Income

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

		March 31,				
	2	2024		2023		
Three Months Ended						
Fixed maturities	\$	280	\$	188		
Short term investments		29		14		

Net Realized Gains (Losses)

Net realized gains (losses), which include changes in the allowance for credit losses on financial assets and net impairment losses recognized in earnings were as follows:

	March 31,				
		2024		2023	
Three Months Ended					
Available for sale securities:					
Gross gains on investment sales	\$	50	\$	17	
Gross losses on investment sales		(78)		(111)	
Change in fair value of assets and liabilities accounted for using the fair value option:					
Fixed maturities		2		6	
Other investments		(2)		9	
Equity securities		_		1	
Equity securities, at fair value:					
Net realized gains (losses) on sales during the period		11		19	
Net unrealized gains (losses) on equity securities still held at reporting date		82		38	
Allowance for credit losses:					
Investments related		(6)		(16)	
Underwriting related		1		_	
Derivative instruments (1)		(10)		56	
Other		17		(2)	
Net realized gains (losses)	\$	67	\$	17	

(1) See <u>note 9</u> for information on the Company's derivative instruments.

Investments Accounted For Using the Equity Method

The following table summarizes the Company's investments accounted for using the equity method, by strategy:

			De	cember
	Ma	arch 31,		31,
		2024		2023
Credit related funds	\$	1,320	\$	1,258
Private equity		1,341		1,175
Real estate		671		666
Lending		582		597

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

Limited Partnership Interests

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

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

			D	ecember
	ľ	larch 31, 2024		31, 2023
	_	2024		2023
Investments accounted for				
using the equity method (1)	\$	4,842	\$	4,566
Investments accounted for				
using the fair value option				
(2)		109		114
Total	\$	4,951	\$	4,680

- (1) Aggregate unfunded commitments were \$3.5 billion at March 31, 2024, compared with \$3.4 billion at December 31, 2023.
- (2) Aggregate unfunded commitments were \$29 million at March 31, 2024, compared to \$32 million at December 31, 2023

Equity in Net Income (Loss) of Investment Funds Accounted for Using the Equity Method

Income from investment funds accounted for using the equity method for the 2024 first quarter was \$99 million, compared to \$48 million for the 2023 first quarter. In applying the equity method, investments are initially recorded at cost and are subsequently adjusted based on the Company's proportionate share of the net income or loss of the funds (which include changes in the market value of the underlying securities in the funds). Such investments are generally recorded on a one to three month lag based on the availability of reports from the investment funds.

Investments in Operating Affiliates

Investments in which the Company has significant influence over the operating and financial policies are classified 'investments in operating affiliates' on the Company's balance sheets and are accounted for under the equity method. Such investments primarily include the Company's investment in Coface SA ("Coface"), Greysbridge Holdings ("Greysbridge") and Premia Holdings Ltd. Investments in Coface and Premia Holdings Ltd. are generally recorded on a three month lag, while the Company's investment in Greysbridge is not recorded on a lag.

As of March 31, 2024, the Company owned approximately 29.9% of the issued shares of Coface, or 30.1% excluding treasury shares, with a carrying value of \$586 million, compared to \$570 million at December 31, 2023.

As of March 31, 2024, the Company owned 40% of Greysbridge with a carrying value of \$472 million, compared to \$430 million at December 31, 2023.

Income from operating affiliates for the 2024 first quarter was \$55 million, compared to \$39 million for the 2023 first quarter.

See <u>note 15</u> for information on Company's transactions with related parties.

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

Allowance for Expected Credit Losses

The following table provides a roll forward of the allowance for expected credit losses of the Company's securities classified as available for sale:

Structured				Non-U.S.			
Sec	urities	Cor	porate	Gove	ernment		
	(1)	В	onds	Sec	urities	Te	otal
\$	7	\$	20	\$	1	\$	28
	_		_		_		_
			_				5
			5		_		5
			(1)				(1)
\$	7	\$	24	\$	1	\$	32
\$	9	\$	30	\$	2	\$	41
	_		1		_		1
	(1)		15		1		15
			(1)				(1)
\$	8	\$	45	\$	3	\$	56
	\$ \$	\$ 7 \$ 7 \$ 9	\$ 7 \$ \$ 7 \$ \$ 7 \$ \$ 7 \$	\$ 7 \$ 20 \$ 7 \$ 20 5 - (1) \$ 7 \$ 24 \$ 9 \$ 30 - 1 (1) 15 - (1)	Securities (1) Corporate Bonds Government Government \$ 7 \$ 20 \$ - - - - (1) - \$ 7 \$ 24 \$ \$ 9 \$ 30 \$ - 1 - (1) 15 - - (1) -	Securities (1) Corporate Bonds Government Securities \$ 7 \$ 20 \$ 1	Securities (1) Corporate Bonds Government Securities To securities \$ 7 \$ 20 \$ 1 \$ -

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

Restricted Assets

The Company is required to maintain assets on deposit, which primarily consist of fixed maturities, with various regulatory authorities to support its underwriting operations. The Company's subsidiaries maintain assets in trust accounts as collateral for transactions with affiliated companies and also have investments in segregated portfolios primarily to provide collateral or guarantees for letters of credit to third parties. See note 18, "Commitments and Contingencies," of the notes to consolidated financial statements in the Company's 2023 Form 10-K.

The following table details the value of the Company's restricted assets:

		D	ecember
	March 31,		31,
	2024		2023
Assets used for collateral or			
guarantees:			
Affiliated transactions	\$ 4,874	\$	4,854
Third party agreements	2,694		2,869
Deposits with U.S. regulatory			
authorities	828		833
Other (1)	1,343		1,376
Total restricted assets	\$ 9,739	\$	9,932

 Primarily includes Funds at Lloyds, deposits with non-U.S. regulatory authorities and other restricted assets.

Reconciliation of Cash and Restricted Cash

The following table details reconciliation of cash and restricted cash within the Consolidated Balance Sheets:

			December			
	M	arch 31,		31,		
		2024		2023		
Cash	\$	993	\$	917		
Restricted cash (included						
in 'other assets')		607		581		
Cash and restricted cash	\$	1,600	\$	1,498		

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

The levels in the hierarchy are defined as follows:

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

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

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

Following is a description of the valuation methodologies used for securities measured at fair value as well as the general

is not limited to: (i) quantitative analysis (e.g., comparing the quarterly return for each managed portfolio to its target benchmark, with significant differences identified and investigated); (ii) a review of the average number of prices obtained in the pricing process and the range of resulting fair values; (iii) initial and ongoing evaluation of methodologies used by outside parties to calculate fair value; (iv) a comparison of the fair value estimates to the Company's knowledge of the current market; (v) a comparison of the pricing services' fair values to other pricing services' fair values for the same investments; and (vi) periodic back-testing, which includes randomly selecting purchased or sold securities and comparing the executed prices to the fair value estimates from the pricing service. A price source hierarchy was maintained in order to determine which price source would be used (i.e., a price obtained from a pricing service with more seniority in the hierarchy will be used over a less senior one in all cases). The hierarchy prioritizes pricing services based on availability and reliability and assigns the highest priority to index providers. Based on the above review, the Company will challenge any prices for a security or portfolio which are considered not to be representative of fair value. The Company did not adjust any of the prices obtained from the independent pricing sources at March 31, 2024.

In certain circumstances, when fair values are unavailable from these independent pricing sources, quotes are obtained directly from broker-dealers who are active in the corresponding markets. Such quotes are subject to the validation procedures noted above. Where quotes are unavailable, fair value is determined by the Investment Manager using quantitative and qualitative assessments such as internally modeled values. Of the \$30.6 billion of financial assets and liabilities measured at fair value at March 31, 2024, approximately \$15 million, or 0.0%, were priced using nonbinding broker-dealer quotes or modeled valuations. Of the \$29.6 billion of financial assets and liabilities measured at fair value at December 31, 2023, approximately \$14 million, or 0.0%, were priced using nonbinding broker-dealer quotes or modeled valuations.

including, but not limited to, investment yields, credit risks and spreads, benchmarking of like securities, brokerdealer quotes, reported trades and sector groupings to determine a reasonable fair value.

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

U.S. government and government agencies valuations provided by independent pricing services, with all prices provided through index providers and pricing vendors. The Company determined that all U.S. Treasuries would be classified as Level 1 securities due to observed levels of trading activity, the high number of strongly correlated pricing quotes received on U.S. Treasuries and other factors. The fair values of U.S. government agency securities are generally determined using the spread above the risk-free yield curve. As the yields for the risk-free yield curve and the spreads for these securities are observable market inputs, the fair values of U.S. government agency securities are classified within Level 2.

Corporate bonds - valuations provided by independent pricing services, substantially all through index providers and pricing vendors with a small amount through brokerdealers. The fair values of these securities are generally determined using the spread above the risk-free yield curve. These spreads are generally obtained from the new issue market, secondary trading and from broker-dealers who trade in the relevant security market. As the significant inputs used in the pricing process for corporate bonds are observable market inputs, the fair value of these securities are classified within Level 2. A small number of securities are included in Level 3 due to a low level of transparency on the inputs used in the pricing process.

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

prepayment speeds and other indicators, when applicable. As the significant inputs used in the pricing process for mortgage-backed securities are observable market inputs, the fair value of these securities are classified within Level 2. A small number of securities are included in Level 3 due to a low level of transparency on the inputs used in the pricing process.

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

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

Asset-backed securities – valuations provided by independent pricing services, substantially all through index providers and pricing vendors with a small amount through broker-dealers. The fair values of these securities are generally determined through the use of pricing models (including Option Adjusted Spread) which use spreads to determine the appropriate average life of the securities. These spreads are generally obtained from the new issue market, secondary trading and from broker-dealers who trade in the relevant security market.

Equity securities

The Company determined that exchange-traded equity securities would be included in Level 1 as their fair values are based on quoted market prices in active markets. Certain equity securities are included in Level 2 of the valuation hierarchy as the significant inputs used in the pricing process for such securities are observable market inputs. Other equity securities are included in Level 3 due to the lack of an available independent price source for such securities. As the significant inputs used to price these securities are unobservable, the fair value of such securities are classified as Level 3.

Other investments

The Company's other investments include term loan investments for which fair values are estimated by using quoted prices of term loan investments with similar characteristics, pricing models or matrix pricing. Such investments are generally classified within Level 2. The fair values for certain of the other investments Company's are determined using net asset values as advised by external fund managers. The net asset value is based on the fund manager's valuation of the underlying holdings in accordance with the fund's governing documents. In accordance with applicable accounting guidance, certain investments that are measured at fair value using the net asset value per share (or its equivalent) practical expedient have not been classified in the fair value hierarchy. A small number of securities are included in Level 3 due to the lack of an available independent price source for such securities.

Derivative instruments

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

Short-term investments

The Company determined that certain of its short-term investments held in highly liquid money market-type funds, Treasury bills and commercial paper would be included in Level 1 as their fair values are based on guoted market prices in active markets. The fair values of certain short-term investments are generally determined using the spread above the risk-free yield curve and are classified within Level 2. Other short-term investments are included in Level 3 due to the lack of an available independent price source for such securities. As the significant inputs used to price these short-term securities are unobservable, the fair value of such securities are classified as Level 3.

