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 June 30, 2023

OR

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

Commission File Number 1-11848

REINSURANCE GROUP OF AMERICA, INCORPORATED
(Exact name of Registrant as specified in its charter)

Missouri	**43-1627032**
(State or other jurisdiction of incorporation or organization)	**(IRS employer identification number)**

16600 Swingley Ridge Road
Chesterfield, Missouri 63017
(Address of principal executive offices)
(636) 736-7000
(Registrant’s telephone number, including area code)

Indicate by check mark whether the registrant (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days.

Yes x **No** o

Indicate by check mark whether the registrant has submitted electronically every Interactive Data File required to be submitted and posted pursuant to Rule 405 of Regulation S-T (§232.405 of this chapter) during the preceding 12 months (or for such shorter period that the registrant was required to submit and post such files).

Yes ☒ **No** o

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, 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 x **Accelerated filer** o **Non-accelerated filer** o

Smaller reporting company ☐ **Emerging growth company** ☐

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. ☐

Indicate by check mark whether the registrant is a shell company (as defined in Rule 12b-2 of the Act). Yes ☐ **No** ☒

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

Title of each class	Trading Symbol(s)	Name of each exchange on which registered
Common Stock, par value $0.01	RGA	New York Stock Exchange
5.75% Fixed-To-Floating Rate Subordinated Debentures due 2056	RZB	New York Stock Exchange
7.125% Fixed Rate Subordinated Debentures due 2052	RZC	New York Stock Exchange

As of July 31, 2023, 66,211,799 shares of the registrant’s common stock were outstanding.

REINSURANCE GROUP OF AMERICA, INCORPORATED AND SUBSIDIARIES

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PART I – FINANCIAL INFORMATION

REINSURANCE GROUP OF AMERICA, INCORPORATED AND SUBSIDIARIES
CONDENSED CONSOLIDATED BALANCE SHEETS
(in millions, except share data)
(Unaudited)

	June 30, 2023	December 31, 2022
Assets		
Fixed maturity securities available-for-sale, at fair value (amortized cost of $62,185 and $59,663; allowance for credit losses of $75 and $37)	$ 56,236	$ 52,901
Equity securities, at fair value	136	134
Mortgage loans (net of allowance for credit losses of $57 and $51)	7,038	6,590
Policy loans	1,202	1,231
Funds withheld at interest	5,862	6,003
Limited partnerships and real estate joint ventures	2,473	2,327
Short-term investments	224	154
Other invested assets	1,119	1,140
Total investments	74,290	70,480
Cash and cash equivalents	2,598	2,927
Accrued investment income	702	630
Premiums receivable and other reinsurance balances	3,321	3,013
Reinsurance ceded receivables and other	2,664	2,671
Deferred policy acquisition costs	4,286	4,128
Other assets	1,179	1,055
Total assets	$ 89,040	$ 84,904
Liabilities and equity		
Future policy benefits	$ 38,239	$ 35,689
Interest-sensitive contract liabilities	29,910	30,342
Market risk benefits, at fair value	235	247
Other policy claims and benefits	2,579	2,480
Other reinsurance balances	858	725
Deferred income taxes	1,424	1,383
Other liabilities	3,050	2,906
Long-term debt	4,850	3,961
Total liabilities	81,145	77,733
Commitments and contingent liabilities (See Note 16)		
Equity		
Preferred stock – par value $0.01 per share, 10,000,000 shares authorized, no shares issued or outstanding	—	—
Common stock – par value $0.01 per share, 140,000,000 shares authorized, 85,310,598 shares issued at June 30, 2023 and December 31, 2022	1	1
Additional paid-in-capital	2,522	2,502
Retained earnings	8,483	8,169
Treasury stock, at cost – 19,098,799 and 18,634,390 shares	(1,803)	(1,720)
Accumulated other comprehensive income (loss)	(1,398)	(1,871)
Total RGA, Inc. shareholders' equity	7,805	7,081
Noncontrolling interest	90	90
Total equity	7,895	7,171
Total liabilities and shareholders' equity	$ 89,040	$ 84,904

See accompanying notes to condensed consolidated financial statements (unaudited).