Residential mortgage loans

The Company's residential mortgage loans (included in 'other assets' the in consolidated balance sheets) include amounts related to the Company's whole mortgage loan purchase and sell program. Fair values of residential mortgage loans are generally determined based on market prices. As significant inputs used in pricing process for these residential mortgage loans are observable market inputs, the fair value of these securities are classified within Level 2.

Other liabilities

The Company's other liabilities include contingent and deferred consideration liabilities related to the Company's acquisitions. Contingent consideration liabilities are remeasured at fair value at each balance sheet date with changes in fair value recognized in 'net realized gains (losses).' To determine the fair value of contingent consideration liabilities. the Company estimates the future payments using an income approach based on modeled inputs which include a weighted capital. average cost of Deferred consideration liabilities are measured at fair value on the transaction date. The Company determined that contingent and deferred consideration liabilities would be included within Level 3.

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

The following table presents the Company's financial assets and liabilities measured at fair value by level at March 31, 2024:

Estimated Fair	Value	Measurements	Using:
----------------	-------	--------------	--------

	Es	timated Fair Value	A	uoted Prices in active Markets for Identical Assets (Level 1)	0	ignificant Other bservable Inputs (Level 2)	Un	ignificant observable Inputs (Level 3)
Assets measured at fair value:								
Available for sale securities:								
Fixed maturities:								
Corporate bonds	\$	11,698	\$	_	\$	11,538	\$	160
U.S. government and government agencies		4,370		4,342		28		_
Asset backed securities		2,762		_		2,762		_
Non-U.S. government securities		2,195		_		2,195		_
Commercial mortgage backed securities		1,197		_		1,197		_
Residential mortgage backed securities		1,179		_		1,179		_
Municipal bonds		227	_			227		
Total		23,628		4,342		19,126		160
Short-term investments		2,142		1,885		160		97
Equity securities, at fair value		1,720		1,686		29		5
Derivative instruments (2)		120		_		120		_
Residential mortgage loans		2		_		2		_
Fair value option:								
Corporate bonds		910		_		910		_
Non-U.S. government bonds		5		_		5		_
Asset backed securities		2		_		2		_
U.S. government and government agencies		13		13		_		_
Short-term investments		35		1		17		17
Equity securities		7		3		_		4
Other investments		249		_		123		126
Other investments measured at net asset		1.665						
value (1)		1,665	_		_			
Total		2,886		17		1,057		147
Total assets measured at fair value	\$	30,498	\$	7,930	\$	20,494	\$	409
Liabilities measured at fair value:								
Other liabilities	\$	(22)	\$	_	\$	_	\$	(22)
Derivative instruments (2)		(57)				(57)		
Total liabilities measured at fair value	\$	(79)	\$	_	\$	(57)	\$	(22)

⁽¹⁾ In accordance with applicable accounting guidance, certain investments that are measured at fair value using the net asset value per share (or its equivalent) practical expedient have not been classified in the fair value

hierarchy. The fair value amounts presented in this table are intended to permit reconciliation of the fair value hierarchy to the amounts presented in the consolidated balance sheets.

(2) See <u>note 9</u>.

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2024 FIRST QUARTER FORM 10-Q

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

The following table presents the Company's financial assets and liabilities measured at fair value by level at December 31, 2023:

Estimated	Fair	Value	Measurements	Usina:
-----------	------	-------	--------------	--------

	timated Fair Value	A	uoted Prices in ctive Markets for Identical Assets (Level 1)	o	ignificant Other bservable Inputs (Level 2)	Un	ignificant observable Inputs (Level 3)
Assets measured at fair value:					_		
Available for sale securities:							
Fixed maturities:							
Corporate bonds	\$ 10,855	\$	_	\$	10,708	\$	147
U.S. government and government agencies	5,814		5,792		22		_
Asset backed securities	2,250		_		2,250		_
Non-U.S. government securities	2,062		_		2,062		_
Commercial mortgage backed securities	1,213		_		1,213		_
Residential mortgage backed securities	1,103		_		1,103		_
Municipal bonds	256	_			256		
Total	23,553		5,792		17,614		147
Short-term investments	2,063		1,786		193		84
Equity securities, at fair value	1,186		1,151		30		5
Derivative instruments (2)	197		_		197		_
Residential mortgage loans	2		_		2		_
Fair value option:							
Corporate bonds	662		_		662		_
Non-U.S. government bonds	6		_		6		_
Asset backed securities	2		_		2		_
U.S. government and government agencies	13		13		_		_
Short-term investments	21		_		11		10
Equity securities	7		3		_		4
Other investments	316		_		210		106
Other investments measured at net asset							
value (1)	 1,461						_
Total	2,488		16		891		120
Total assets measured at fair value	\$ 29,489	\$	8,745	\$	18,927	\$	356
Liabilities measured at fair value:							
Other liabilities	\$ (22)	\$	_	\$	_	\$	(22)
Derivative instruments (2)	(119)		_		(119)		_
Total liabilities measured at fair value	\$ (141)	\$		\$	(119)	\$	(22)

⁽¹⁾ In accordance with applicable accounting guidance, certain investments that are measured at fair value using the net asset value per share (or its equivalent) practical expedient have not been classified in the fair value

hierarchy. The fair value amounts presented in this table are intended to permit reconciliation of the fair value hierarchy to the amounts presented in the consolidated balance sheets.

(2) See <u>note 9</u>.

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2024 FIRST QUARTER FORM 10-Q

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

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

	Assets							
	Availab	Available For Sale Fair Value Option Fair						
	Corporate	Short-term	Other	Short-term	Equity	Equity	Other	
	Bonds	Investments	Investments	Investments	Securities	Securities	Liabilities	
Three Months Ended								
March 31, 2024								
Balance at beginning of period	\$ 147	\$ 84	\$ 106	\$ 10	\$ 4	\$ 5	\$ (22)	
Total gains or (losses) (realized/unrealized)								
Included in earnings	_	_	(4)	_	_	_	_	
Included in other comprehensive income	2	1	_	_	_	_	_	
Purchases, issuances, sales and settlements								
Purchases	98	12	30	7	_	_	_	
Issuances	_	_	_	_	_	_	_	
Sales	_	_	_	_	_	_	_	
Settlements	(87)	_	(6)	_	_	_	_	
Transfers in and/or out of Level 3	_	_	_	_	_	_	_	
Balance at end of period	\$ 160	\$ 97	\$ 126	\$ 17	\$ 4	\$ 5	\$ (22)	
Three Months Ended March 31, 2023								
Balance at beginning of period	\$ 121	\$ -	\$ 33	\$ -	\$ 4	\$ 4	\$ (14)	
Total gains or (losses) (realized/unrealized)								
Included in earnings	1	_	(1)	_	_	_	_	
Included in other comprehensive income	_	_	_	_	_	_	_	
Purchases, issuances, sales and settlements								
Purchases	_	_	18	_	_	1	_	
Issuances	_	_	_	_	_	_	_	
Sales	_	_	(4)	_	_	_	_	
Settlements	(53)	_	_	_	_	_	_	
Transfers in and/or out of Level 3	_	_	_	_	_	_	_	
Balance at end of period	\$ 69	\$ —	\$ 46		\$ 4	 5	\$ (14)	
zalance at ena of period							(= ./	

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2024 FIRST QUARTER FORM 10-Q

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

Financial Instruments Disclosed, But Not Carried, At Fair Value

The Company uses various financial instruments in the normal course of its business. The carrying values of cash, accrued investment income, receivable for securities sold, certain other assets, payable for securities purchased and certain other liabilities approximated their fair values at March 31, 2024, due to their respective short maturities. As these financial instruments are not actively traded, their respective fair values are classified within Level 2.

At March 31, 2024, the Company's senior notes were carried at their cost, net of debt issuance costs, of \$2.7 billion and had a fair value of \$2.5 billion. At December 31, 2023, the Company's senior notes were carried at their cost, net of debt issuance costs, of \$2.7 billion and had a fair value of \$2.5 billion. The fair values of the senior notes were obtained from a third party pricing service and are based on observable market inputs. As such, the fair values of the senior notes are classified within Level 2.

9. Derivative Instruments

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

From time to time, the Company purchases to-be-announced mortgage backed securities ("TBAs") as part of its investment strategy. TBAs represent commitments to purchase a future issuance of agency mortgage backed securities. For the period

The following table summarizes information on the fair values and notional values of the Company's derivative instruments:

	Es	timated				
				iability rivatives	Notional	
		(1)		(1)	Vā	lue (2)
March 31, 2024		-		_		
Futures contracts	\$	72	\$	(14)	\$	3,035
Foreign currency forward						
contracts		9		(13)		1,183
Other (3)		39		(30)		371
Total	\$	120	\$	(57)		
December 31, 2023						
Futures contracts	\$	139	\$	(61)	\$	3,746
Foreign currency forward						
contracts		27		(32)		1,224
Other (3)		31		(26)		512

(1) The fair value of asset derivatives are included in 'other assets' and the fair value of liability derivatives are included in 'other liabilities.'

197 \$

Total

(119)

- (2) Represents the absolute notional value of all outstanding contracts, consisting of long and short positions.
- (3) Includes swaps, options and other derivatives contracts.

The Company did not hold any derivatives which were designated as hedging instruments at March 31, 2024 or December 31, 2023.

The Company's derivative instruments can be traded under master netting agreements, which establish terms that apply to all derivative transactions with a counterparty. In the event of a bankruptcy or other stipulated event of default, such agreements provide that the non-defaulting party may elect to terminate all outstanding derivative transactions, in which case all individual

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

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

Derivatives not designated as	March 31,					
hedging instruments:	2024 2023		023			
Three Months Ended						
Net realized gains (losses):						
Futures contracts	\$	(14)	\$	39		
Foreign currency forward						
contracts		(1)		9		
Other (1)		5		8		
Total	\$	(10)	\$	56		

(1) Includes realized gains and losses on swaps, options and other derivatives contracts.

10. Commitments and Contingencies

Investment Commitments

The Company's investment commitments, which are primarily related to agreements entered into by the Company to invest in funds and separately managed accounts when called upon, were approximately \$3.7 billion at March 31, 2024, compared to \$3.6 billion at December 31, 2023.

11. Variable Interest Entities

Bellemeade Re

The Company has entered into aggregate of loss mortgage reinsurance excess agreements with various special purpose companies domiciled reinsurance Bermuda (the "Bellemeade Agreements"). At the time the Bellemeade Agreements were entered into, the applicability of the accounting guidance that addresses VIEs was evaluated. As a result of the evaluation Bellemeade Agreements, Company concluded that these entities are VIEs. However, given that the ceding insurers do not have the unilateral power to direct those activities that are significant to their economic performance, the Company does not consolidate such entities in its consolidated financial statements. The reinsurance premium paid in regard to the Bellemeade Agreements is calculated by multiplying the outstanding reinsurance coverage amount at the beginning of the period by the coupon rate, which is the SOFR plus a contractual risk margin, less the actual investment income collected during the preceding month on the assets included in the underlying reinsurance trusts. In the event the assets included in the underlying reinsurance trusts became severely impaired or worthless and the special purpose reinsurance companies were unable to meet their future obligations, the Company's mortgage insurance subsidiaries would be fulfill liable to claim payments policyholders. The Company's maximum exposure to loss associated with these VIEs is determined as the amount of mortgage insurance claim payments on the insured policies, net of aggregate reinsurance payments previously received, up to the full aggregate excess of loss reinsurance coverage amounts.

The following table summarizes the total assets of the Bellemeade entities:

		March 31, 2024	
		Coverage	
		Remaining	
Bellemeade		from	
Entities	Total VIE	Reinsurers	Total VIE
(Issue Date)	Assets	(1)	Assets

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

12. Other Comprehensive Income (Loss)

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

				Amounts Reclassified from AOCI						
	Consolidated Statement of Income						Three Months Ended			
Details About	Line Item That Includes				Mar	ch 3	1,			
AOCI Components	Reclassification				2024	2023				
Unrealized appreciatio	n (decline) on available-for-sale investments									
	Net realized gains (losses)				\$ (28)	\$	(94)			
	Provision for credit losses				(6)		(16)			
	Total before tax				(34)		(110)			
	Income tax (expense) benefit				5		11			
	Net of tax				\$ (29)	\$	(99)			
					Tax					
		Ве	efore Tax	E	xpense	Net	t of Tax			
			Amount	(Benefit)	Aı	mount			
Three Months Ended	d March 31, 2024									
Unrealized appreciatio	n (decline) in value of investments:									
Unrealized holding g	ains (losses) arising during period	\$	(151)	\$	(10)	\$	(141)			
Less reclassification of	net realized gains (losses) included in net									
income			(34)		(5)		(29)			
Foreign currency trans	lation adjustments		(33)				(33)			
Other comprehensive	income (loss)	\$	(150)	\$	(5)	\$	(145)			
Three Months Ended	d March 31. 2023									
	n (decline) in value of investments:									
	ains (losses) arising during period	\$	281	\$	36	\$	245			
	net realized gains (losses) included in net			'		'				
income			(110)		(11)		(99)			
Foreign currency trans	lation adjustments		5		_		5			
Other comprehensive	income (loss)	\$	396	\$	47	\$	349			

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

The Company's income tax provision on income before income taxes, including income (loss) from operating affiliates, resulted in an effective tax rate of 8.3% for the three months ended March 31, 2024, compared to 8.2% for the three months ended March 31, 2023. The Company's effective tax rate, which is based upon the expected annual effective tax rate, may fluctuate from period to period based on the relative mix of income or loss reported by jurisdiction and the varying tax rates in each jurisdiction.

The Company had a net deferred tax asset of \$1.6 billion at March 31, 2024, consistent with a net deferred tax asset of \$1.6 billion at December 31, 2023. In addition, the Company recovered \$6 million of income taxes for the three months ended March 31, 2024, compared to \$4 million of income taxes paid for the three months ended March 31, 2023.

14. Legal Proceedings

The Company, in common with the insurance industry in general, is subject to litigation and arbitration in the normal course of its business. As of March 31, 2024, the Company was not a party to any litigation or arbitration which is expected by management to have a material adverse effect on the Company's results of operations and financial condition and liquidity.

15. Transactions with Related Parties

Premia Reinsurance Ltd. is a multi-line Bermuda reinsurance company (and its affiliates together with Premia Holdings Ltd., "Premia"). The Company has entered into certain reinsurance transactions with Premia. For the three months ended March 31, 2024, the Company recorded de minims net premiums written and earned, compared to \$75 million for the three months ended March 31, 2023. At March 31, 2024, the Company recorded a funds held asset from Premia of \$144 million, compared to \$158 million at December 31, 2023.

Somers Group Holdings Ltd. and its wholly owned subsidiaries (collectively, "Somers") are wholly owned by Greysbridge. The Company entered into has reinsurance transactions with Somers. For the three months ended March 31, 2024, the Company's net premiums written was reduced by \$219 million, compared to \$155 million for the three months ended March 31, 2023. In addition, Somers paid certain acquisition costs and administrative fees to the Company. At March 31, 2024, the recorded Company reinsurance а recoverable on unpaid and paid losses from Somers of \$1.4 billion and a reinsurance balance payable to Somers of \$584 million, compared to \$1.3 billion and \$475 million, respectively, at December 31, 2023.

16. Subsequent Events

Business Acquired.

On April 5, 2024, the Company announced that it has entered into a master transaction agreement to acquire the U.S. middle market and entertainment insurance businesses, includina select specialty insurance programs, from Allianz Global Corporate & Specialty SE ("Allianz") for a \$450 million consideration to Allianz. transaction is expected to close in the second half of 2024 and is subject to regulatory approvals.

Castel Sale.

On May 1, 2024, the Company completed the sale of Castel Underwriting Agencies Limited ("Castel"), a managing general underwriting platform headquartered in

ITEM 2. MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS

The following is a discussion and analysis of our financial condition and results of operations. This should be read in conjunction with our consolidated financial statements included in Item 1 of this report and also our Management's Discussion and Analysis of Financial Condition and Results of Operations contained in our Annual Report on Form 10-K for the year ended December 31, 2023 ("2023 Form 10-K"). In addition, readers should review "Risk Factors" set forth in Item 1A of Part I of our 2023 Form 10-K and "ITEM 1A—Risk Factors" of this Form 10-Q. All amounts are in millions, except per share amounts, unless otherwise noted.

Arch Capital Group Ltd. ("Arch Capital" and, together with its subsidiaries, "Arch", "we", "our" or "us") is a publicly listed Bermuda exempted company with approximately \$22.1 billion in capital at March 31, 2024 and, through operations in Bermuda, the United States, Europe, Canada and Australia, writes insurance, reinsurance and mortgage insurance on a worldwide basis.

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We reported a strong 2024 first quarter, with \$1.1 billion of net income and growth in book value per share of 5.2%. Our property and casualty underwriting teams continued to lean into attractive market conditions, writing \$5.6 billion of gross premiums written, up 26% from the 2023 first quarter. Overall, rate changes are exceeding loss trends, and absolute returns remain above our long-term targets, positive indicators in our continued efforts to deliver superior results to our shareholders. We continue to execute our cycle management strategy by actively allocating capital to the segments with the best risk-adjusted returns, while retaining the flexibility to invest in our platform when we find attractive opportunities. We continue to practice disciplined underwriting that builds meaningful margin of safety into pricing, taking a long-term view of risk and a prudent approach to reserving.

Our reinsurance segment was able to generate \$379 million of underwriting income in the 2024 first quarter, while gross premiums written grew 41% over the same quarter last year. As a key trading partner, when opportunities emerge Arch is there to provide solutions and financial strength to its clients.

In our insurance segment, growth tapered from the highs of the past few years as rate increases slowed. Overall. conditions remained strong and the market is behaving important factors rationally, two continue to support growth and strong profit. In the 2024 first quarter, we found growth opportunities in several lines, including excess and surplus property and casualty and other specialty lines. Across most of our specialty lines, pricing remains very healthy and we believe we can deliver attractive returns above our long term target of 15%.

In the property market, our peak zone natural catastrophe PML for a 1-in-250 single event exposure to property catastrophe risk remains well below our self-imposed threshold (see "Catastrophic and Severe Economic Events") and, because of our diversified portfolio and broad set of opportunities, we retain the flexibility to pursue the most attractive returns across

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

Book Value per Share

Book value per share represents total common shareholders' equity available to Arch divided by the number of common shares outstanding. Management uses growth in book value per share as a key measure of the value generated for our common shareholders each period and believes that book value per share is the key driver of Arch Capital's share price over time. Book value per share is impacted by, among other factors, our underwriting results, investment returns and share repurchase activity, which has an accretive or dilutive impact on book value per share depending on the purchase price. Book value per share was \$49.36 at March 31, 2024, compared to \$46.94 at December 31, 2023, and \$35.35 at March 31, 2023. The 5.2% increase in book value per share for the 2024 first quarter reflected strong underwriting results.

Operating Return on Average Common Equity

Operating return on average common equity ("Operating ROAE") represents annualized after-tax operating income available to Arch common shareholders divided by average of beginning and ending common shareholders' equity available to Arch during the period. After-tax operating income available to Arch common shareholders, a non-GAAP financial measure as defined in Regulation G, represents net income available to Arch common shareholders, excluding net realized gains or losses (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 and income taxes. Management uses Operating ROAE as a key measure of the return generated to common shareholders. See

Total Return on Investments

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 assets) and the change financial unrealized gains and losses generated by Arch'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. In addition, total return incorporates the timing of investment returns during the periods. The following table summarizes our total return compared to the benchmark return against which we measured our portfolio during the See "Comment on Non-GAAP periods. Financial Measures."

	Arch	Benchmark
	Portfolio	Return
Pre-tax total return (before in	vestment exp	enses):
2024 First Quarter	0.80 %	0.83 %
2023 First Quarter	2.54 %	2.64 %

Total return for the 2024 first quarter primarily reflected net investment income on fixed income securities, partially offset by unrealized losses resulting from an increase in interest rates in the period. We continue to maintain a relatively short duration on our portfolio of 2.70 years at March 31, 2024.

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

The benchmark return index included weightings to the following indices:

	%
ICE BofA 1-10 Year U.S. Corporate Index	27.00
Yield on 3-5 Year U.S. Treasury Index plus 6%	17.00
ICE BofA 1-10 Year U.S. Treasury Index	15.00
JPM CLOIE Investment Grade	6.00
ICE BofA U.S. High Yield Constrained Index	6.00
ICE BofA 1-5 Year U.K. Gilt Index	5.50
S&P 500 Total Return Index	4.75
ICE BofA U.S. ABS & CMBS Index	4.50
ICE BofA German Government 1-5 Year Index	3.40
ICE BofA German Government 5-7 Year Index	0.60
ICE BofA 0-3 Month U.S. Treasury Index	3.00
ICE BofA 1-5 Year Canada Government Index	2.70
ICE BofA 15+ Year Canada Government Index	0.30
ICE BofA 1-5 Year Australia Government Index	2.50
ICE BofA U.S. Mortgage Backed Securities	
Index	1.50
ICE BofA 1-5 Year Japan Government Index	0.25
Total	100.00 %

COMMENT ON NON-GAAP FINANCIAL MEASURES

Throughout this filing, we present our operations in the way that we believe will be the most meaningful and useful to investors, analysts, rating agencies and others who use our financial information in evaluating the performance of our company. 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 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, 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

loss of investment funds accounted for using the equity method and net foreign exchange gains or losses are an integral part of our operations, the decision to realize 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 our 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 investments represent other-thantemporary declines in expected recovery values on securities without actual realization.

The use of the equity method on certain of our investments is driven by the ownership structure of such funds (either limited partnerships or limited liability companies). In applying the equity method, these investments are initially recorded at cost and are subsequently adjusted based on our proportionate share of the net income or loss of the funds (which include changes in the market value of the underlying securities in the funds). This method of accounting is different from the way that we account for our other investments 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. We believe that transaction costs and other, due to their non-recurring nature, are not indicative of the performance of, or trends in, our business performance.

believe that showing net income available to Arch common shareholders exclusive of the items referred to above reflects the underlying fundamentals of our business since we evaluate the performance of and manage our business to produce an underwriting profit. In addition to presenting the net income available to Arch common shareholders. believe this we that presentation enables investors and other users of our financial information to analyze

Our segment information includes the presentation of consolidated underwriting income or loss. Such measures represent the pre-tax profitability of our underwriting operations and include net premiums earned plus other underwriting income, less losses and loss adjustment expenses, acquisition expenses and other operating expenses. Other operating expenses include those operating expenses that are incremental and/or directly attributable to our individual underwriting operations. Underwriting income or loss does not incorporate items included in our corporate segment. While these measures are presented in note 4. <u>"Segment Information,"</u> of the notes accompanying our consolidated financial statements, they are considered non-GAAP when financial measures 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 in note 4, "Segment Information" of the notes accompanying our consolidated financial statements.

We measure segment performance for our three underwriting segments based on underwriting income or loss. We do not manage our assets by underwriting segment, with the exception of goodwill and intangibles and, accordingly, investment income and other non-underwriting related items are not allocated to each underwriting segment.

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

Total return on investments includes investment income, equity in net income or loss of investment funds accounted for using the equity method, net realized gains and losses (excluding changes in the allowance

RESULTS OF OPERATIONS

The following table summarizes our consolidated financial data, including a reconciliation of net income or loss available to Arch common shareholders to after-tax operating income or loss available to Arch common shareholders. See "Comment on Non-GAAP Financial Measures."

	March 31,			
		2024		2023
Net income available to Arch	_	1 110		705
common shareholders	\$	1,110	\$	705
Net realized (gains) losses (1)		(67)		(17)
Equity in net (income) loss of				
investment funds accounted for using the equity method		(99)		(48)
Net foreign exchange (gains) losses		(31)		18
Transaction costs and other		7		(1)
Income tax expense (benefit) (2)		13		(3)
After-tax operating income available to Arch common shareholders	\$	933	\$	654
Beginning common shareholders' equity	\$	17,523	\$	12,080
Ending common shareholders' equity		18,525		13,158
Average common shareholders' equity	\$	18,024	\$	12,619
Annualized net income return on average common equity %		24.6		22.3
Annualized operating return on average common equity %		20.7		20.7

- (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 on 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 reflects the relative mix reported by jurisdiction and the varying tax rates in each jurisdiction.

Segment Information

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

Insurance Segment

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

	Three Moi	March 31,		
	2024	2023	% Change	
Gross premiums	\$2,126	\$1,979	7.4	
		. ,	7.4	
Premiums ceded	(584)	(542)		
Net premiums written	1,542	1,437	7.3	
Change in unearned premiums	(91)	(180)		
Net premiums earned	1,451	1,257	15.4	
Losses and loss adjustment expenses	(854)	(703)		
Acquisition expenses	(276)	(245)		
Other operating expenses	(235)	(195)		
Underwriting income				
(loss)	\$ 86	\$ 114	(24.6)	
Underwriting Ratios			% Point Change	
Loss ratio	58.9 %	55.9 %	3.0	
Acquisition expense ratio	19.0 %	19.5 %	(0.5)	
Other operating expense ratio	16.2 %	15.5 %	0.7	
Combined ratio	94.1 %	90.9 %	3.2	

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

Construction and national accounts: primary and excess casualty coverages 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-

Professional lines: directors' and officers' liability, errors and omissions liability, employment practices liability, fiduciary liability, crime, professional indemnity and other financial related coverages corporate, private equity, venture capital, estate investment trust, limited partnership, financial institution and not-forprofit clients of all sizes, cyber insurance, and medical professional and general insurance coverages for liability 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, stand-alone 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.

Premiums Written.

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

	Three Months Ended March 31,						
		202	2023				
	Am	ount	%	An	nount	%	
Professional lines	\$	369	23.9	\$	328	22.8	
Property, energy, marine and aviation		311	20.2		275	19.1	
Programs		187	12.1		141	9.8	
Construction and national accounts		179	11.6		173	12.0	
Travel, accident and health		179	11.6		180	12.5	
Excess and surplus casualty		148	9.6		131	9.1	
Warranty and lenders solutions		39	2.5		89	6.2	
Other		130	8.4		120	8.4	
Total	\$1	,542	100.0	\$ 1	L,437	100.0	

2024 First Quarter versus 2023 Period. Gross premiums written by the insurance segment in the 2024 first quarter were 7.4% higher than in the 2023 first quarter, while net premiums written were 7.3% higher. Growth in net premiums written reflected increases in most lines of business due in part to new business opportunities, increases in existing accounts and rate changes. In addition, the insurance segment retained a higher portion of business written in the 2024 first quarter than in the 2023 first quarter.

Net Premiums Earned.

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

	Three Months Ended March 31,						
	2024			2023			
	Ar	Amount %		Amount		%	
Professional lines	\$	347	23.9	\$	349	27.8	
Property, energy,							
marine and aviatior	1	301	20.7		227	18.1	
Programs		195	13.4		144	11.5	
Construction and							
national accounts		157	10.8		126	10.0	
Travel, accident and							

Losses and Loss Adjustment Expenses.

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

	Three Mont	Three Months Ended			
	March	March 31,			
	2024	2023			
Current year	59.6 %	56.8 %			
Prior period reserve development	(0.7)%	(0.9)%			
Loss ratio	58.9 %	55.9 %			

Current Year Loss Ratio.

2024 First Quarter versus 2023 Period. The insurance segment's current year loss ratio in the 2024 first quarter was 2.8 points higher than in the 2023 first quarter. The 2024 first quarter loss ratio reflected 2.1 points of activity related to the Baltimore bridge collapse along with 1.9 points of current year catastrophic activity, spread across a series of global events, compared to 1.4 points of catastrophic activity for the 2023 first quarter. The balance of the change in the current year loss ratio resulted, in part, from changes in mix of business.

Prior Period Reserve Development.

The insurance segment's net favorable development was \$10 million, or 0.7 points, for the 2024 first quarter, compared to \$12 million, or 0.9 points, for the 2023 first quarter. See note 5, "Reserve for Losses and Loss Adjustment Expenses," to our consolidated financial statements for information about the insurance segment's prior year reserve development.

Underwriting Expenses.

2024 First Quarter versus 2023 Period. The insurance segment's underwriting expense ratio was 35.2% in the 2024 first quarter, compared to 35.0% in the 2023 first quarter.

Reinsurance Segment

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

	Three Months Ended March 31,				
					%
		2024		2023	Change
Gross premiums					
written	\$	3,467	\$	2,460	40.9
Premiums ceded		(1,201)		(734)	
Net premiums					
written		2,266		1,726	31.3
Change in unearned premiums		(600)		(396)	
Net premiums					
earned		1,666		1,330	25.3
Other underwriting income (loss)		2		4	
Losses and loss adjustment					
expenses		(883)		(766)	
Acquisition					
expenses		(331)		(281)	
Other operating					
expenses		(75)		(74)	
Underwriting income (loss)	\$	379	\$	213	77.9
Underwriting Ratios					% Point Change
Loss ratio		53.0 %		57.6 %	(4.6)
Acquisition expense ratio		19.9 %		21.1 %	(1.2)
Other operating					
expense ratio		4.5 %		5.6 %	(1.1)
Combined ratio		77.4 %		84.3 %	(6.9)

The reinsurance segment consists of our 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

or aggregation of losses from a covered peril exceed the retention specified in the contract.

Property excluding property catastrophe: provides coverage for personal lines and/or commercial property exposures 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 basis or facultative basis.

Other: primarily includes life reinsurance business.

Premiums Written.

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

	Three Months Ended March 31,							
	2024				2023			
	Amount		%	Amount		%		
Other specialty	\$	840	37.1	\$	619	35.9		
Property excluding property								
catastrophe		567	25.0		446	25.8		
Property								
catastrophe		350	15.4		257	14.9		
Casualty		343	15.1		283	16.4		
Marine and aviation		129	5.7		99	5.7		
Other		37	1.6		22	1.3		
Total	\$ 2	,266	100.0	\$ 1	L,726	100.0		

2024 First Quarter versus 2023 Period. Gross premiums written by the reinsurance segment in the 2024 first quarter were 40.9% higher than in the 2023 first quarter, while net premiums written were 31.3% higher. The growth in net premiums written reflected increases in all lines of business due in part to rate increases, new business opportunities and growth in existing accounts.

Net Premiums Earned.

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

Three Months	Ended March 31,
2024	2023

Net premiums written, irrespective of the class of business, are generally earned on a pro rata basis over the terms of the underlying policies or reinsurance contracts. Net premiums earned by the reinsurance segment in the 2024 first quarter were 25.3% higher than in the 2023 first quarter, and reflect changes in net premiums written over the previous five quarters.

Other Underwriting Income (Loss).

Other underwriting income for the 2024 first quarter was \$2 million, compared to \$4 million for the 2023 first quarter.

Losses and Loss Adjustment Expenses.

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

	Three Mont	Three Months Ended			
	March	March 31,			
	2024	2023			
Current year	55.4 %	61.6 %			
Prior period reserve	(2.4)0/	(4.0)0/			
development	(2.4)%	(4.0)%			
Loss ratio	53.0 %	57.6 %			

Current Year Loss Ratio.

2024 First Quarter versus 2023 Period. The reinsurance segment's current year loss ratio in the 2024 first quarter was 6.2 points lower than in the 2023 first quarter. The 2024 first quarter loss ratio reflected 3.0 points of activity related to the Baltimore bridge collapse and 1.9 points of current year catastrophic activity spread across a series of global events. The 2023 first quarter included 5.4 points of current year catastrophic activity. The balance of the change in the loss ratio resulted, in part, from the impact of rate increases and changes in the mix of business.

Prior Period Reserve Development.

The reinsurance segment's net favorable development was \$40 million, or 2.4 points, for the 2024 first guarter, compared to \$53 million, or 4.0 points, for the 2023 first quarter. See note 5, "Reserve for Losses and Loss Adjustment Expenses," our consolidated financial statements for information about the reinsurance segment's prior year reserve development.

Underwriting Expenses.

Mortgage Segment

Our mortgage operations include U.S. and international mortgage insurance and reinsurance operations as well as participation in GSE credit risk-sharing transactions.

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

	Three Months Ended March 31,				
	2024	2023	% Change		
Gross premiums written	\$ 341	\$ 343	(0.6)		
Premiums ceded	(64)	(82)			
Net premiums written	277	261	6.1		
Change in unearned premiums	28	35			
Net premiums earned	305	296	3.0		
Other underwriting income	10	6			
Losses and loss adjustment expenses	9	(2)			
Acquisition expenses	_	(7)			
Other operating expenses	(53)	(50)			
Underwriting income	\$ 271	\$ 243	11.5		
Underwriting Ratios			% Point Change		
Loss ratio	(3.0)%	0.6 %	(3.6)		
Acquisition expense ratio	– %	2.5 %	(2.5)		
Other operating expense ratio	17.5 %	16.9 %	0.6		
Combined ratio	14.5 %	20.0 %	(5.5)		

Premiums Written.

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

	Three Months Ended March 31,					
	20	2023				
	Amoun	t %	Ar	nount	%	
U.S. primary mortgage insurance	\$ 202	72.9	\$	186	71.3	
U.S. credit risk transfer (CRT) and other	56	20.2		53	20.3	
International mortgage						

The following tables provide details on the new insurance written ("NIW") generated by Arch MI U.S. NIW represents the original principal balance of all loans that received coverage during the period.

	Three Months Ended March 31,						
		202	4	2023			
	A	Amount %			mount	%	
Total new insurance written (NIW) (1)	\$	9,336		\$:	10,394		
Credit quality (FICO):							
>=740	\$	6,364	68.2	\$	6,672	64.2	
680-739		2,660	28.5		3,490	33.6	
620-679		311	3.3		229	2.2	
<620		1			3		
Total	\$	9,336	100.0	\$:	10,394	100.0	
Loan-to-value (LTV):							
95.01% and above	\$	542	5.8	\$	519	5.0	
90.01% to 95.00%		5,240	56.1		6,043	58.1	
85.01% to 90.00%		2,624	28.1		2,772	26.7	
85.00% and below		930	10.0		1,060	10.2	
Total	\$	9,336	100.0	\$ 3	10,394	100.0	
Monthly vs. single:							
Monthly	\$	8,916	95.5	\$:	10,106	97.2	
Single		420	4.5		288	2.8	
Total	\$	9,336	100.0	\$:	10,394	100.0	
Purchase vs. refinance:							
Purchase	\$	9,167	98.2	\$ 3	10,201	98.1	
Refinance		169	1.8		193	1.9	
Total	\$	9,336	100.0	\$ 1	10,394	100.0	

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

Net Premiums Earned.

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

Losses and Loss Adjustment Expenses.

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

	Three Months Ended			
	March 31,			
	2024	2023		
Current year	21.4 %	24.5 %		
Prior period reserve development	(24.4)%	(23.9)%		
Loss ratio	(3.0)%	0.6 %		

Current Year Loss Ratio.

2024 First Quarter versus 2023 Period. The mortgage segment's current year loss ratio was 3.1 points lower in the 2024 first quarter than in the 2023 first quarter. The lower current year loss ratio for the 2024 first quarter reflected a decrease in estimated claim rates, partially offset by slightly higher new delinquencies.

Prior Period Reserve Development.

The mortgage segment's net favorable development was \$74 million, or 24.4 points, for the 2024 first quarter, compared to \$71 million, or 23.9 points, for the 2023 first quarter. See note 5, "Reserve for Losses and Loss Adjustment Expenses," to our consolidated financial statements for information about the mortgage segment's prior year reserve development.

Underwriting Expenses.

2024 First Quarter versus 2023 Period. The underwriting expense ratio for the mortgage segment was 17.5% in the 2024 first quarter, compared to 19.4% in the 2023 first quarter. The decrease was primarily due to higher level of ceding and profit commissions on U.S. primary business in the 2024 first quarter.

Corporate Segment

The corporate segment results include net investment income, net realized gains or (which includes realized 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 investments accounted for using the equity method, other income or loss, corporate expenses, transaction costs and other, amortization of intangible assets, interest expense, net foreign exchange gains or losses, income taxes, income from operating affiliates and items related to our non-cumulative preferred shares.

Net Investment Income.

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

	Three Months Ended				
	March 31,				
	2	2024	2	2023	
Fixed maturities	\$	280	\$	188	
Short-term investments		29		14	
Equity securities		8		4	
Other (1)		33		13	
Gross investment income		350		219	
Investment expenses (2)		(23)		(20)	
Net investment income	\$	327	\$	199	

- (1) Amounts include dividends and other distributions on investment funds, term loan investments, funds held balances, cash balances and other items.
- (2) Investment expenses were approximately 0.28% of average invested assets for the 2024 first quarter, compared to 0.26% for the 2023 first quarter.

The higher level of net investment income for the 2024 first quarter was primarily related to higher yields available in the financial market. The pre-tax investment income yield, calculated based on amortized cost and on an annualized basis, was 4.14% for the 2024 first quarter, compared to 3.03% for the 2023 first quarter. Net cash flow from operating activities over the trailing twelve months grew our invested asset base and also contributed to the growth in net investment income.

Corporate Expenses.

Other Income or Losses.

Other income for the 2024 first quarter was \$14 million, compared to \$11 million for the 2023 first quarter. Amounts in both periods primarily reflect changes in the cash surrender value of our investment in corporate-owned life insurance.

Amortization of Intangible Assets.

Amortization of intangible assets for the 2024 first quarter was \$21 million, compared to \$23 million for the 2023 first quarter. Amounts in both periods primarily attributed to amortization of finite-lived intangible assets.

Interest Expense.

Interest expense was \$34 million for the 2024 first quarter, compared to \$32 million for the 2023 first quarter. Interest expense primarily reflects amounts related to our outstanding senior notes.

Net Realized Gains or Losses.

Net realized gains for the 2024 first quarter were \$67 million, compared to gains of \$17 million for the 2023 first quarter. Amounts in both periods reflected sales of investments as well as the impact of financial market movements on the Company's equity securities and investments accounted for under the fair value option method. Currently, our portfolio is actively managed to maximize total return within certain guidelines. The effect of financial market movements on the investment portfolio will directly impact net realized gains and losses as the portfolio is adjusted and rebalanced. Net realized gains or losses from the sale of fixed maturities primarily results from our decisions to reduce credit exposure, to change duration targets, to rebalance our portfolios or due to relative value determinations.

Net realized gains or losses also include realized and unrealized contract gains and losses on our derivative instruments, changes in the fair value of assets accounted for using the fair value option and in the fair value of equities, along with changes in the allowance for credit losses on financial assets and net impairment losses recognized in earnings. See note 7, "Investment Information—Net Realized Gains (Losses)" and note 7, "Investment Information—Allowance for Expected Credit

Equity in Net Income or Losses of Investment Funds Accounted for Using the Equity Method.

Income from investment funds accounted for using the equity method for the 2024 first quarter was \$99 million, compared to \$48 million for the 2023 first quarter. Such investments are generally recorded on a one to three month lag based on the availability of reports from the investment funds. Investment funds accounted for using the equity method totaled \$4.8 billion at March 31, 2024, compared to \$4.6 billion at December 31, 2023. See note 7. "Investment Information—Investments Accounted For Using the Equity Method," to our consolidated financial statements for additional information.

Net Foreign Exchange Gains or Losses.

Net foreign exchange gains for the 2024 first quarter were \$31 million, compared to losses of \$18 million for the 2023 first quarter. Amounts in both periods were primarily unrealized and resulted from the effects of revaluing our net insurance liabilities required to be settled in foreign currencies at each balance sheet date.

Income Tax Expense.

Our income tax provision on income or loss before income taxes, including income or loss from operating affiliates, resulted in an effective tax rate of 8.3% for the 2024 first quarter, compared to 8.2% for the 2023 first quarter. See note 13, "Income Taxes" to our consolidated financial statements for additional information.

Income or Losses from Operating Affiliates.

Income from operating affiliates for 2024 first quarter was \$55 million, compared to income of \$39 million for the 2023 first quarter. See note 7, "Investment Information—Investments in Operating Affiliates," to our consolidated financial statements for additional information.

CRITICAL ACCOUNTING POLICIES, ESTIMATES AND RECENT ACCOUNTING PRONOUNCEMENTS

Critical accounting policies, estimates and recent accounting pronouncements are

Investable Assets Held by Arch

At March 31, 2024, approximately \$22.1 billion, or 61%, of total investable assets held by Arch were internally managed, compared to \$21.9 billion, or 63%, at December 31. 2023. See note 7. "Investment Information" to our consolidated financial statements for additional information.

	March 31,	December 31,
	2024	2023
Average effective duration		
(in years)	2.70	2.91
Average S&P/Moody's credit		
ratings (1)	AA-/Aa3	AA-/Aa3

(1) Average credit ratings on our investment portfolio on securities with ratings assigned by Standard & Poor's Rating Services ("S&P") and Moody's Investors Service ("Moody's").

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

Estimated

% of

	2511114104		, , , ,
	Fa	ir Value	Total
March 31, 2024			
U.S. government and gov't			
agencies (1)	\$	5,106	20.8
AAA		4,495	18.3
AA		2,405	9.8
A		4,912	20.0
BBB		5,672	23.1
ВВ		920	3.7
В		484	2.0
Lower than B		30	0.1
Not rated		534	2.2
Total	\$	24,558	100.0
December 31, 2023			
U.S. government and gov't			
agencies (1)	\$	6,493	26.8
AAA		4,305	17.8
AA		2,165	8.9
А		4,629	19.1

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

					% of
				Gross	Total Gross
Severity of gross Estimated		Uı	nrealized	Unrealized	
unrealized losses	: Fa	ir Value		Losses	Losses
March 31, 2024					
0-10%	\$	13,861	\$	(384)	46.5
10-20%		2,365		(376)	45.6
20-30%		168		(48)	5.8
Greater than 30%		33		(17)	2.1
Total	\$	16,427	\$	(825)	100.0
December 31,					
2023					
0-10%	\$	10,696	\$	(410)	49.7
10-20%		2,282		(367)	44.5
20-30%		116		(35)	4.2
Greater than 30%		26		(13)	1.6
Total	\$	13,120	\$	(825)	100.0
Greater than 30%	\$	26	\$	(13)	1.6

The following table summarizes our top ten exposures to fixed income corporate issuers by fair value at March 31, 2024, excluding guaranteed amounts and covered bonds:

	Est	timated	Credit
	Fai	ir Value	Rating (1)
JPMorgan Chase & Co.	\$	352	A-/A1
Morgan Stanley		323	A-/A1
Bank of America Corporation		312	A-/A1
The Goldman Sachs Group,			
Inc.		260	A-/A2
			BBB-/
Blue Owl Capital Inc.		197	Baa3
Citigroup Inc.		182	BBB+/A3
Ford Motor Company		178	BBB-/Ba1
Hyundai Motor Company		149	BBB+/A3
Wells Fargo & Company		140	BBB+/A1
Roche Holding AG		134	AA/Aa2
Total	\$	2,227	

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

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

	Below
Investment	Investment

	Ag	Agencies		Grade		Grade	Total
March 31	, 20	24					
RMBS	\$	721	\$	458	\$	_	\$1,179
CMBS		7		1,112		78	1,197
ABS				2,608		154	2,762
Total	\$	728	\$	4,178	\$	232	\$5,138
Decembe	r						
<u>31, 2023</u>							
RMBS	\$	658	\$	445	\$	_	\$1,103
CMBS		7		1,126		80	1,213
ABS		_		2,143		107	2,250
Total	\$	665	\$	3,714	\$	187	\$4,566

The following table summarizes our equity securities, which include investments in exchange traded funds:

	arch 31, 2024	De	31, 2023
Equities (1)	\$ 962	\$	739
Exchange traded funds			
Fixed income (2)	587		285
Equity and other (3)	178		169
Total	\$ 1,727	\$	1,193

- Primarily in technology, consumer non-cyclical, communications, financial and industrial sectors at March 31, 2024.
- (2) Primarily in corporate exposures at March 31, 2024.
- (3) Primarily in financials, consumer staples, industrials and energy sectors at March 31, 2024.

For details on our other investments and other investable assets, see note 7, "Investment Information—Other Investments" to our consolidated financial statements.

For details on our investments accounted for using the equity method, see <u>note 7</u>, "Investment <u>Information—Investments</u>

Accounted For Using the Equity Method," to our consolidated financial statements

for a summary of our financial assets and liabilities measured at fair value, segregated by level in the fair value hierarchy.

Reinsurance

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

	Three Months Ended			
	March 31,			
		2024		2023
Premiums written:				
Direct	\$	2,486	\$	2,358
Assumed		3,447		2,422
Ceded		(1,848)		(1,356)
Net	\$	4,085	\$	3,424
Premiums earned:				
Direct	\$	2,341	\$	2,154
Assumed		2,375		1,774
Ceded		(1,294)		(1,045)
Net	\$	3,422	\$	2,883
Losses and LAE:				
Direct	\$	1,399	\$	1,071
Assumed		1,264		997
Ceded		(935)		(597)
Net	\$	1,728	\$	1,471

See note 6, "Allowance for Expected Credit Losses," to our consolidated financial statements for information about our reinsurance recoverables and related allowance for credit losses.

Bellemeade Re

We have entered into aggregate excess of loss mortgage reinsurance agreements with various special purpose reinsurance companies domiciled in Bermuda "Bellemeade Agreements"). the respective coverage periods, we will retain the first layer of the respective aggregate losses and the special purpose reinsurance companies will provide second coverage up to the outstanding coverage amount. We will then retain losses in excess of the outstanding coverage limit. The aggregate excess of loss reinsurance coverage generally decreases over a tenyear nariod as the underlying covered

The following table summarizes the respective coverages and retentions at March 31, 2024:

	- 1	nitial				
Bellemeade	Co	verage			Re	maining
Entities		at	C	urrent	Re	tention,
(Issue Date)	Iss	uance	Co	verage		Net
2019-3 Ltd. (1)		701		75		218
2021-3 Ltd. (2)		639		522		134
2022-1 Ltd. (3)		317		267		142
2022-2 Ltd. (4)		327		327		205
2023-1 Ltd. (5)		233		233		183
Total	\$	2,217	\$	1,424	\$	882

- (1) Issued in July 2019, covering in-force policies issued in 2016.
- (2) Issued in September 2021, covering in-force policies issued between April 1, 2021 and June 30, 2021. \$508 million was directly funded by Bellemeade Re 2021-3 Ltd. via insurance-linked notes, with an additional \$131 million capacity provided directly to Arch MI U.S. by a separate panel of reinsurers.
- (3) Issued in January 2022, covering in-force policies issued between July 1, 2021 and November 30, 2021. \$284 million was directly funded by Bellemeade Re 2022-1 Ltd. via insurance-linked notes, with an additional \$33 million capacity provided directly to Arch MI U.S. by a separate panel of reinsurers.
- (4) Issued in September 2022, covering in-force policies issued between November 1, 2021 and June 30, 2022. \$201 million was directly funded by Bellemeade Re 2022-2 Ltd. via insurance-linked notes, with an additional \$126 million capacity provided directly to Arch MI U.S. by a separate panel of reinsurers.
- (5) Issued in October 2023, covering in-force policies issued between January 1, 2023 and September 30, 2023. \$186 million was directly funded by Bellemeade Re 2023-1 Ltd. via insurance-linked notes, with an additional \$47 million capacity provided directly to Arch MI U.S. by a separate panel of reinsurers.

Reserve for Losses and Loss Adjustment Expenses

We establish reserve for losses and loss adjustment expenses ("Loss Reserves") which represent estimates involving actuarial and statistical projections, at a given point in time, of our expectations of the ultimate settlement and administration costs of losses incurred. Estimating Loss

At March 31, 2024 and December 31, 2023, our Loss Reserves, net of unpaid losses and loss adjustment expenses recoverable, by type and by operating segment were as follows:

	March 31, 2024		D	ecember 31, 2023
Insurance segment:				
Case reserves	\$	2,727	\$	2,730
IBNR reserves		5,892		5,626
Total net reserves		8,619		8,356
Reinsurance segment:				
Case reserves		2,400		2,447
Additional case reserves		507		484
IBNR reserves		4,616		4,260
Total net reserves		7,523		7,191
Mortgage segment:				
Case reserves		311		323
IBNR reserves		183		192
Total net reserves		494		515
Total:				
Case reserves		5,438		5,500
Additional case reserves		507		484
IBNR reserves		10,691		10,078
Total net reserves	\$	16,636	\$	16,062

At March 31, 2024 and December 31, 2023, the insurance segment's Loss Reserves by major line of business, net of unpaid losses and loss adjustment expenses recoverable, were as follows:

			December		
	М	March 31,		31,	
		2024		2023	
Insurance segment:					
Professional lines	\$	2,524	\$	2,451	
Construction and national					
accounts		1,723		1,693	
Excess and surplus casualty		1,019		975	
Programs		967		929	
Property, energy, marine					
and aviation		893		836	
Travel, accident and health		143		144	
Warranty and lenders					
solutions		57		65	
Other		1,293		1,263	
Total net reserves	\$	8,619	\$	8,356	

At March 31, 2024 and December 31, 2023, the mortgage segment's Loss Reserves by major line of business, net of unpaid losses and loss adjustment expenses recoverable, were as follows:

	March 31, 2024		December 31, 2023	
Mortgage segment:				
U.S. primary mortgage insurance (1)	\$ 312	\$	324	
U.S. credit risk transfer (CRT) and other	96		100	
International mortgage insurance/	86		91	
Total net reserves	\$ 494	\$	515	

(1) At March 31, 2024, 30.1% of total net reserves represents policy years 2014 and prior and the remainder from later policy years. At December 31, 2023, 31.0% of total net reserves represent policy years 2014 and prior and the remainder from later policy years.

Mortgage Operations Supplemental Information

The mortgage segment's insurance in force ("IIF") and risk in force ("RIF") were as follows at March 31, 2024 and December 31, 2023:

	March 31	, 2024	December 31, 2023		
	Amount %		Amount	%	
Insurance In F	orce (IIF)				
(1):					
U.S. primary mortgage insurance	\$288,385	56.9	\$290,764	57.1	
U.S. credit risk transfer (CRT) and other	148,623	29.3	149,098	29.3	
International mortgage insurance/					
reinsurance	69,811	13.8	69,473	13.6	
Total	\$506,819	100.0	\$509,335	100.0	

The IIF and RIF for our U.S. primary mortgage insurance business by policy year were as follows at March 31, 2024:

	IIF		RIF		Delinquency
	Amount	%	Amount	%	Rate (1)
Policy					
<u>year:</u>					
2014 and					
prior	\$ 12,791	4.4	\$ 3,254	4.3	5.60 %
2015	4,299	1.5	1,131	1.5	1.95 %
2016	7,039	2.4	1,887	2.5	2.35 %
2017	7,172	2.5	1,912	2.5	2.95 %
2018	8,173	2.8	2,122	2.8	3.76 %
2019	14,976	5.2	3,900	5.2	2.30 %
2020	48,509	16.8	12,727	16.9	1.14 %
2021	73,167	25.4	19,039	25.3	1.14 %
2022	62,612	21.7	16,444	21.9	0.93 %
2023	40,369	14.0	10,382	13.8	0.42 %
2024	9,278	3.2	2,396	3.2	0.02 %
Total	\$288,385	100.0	\$75,194	100.0	1.65 %

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

The IIF and RIF for our U.S. primary mortgage insurance business by policy year were as follows at December 31, 2023:

	IIF	IIF		F	Delinquency
	Amount	%	Amount	%	Rate (1)
Policy year:					
2014 and					
prior	\$ 13,301	4.6	\$ 3,387	4.5	6.01 %
2015	4,691	1.6	1,244	1.6	1.98 %
2016	7,525	2.6	2,025	2.7	2.50 %
2017	7,600	2.6	2,023	2.7	3.13 %
2018	8,512	2.9	2,207	2.9	4.04 %
2019	15,767	5.4	4,074	5.4	2.40 %
2020	51,349	17.7	13,357	17.7	1.17 %
2021	76,667	26.4	19,812	26.2	1.12 %
2022	63,899	22.0	16,755	22.2	0.89 %
2023	41,453	14.3	10,643	14.1	0.26 %
Total	\$290,764	100.0	\$75,527	100.0	1.74 %

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

Risk In Force (RIF) (2):

U.S. primary

The following tables provide supplemental disclosures on risk in force for our U.S. primary mortgage insurance business at March 31, 2024 and December 31, 2023:

December 31,

	March 31, 2024		2023		
	Amount	%	Amount	%	
Credit quality (FICO):					
>=740	\$46,693	62.1	\$46,796	62.0	
680-739	24,827	33.0	24,990	33.1	
620-679	3,439	4.6	3,497	4.6	
<620	235	0.3	244	0.3	
Total	\$75,194	100.0	\$75,527	100.0	
Weighted average FICO score	748		748		
Loan-to-value (LTV):					
95.01% and above	\$ 7,005	9.3	\$ 7,067	9.4	
90.01% to 95.00%	44,742	59.5	44,669	59.1	
85.01% to 90.00%	20,352	27.1	20,490	27.1	
85.00% and below	3,095	4.1	3,301	4.4	
Total	\$75,194	100.0	\$75,527	100.0	
Weighted average LTV	93.1 %		93.0 %		
Total RIF, net of external reinsurance	\$ 57,882		\$58,146		

			December 31,			
	March 31,	2024	2023			
	Amount	%	Amount	%		
Total RIF by State:						
California	\$ 6,105	8.1	\$ 6,162	8.2		
Texas	5,859	7.8	5,972	7.9		
North Carolina	3,245	4.3	3,248	4.3		
Minnesota	3,056	4.1	3,069	4.1		
Georgia	3,043	4.0	3,081	4.1		
Illinois	2,979	4.0	2,986	4.0		
Florida	2,929	3.9	3,007	4.0		
Massachusetts	2,852	3.8	2,858	3.8		
Michigan	2,796	3.7	2,773	3.7		

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

(U.S. Dollars in thousands,	, Three Months Ended						
except policy, loan and claim count)		Mar	ch 3	L,			
,							
		2024		2023			
Roll-forward of insured							
loans in default:							
Beginning delinquent							
number of loans		19,457		20,567			
New notices		10,371		9,476			
Cures		(11,253)		(10,853)			
Paid claims		(306)		(215)			
Ending delinquent		·					
number of loans (1)		18,269		18,975			
Ending number of policie	:S						
in force (1)	1,	104,746	1,	147,081			
Delinquency rate (1)		1.65 %		1.65 %			
Losses:							
Number of claims paid		306		215			
Total paid claims	\$	10,785	\$	7,185			
Average per claim	\$	35.2	\$	33.4			
Severity (2)		78.6 %		81.8 %			
Average case reserve pe	r						
default (1)	\$	18.2	\$	23.0			
(1) Includes first lien primary and pool policies.							

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

The risk to capital ratio, which represents total current (non-delinquent) risk in force, net of reinsurance, divided by total statutory capital, for Arch MI U.S. was approximately 7 to 1 at March 31, 2024, compared to 7.3 to 1 at December 31, 2023.

Shareholders' Equity and Book Value per Share

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

			De	ecember
	M	arch 31,		31,
		2024		2023
Total shareholders' equity				
available to Arch	\$	19,355	\$	18,353

Less preferred shareholders'

Liquidity is a measure of our ability to access sufficient cash flows to meet the short-term and long-term cash requirements of our business operations.

Arch Capital is a holding company whose assets primarily consist of the shares in its subsidiaries. Generally, Arch Capital depends on its available cash resources, liquid investments and dividends or other distributions from its subsidiaries to make payments, including the payment of debt service obligations and operating expenses it may incur and any dividends or liquidation amounts with respect to our preferred and common shares.

For the three months ended March 31, 2024, Arch Capital received dividends of \$68 million from Arch Reinsurance Ltd. ("Arch Re Bermuda"), our Bermuda based reinsurer and insurer, which can pay approximately \$4.7 billion to Arch Capital during the remainder of 2024 without providing an affidavit to the Bermuda Monetary Authority.

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

Cash Flows

The following table summarizes our cash flows from operating, investing and financing activities:

	Three Months		
	Ended		
	Marc	h 31,	
	2024 2023		
Total cash provided by (used			
for):			
Operating activities	\$ 1,564	\$ 963	
Investing activities	(1,409)	(996)	
Financing activities	(42)	(30)	
Effects of exchange rate changes			
on foreign currency cash and			
restricted cash	(11)	5	

CAPITAL RESOURCES

The following table provides an analysis of our capital structure:

			December		
	М	arch 31,		31,	
		2024		2023	
Senior notes	\$	2,727	\$	2,726	
Shareholders' equity available to Arch:					
Series F non-cumulative preferred shares	\$	330	\$	330	
Series G non-cumulative preferred shares		500		500	
Common shareholders' equity		18,525		17,523	
Total	\$	19,355	\$	18,353	
Total capital available to Arch	\$	22,082	\$	21,079	
Debt to total capital (%)		12.3		12.9	
Preferred to total capital (%)		3.8		3.9	
Debt and preferred to total capital (%)		16.1		16.9	

Arch MI U.S. is required to maintain compliance with the GSEs requirements, known as the Private Mortgage Insurer Eligibility Requirements or "PMIERs." The financial requirements require an eligible mortgage insurer's available assets, which generally include only the most liquid assets of an insurer, to meet or exceed "minimum required assets" as of each quarter end. Minimum required assets are calculated from PMIERs tables with several risk dimensions (including origination year, original loan-tovalue and original credit score of performing loans, and the delinquency status of nonperforming loans) and are subject to a minimum amount. Arch MI U.S. satisfied the PMIERs' financial requirements with an estimated PMIER sufficiency ratio of 223% at March 31, 2024, compared to 213% at December 31, 2023.

Arch Capital, through its subsidiaries, provides financial support to certain of its insurance subsidiaries and affiliates, through certain reinsurance arrangements beneficial to the ratings of such subsidiaries. Historically, our insurance, reinsurance and mortgage insurance subsidiaries have

GUARANTOR INFORMATION

The below table provides a description of our senior notes payable at March 31, 2024:

	Interest	Principal		Carrying	
Issuer/Due	(Fixed)	A	Amount		Amount
Arch Capital:			_		
May 1, 2034	7.350 %	\$	300	\$	298
June 30, 2050	3.635 %		1,000		989
Arch-U.S.:					
Nov. 1, 2043					
(1)	5.144 %		500		495
Arch Finance:					
Dec. 15, 2026					
(1)	4.011 %		500		499
Dec. 15, 2046					
(1)	5.031 %		450		446
Total		\$	2,750	\$	2,727

(1) Fully and unconditionally guaranteed by Arch Capital. Our senior notes were issued by Arch Capital, Arch Capital Group (U.S.) Inc. ("Arch-U.S.") and Arch Capital Finance LLC ("Arch Finance"). Arch-U.S. is a wholly-owned subsidiary of Arch Capital and Arch Finance is a wholly-owned finance subsidiary of Arch-U.S. Our 2034 senior notes and 2050 senior notes issued by Arch Capital are unsecured and unsubordinated obligations of Arch Capital and ranked equally with all of its existing and future unsecured and unsubordinated indebtedness. The 2043 senior notes issued by Arch-U.S. unsecured and unsubordinated obligations of Arch-U.S. and Arch Capital and rank equally and ratably with the other unsecured and unsubordinated indebtedness of Arch-U.S. and Arch Capital. The 2026 senior notes and 2046 senior notes issued by Arch Finance unsecured and unsubordinated are obligations of Arch Finance and Arch Capital and rank equally and ratably with the other unsecured and unsubordinated indebtedness of Arch Finance and Arch Capital.

Arch-U.S. and Arch Finance depend on their available cash resources, liquid investments and dividends or other distributions from their subsidiaries or affiliates to make payments, including the payment of debt service obligations and operating expenses they may incur.

The following tables present condensed financial information for Arch Capital (parent guarantor) and Arch-U.S. (subsidiary issuer):

	March 31, 2024				
		Arch Capital	Arch-U.S.		
Assets					
Total investments	\$	14	\$	80	
Cash		48		5	
Investment in operating affiliates		4		_	
Due from subsidiaries and					
affiliates		4		_	
Other assets		59		66	
Total assets	\$	129	\$	151	
Liabilities					
Senior notes		1,287		495	
Due to subsidiaries and					
affiliates		43		1,005	
Other liabilities		40		54	
Total liabilities	\$	1,370	\$	1,554	
Non-cumulative preferred shares	\$	830		_	

	——————————————————————————————————————				
		Arch Capital	Arch-U.S.		
Assets					
Total investments	\$	17	\$	145	
Cash		9		5	
Investment in operating affiliates		4		_	
Due from subsidiaries and					
affiliates		_		_	
Other assets		58		56	
Total assets	\$	88	\$	206	
Liabilities					
Senior notes		1,287		495	
Due to subsidiaries and					
affiliates		_		993	
Other liabilities		38		42	
T. 11. 1.99	¢	1 225	ф	1 520	

December 31, 2023

	Three Months Ended			Year Ended				
	Ma	arch 3	1, :	2024	December 31, 2023			
		rch pital	Α	rch- J.S.	Arch Capital		Arch- U.S.	
Revenues								
Net investment income	\$	1	\$	2	\$	2	\$	4
Equity in net income (loss) of investments accounted for using								
the equity method				(1)				(2)
Total revenues		1		1		2		2
Expenses								
Corporate expenses		46		4		93		9
Interest expense		15		6		59		26
Interest expense (intercompany)		_		13		_		51
Total expenses		61		23		152		86
Income (loss) before income taxes and income (loss) from operating affiliates		(60)		(22)		(150)		(84)
Income tax		(00)		(22)	,	(130)		(04)
(expense) benefit		_		3		41		19
Income (loss) from operating affiliates						(1)		_
Net income								
available to Arch		(60)	_	(19)		(110)	_	(65)
Preferred dividends		(10)		_		(40)		_
Net income (loss) available to Arch common shareholders	\$	(70)	\$	(19)	\$ ((150)	\$	(65)

CATASTROPHIC AND SEVERE ECONOMIC EVENTS

We have large aggregate exposures to natural and man-made catastrophic events, pandemic events like COVID-19 and severe economic events. Natural catastrophes can be caused by various events, including hurricanes, floods, windstorms, earthquakes, hailstorms, tornadoes, explosions, severe winter weather, fires, droughts and other natural disasters. Man-made catastrophic

Based on in-force exposure estimated as of April 1, 2024, our modeled peak zone catastrophe exposure was a windstorm affecting the Florida Tri-County regions, with a net probable maximum pre-tax loss of \$1.7 billion, or 9% of tangible shareholders' equity available to Arch, followed by windstorms affecting the Northeastern U.S. regions and the Gulf of Mexico with net probable maximum pre-tax losses of \$1.5 billion and \$1.3 billion, respectively. Our exposures to other perils, such as U.S. earthquake and international events, were less than the exposures arising from U.S. windstorms and hurricanes. As of April 1, 2024, our modeled peak zone earthquake (San Francisco earthquake) exposure represented approximately 57% of our peak catastrophe exposure, zone and our modeled peak zone international exposure (Japan earthquake) was substantially less than both our peak zone windstorm and earthquake exposures.

We also have significant exposure to losses due to mortgage defaults resulting from severe economic events in the future. For our U.S. mortgage insurance business, we have developed a proprietary risk model ("Realistic Disaster Scenario" or "RDS") that simulates the maximum loss resulting from a severe economic downturn impacting the housing market. The RDS models the collective impact of adverse conditions for key economic indicators, the most significant of which is a decline in home prices. The RDS model projects paths of future home prices, unemployment rates, income levels and interest rates and assumes correlation across states and geographic regions. The resulting future performance of our in-force portfolio is then estimated under the economic stress scenario, reflecting loan and borrower information.

Currently, we seek to limit our modeled RDS loss from a severe economic event to approximately 25% of tangible shareholders' equity available to Arch. We reserve the right to change this threshold at any time. Based on in-force exposure estimated as of April 1, 2024, our modeled RDS loss was approximately \$1.1 billion, or 6% of tangible shareholders' equity available to Arch.

Net probable maximum loss estimates are net of expected reinsurance recoveries, before income tax and before excess

factors. These factors include the inherent uncertainties in estimating the frequency and severity of such events and the margin of error in making such determinations resulting from potential inaccuracies and inadequacies in the data provided by clients and brokers, the modeling techniques and the application of such techniques or as a result of a decision to change the percentage of shareholders' equity exposed to a single catastrophic event or severe economic event. In addition, actual losses may increase if our reinsurers fail to meet their obligations to us or the reinsurance protections purchased by us are exhausted or are otherwise unavailable. See "Risk Factors—Risks Relating to Our Industry" and "Management's Discussion and Analysis of Financial Condition and Results of Operations —Catastrophic Events and Severe Economic Events" in our 2023 Form 10-K.

MARKET SENSITIVE INSTRUMENTS AND RISK MANAGEMENT

In accordance with the SEC's Financial Reporting Release No. 48, we performed a sensitivity analysis to determine the effects that market risk exposures could have on the future earnings, fair values or cash flows of our financial instruments as of March 31, 2024. Market risk represents the risk of changes in the fair value of a financial instrument and is comprised of several components, including liquidity, basis and price risks.

An analysis of material changes in market risk exposures at March 31, 2024 that affect the quantitative and qualitative disclosures presented in our 2023 Form 10-K (see section captioned "Management's Discussion and Analysis of Financial Condition and Results of Operations—Market Sensitive Instruments and Risk Management") were as follows:

Investment Market Risk

Fixed Income Securities. We invest in interest rate sensitive securities, primarily debt securities. We consider the effect of interest rate movements on the fair value of our fixed maturities, short-term investments and certain of our other investments, equity securities and investment funds accounted for using the equity method which invest in

The following table summarizes the effect that an immediate, parallel shift in the interest rate yield curve would have had on our Fixed Income Securities:

(U.S. dollars in	Interest Rate Shift in Basis Points						
billions)							
	-100	-50		+50	+100		
March 31, 202	4						
Total fair value	\$34.5	\$34.0	\$33.6	\$33.2	\$32.7		
Change from base	2.7 %	1.3 %		(1.3)%	(2.6)%		
Change in unrealized value	\$ 0.9	\$ 0.4		\$ (0.4)	\$ (0.9)		
December 31,	2023						
Total fair value	\$33.6	\$33.1	\$32.7	\$32.2	\$31.7		
Change from base	3.0 %	1.5 %		(1.4)%	(2.8)%		
Change in unrealized value	\$ 1.0	\$ 0.5		\$ (0.5)	\$ (0.9)		

In addition, we consider the effect of credit spread movements on the market value of our Fixed Income Securities and the corresponding change in unrealized value. As credit spreads widen, the fair value of our Fixed Income Securities falls, and the converse is also true. In periods where the spreads on our Fixed Income Securities are much higher than their historical average due to short-term market dislocations, a parallel shift in credit spread levels would result in a much more pronounced change in unrealized value.

The following table summarizes the effect that an immediate, parallel shift in credit spreads in a static interest rate environment would have had on our Fixed Income Securities:

(U.S. dollars in billions) Credit Spread Shift in Percentage Points

	-100	-50		+50	+100
March 31, 202	24				
Total fair value	\$34.8	\$34.2	\$33.6	\$33.0	\$32.5
Change from					
base	3.4 %	1.7 %		(1.7)%	(3.4)%
Change in unrealized					
value	\$ 1.1	\$ 0.6		\$ (0.6)	\$(1.1)

recent data points are generally given more weight. As of March 31, 2024, our portfolio's 95th percentile VaR was estimated to be 6.3%, compared to an estimated 7.8% at December 31, 2023. In periods where the volatility of the risk factors mapped to our portfolio's exposures is higher due to market conditions, the resulting VaR is higher than in other periods.

Equity Securities. At March 31, 2024 and December 31, 2023, the fair value of our investments in equity securities and certain investments accounted for using the equity method with underlying equity strategies totaled \$1.3 billion and \$1.0 billion, respectively. These investments are exposed to price risk, which is the potential loss arising from decreases in fair value. An immediate hypothetical 10% decline in the value of each position would reduce the fair value of such investments by approximately \$134 million and \$101 million at March 31, 2024 and December 31, 2023, respectively, and would have decreased book value per share by approximately \$0.36 and \$0.27, respectively. An immediate hypothetical 10% increase in the value of each position would increase the fair value of such investments by approximately \$134 million and \$101 million at March 31, 2024 and December 31, 2023, respectively, and would increased book value per share approximately \$0.36 and \$0.27, respectively.

Investment-Related Derivatives. Αt March 31, 2024, the notional value of all derivative instruments (excluding foreign currency forward contracts which included in the foreign currency exchange risk analysis below) was \$3.4 billion, compared to \$4.2 billion at December 31, 2023. If the underlying exposure of each investment-related derivative held March 31, 2024 depreciated by 100 basis points, it would have resulted in a reduction in net income of approximately \$34 million, and a decrease in book value per share of approximately \$0.09 per share, compared to \$42 million and \$0.11 per share, respectively, on investment-related derivatives held at December 31, 2023. If the underlying exposure of each investmentrelated derivative held at March 31, 2024 appreciated by 100 basis points, it would have resulted in an increase in net income of approximately \$34 million, and an increase

Foreign Currency Exchange Risk

Foreign currency rate risk is the potential change in value, income and cash flow arising from adverse changes in foreign currency exchange rates. Through our subsidiaries and branches located in various foreign countries, we conduct our insurance and reinsurance operations in a variety of local currencies other than the U.S. Dollar. We generally hold investments in foreign currencies which are intended to mitigate our exposure to foreign currency fluctuations in our net insurance liabilities. We may also utilize foreign currency forward contracts and currency options as part of our investment strategy. See note 9, "Derivative Instruments," to our consolidated financial statements for additional information.

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

			De	ecember
	Ma	arch 31,		31,
		2024	_	2023
Net assets (liabilities),				
denominated in foreign				
currencies, excluding				
shareholders' equity and derivatives	\$	(377)	\$	(300)
	Þ	(377)	Þ	(300)
Shareholders' equity				
denominated in foreign currencies (1)		1,134		1,158
Net foreign currency forward		1,13.		1,150
contracts outstanding (2)		266		246
Net exposures denominated				
in foreign currencies	\$	1,023	\$	1,104
Pre-tax impact of a				
hypothetical 10% appreciation				
of the U.S. Dollar against				
foreign currencies:				
Shareholders' equity	\$	(102)	\$	(110)
Book value per share	\$	(0.27)	\$	(0.30)
Pre-tax impact of a				
hypothetical 10% decline of				
the U.S. Dollar against foreign				
currencies:				
Shareholders' equity	\$	102	\$	110
Shareholders equity				

(1) Represents capital contributions held in the foreign

Effects of Inflation

General economic inflation has increased in recent quarters and may continue to remain at elevated levels for an extended period of time. The potential also exists, after a catastrophe loss or pandemic events like COVID-19, for the development inflationary pressures in a local economy. This may have a material effect on the adequacy of our reserves for losses and loss adjustment expenses, especially in longertailed lines of business, and on the market value of our investment portfolio through rising interest rates. The anticipated effects of inflation are considered in our pricing models, reserving processes and exposure management, across all lines of business types of loss including natural catastrophe events. The actual effects of inflation on our results cannot be accurately known until claims are ultimately settled and will vary by the specific type of inflation affecting each line of business.

ITEM 3. QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK

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

ITEM 4. CONTROLS AND PROCEDURES

Evaluation of Disclosure Controls and Procedures

In connection with the filing of this Form 10-Q, our management, including the Chief Executive Officer and Chief Financial Officer, conducted an evaluation of the Company's disclosure controls and procedures, as of the end of the period covered by this report, for the purposes set forth in the applicable rules under the Securities and Exchange Act of 1934, as amended (the "Exchange Act"). Based on that evaluation, the Chief Executive Officer and Chief Financial Officer

Our management does not expect that our disclosure controls or our internal controls will prevent all errors and all fraud. A control system, no matter how well conceived and operated, can provide only reasonable, not absolute, assurance that the objectives of the control system are met. Further, the design of a control system must reflect the fact that there are resource constraints, and the benefits of controls must be considered relative to their costs. As a result of the inherent limitations in all control systems, no evaluation of controls can provide absolute assurance that all control issues and instances of fraud, if any, within the have been detected. These company inherent limitations include the realities that judgments in decision-making can be faulty, and that breakdowns can occur because of a simple error or mistake. Additionally, controls can be circumvented by the individual acts of some persons or by collusion of two or more people. The design of any system of controls also is based in part upon certain assumptions about the likelihood of future events, and there can be no assurance that any design will succeed in achieving its stated goals under all potential future conditions; over time, controls may become inadequate because of changes in conditions, or the degree of compliance with the policies or procedures may deteriorate. As a result of the inherent limitations in a cost-effective control system, misstatement due to error or fraud may occur and not be detected. Accordingly, our disclosure controls and procedures are designed to provide reasonable, not absolute, assurance that the disclosure controls and procedures are met.

Changes in Internal Control Over Financial Reporting

There have been no changes in internal control over financial reporting that occurred during the quarter ended March 31, 2024 that have materially affected, or are reasonably likely to materially affect, internal control over financial reporting.

PART II. OTHER INFORMATION

ITEM 1. LEGAL PROCEEDINGS

We, in common with the insurance industry in general, are subject to litigation and

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

Issuer's Repurchases of Equity Securities

The following table summarizes our purchases of common shares for the 2024 first quarter:

	Total Number of Shares	Ave	erage Price Paid	Total Number of Shares Purchased as Part of Publicly Announced	V	proximate Dollar Value of Shares that May Yet be Purchased nder the Plan or ograms (\$000's)
Period	Purchased (1)		per Share	Plans or Programs		(2)
1/1/2024-1/31/2024	13,869	\$	79.28	_	\$	1,000,000
2/1/2024-2/29/2024	290,808		87.15	_	\$	1,000,000
3/1/2024-3/31/2024	124,621		87.59		\$	1,000,000
Total	429,298	\$	87.02			

- (1) This column represents (in whole shares) open market share repurchases, including an aggregate of 13,869, 290,808 and 124,621 shares repurchased by Arch Capital during January, February and March, respectively, other than through publicly announced plans or programs. We repurchased these shares from employees in order to facilitate the payment of withholding taxes on restricted shares granted and the exercise of stock appreciation rights, in each case at their fair value as determined by reference to the closing price of our common shares on the day the restricted shares vested or the stock appreciation rights were exercised.
- (2) This column represents the remaining approximate dollar amount available at the end of each applicable period under Arch Capital's \$1.0 billion share repurchase authorization, authorized by the Board of Directors of ACGL on December 19, 2022. Repurchases may be effected from time to time in open market or privately negotiated transactions through December 31, 2024.

ITEM 3. DEFAULTS UPON SENIOR SECURITIES

None.

ITEM 4. MINE SAFETY DISCLOSURES

Not applicable.

ITEM 5. OTHER INFORMATION

During the three months ended March 31, 2024, none of the Company's directors or officers (as defined in Rule 16a-1(f) of the Securities Exchange Act of 1934) adopted or terminated a Rule 10b5-1 trading arrangement or non-Rule 10b5-1 trading arrangement (as such terms are defined in Item 408 of Regulation S-K of the Securities Act of 1933).

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ITEM 6. EXHIBITS

		Incorporated by Reference		_	
Exhibit			Original		Filed
Number	Exhibit Description	Form	Number	Date Filed	Herewith
31.1	Certification of Chief Executive Officer pursuant to				X
	Section 302 of the Sarbanes-Oxley Act of 2002				
31.2	Certification of Chief Financial Officer pursuant to				Χ
	Section 302 of the Sarbanes-Oxley Act of 2002				
32.1	Certification of Chief Executive Officer pursuant to				Χ
	Section 906 of the Sarbanes-Oxley Act of 2002				
32.2	Certification of Chief Financial Officer pursuant to				Χ
	Section 906 of the Sarbanes-Oxley Act of 2002				
101.INS	XBRL Instance Document				
101.SCH	XBRL Taxonomy Extension Schema Document				
101.CAL	XBRL Taxonomy Extension Calculation Linkbase Document				
101.DEF	XBRL Taxonomy Extension Definition Linkbase Document				
101.LAB	XBRL Taxonomy Extension Label Linkbase Document				
101.PRE	XBRL Taxonomy Extension Presentation Linkbase				
	Document				
104	Cover Page Interactive Data File (embedded within the Inline XBRL document)				

SIGNATURES

Pursuant to the requirements of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned thereunto duly authorized.

ARCH	CAPITAL	GROUP	LTD.
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(REGISTRANT)

/s/ Marc Grandisson

Date: May 9, 2024 Marc Grandisson

Chief Executive Officer (Principal Executive

Officer)

/s/ François Morin

Date: May 9, 2024 François Morin

Executive Vice President, Chief Financial Officer (Principal Financial and Accounting Officer) and

Treasurer

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