REINSURANCE GROUP OF AMERICA, INCORPORATED AND SUBSIDIARIES
CONDENSED CONSOLIDATED STATEMENTS OF INCOME
(in millions, except per share amounts)
(Unaudited)

	Three months ended June 30,		Six months ended June 30,	
	2023	2022	2023	2022
Revenues				
Net premiums	$ 3,337	$ 3,230	$ 6,722	$ 6,385
Net investment income	857	754	1,713	1,564
Investment related gains (losses), net	(123)	(240)	(200)	(379)
Other revenues	85	159	172	250
Total revenues	4,156	3,903	8,407	7,820
Benefits and expenses				
Claims and other policy benefits	3,013	2,938	6,076	5,809
Future policy benefits remeasurement (gains) losses	13	18	(13)	76
Market risk benefits remeasurement (gains) losses	(31)	40	(17)	6
Interest credited	209	138	424	279
Policy acquisition costs and other insurance expenses	349	336	680	680
Other operating expenses	275	242	525	469
Interest expense	63	44	116	87
Total benefits and expenses	3,891	3,756	7,791	7,406
Income before income taxes	265	147	616	414
Provision for income taxes	58	41	156	111
Net income	207	106	460	303
Net income attributable to noncontrolling interest	2	1	3	1
Net income available to RGA, Inc. shareholders	$ 205	$ 105	$ 457	$ 302
Earnings per share				
Basic earnings per share	$ 3.09	$ 1.57	$ 6.86	$ 4.50
Diluted earnings per share	$ 3.05	$ 1.55	$ 6.77	$ 4.46

See accompanying notes to condensed consolidated financial statements (unaudited).

REINSURANCE GROUP OF AMERICA, INCORPORATED AND SUBSIDIARIES
CONDENSED CONSOLIDATED STATEMENTS OF COMPREHENSIVE INCOME
(in millions)
(Unaudited)

	Three months ended June 30,		Six months ended June 30,	
	2023	2022	2023	2022
Comprehensive income (loss)				
Net income	$ 207	$ 106	$ 460	$ 303
Other comprehensive income (loss), net of tax:				
Foreign currency translation adjustments	120	(5)	142	16
Net unrealized investment gains (losses)	(486)	(3,539)	617	(7,328)
Effect of updating discount rates on future policy benefits	426	2,917	(295)	6,331
Change in instrument-specific credit risk for market risk benefits	(1)	2	—	(2)
Defined benefit pension and postretirement plan adjustments	4	(1)	9	(1)
Total other comprehensive income (loss), net of tax	63	(626)	473	(984)
Total comprehensive income (loss)	270	(520)	933	(681)
Comprehensive income attributable to noncontrolling interest	2	1	3	1
Total comprehensive income (loss) attributable to RGA, Inc.	$ 268	$ (521)	$ 930	$ (682)

See accompanying notes to condensed consolidated financial statements (unaudited).

REINSURANCE GROUP OF AMERICA, INCORPORATED AND SUBSIDIARIES
CONDENSED CONSOLIDATED STATEMENTS OF EQUITY
(in millions except per share amounts)
(Unaudited)

	Three months ended June 30, 2023 and 2022							
	Common Stock	Additional Paid In Capital	Retained Earnings	Treasury Stock	Accumulated Other Comprehensive Income (Loss)	Total RGA, Shareholders' Equity	Noncontrolling Interest	Total Equity
Balance, March 31, 2023	$ 1	$ 2,506	$ 8,336	$ (1,756)	$ (1,461)	$ 7,626	$ 90	$ 7,716
Change in equity of noncontrolling interest							(2)	(2)
Net income			205			205	2	207
Total other comprehensive income (loss)					63	63		63
Dividends to shareholders, $0.80 per share			(54)			(54)		(54)
Purchase of treasury stock				(52)		(52)		(52)
Reissuance of treasury stock		16	(4)	5		17		17
Balance, June 30, 2023	$ 1	$ 2,522	$ 8,483	$ (1,803)	$ (1,398)	$ 7,805	$ 90	$ 7,895
Balance, March 31, 2022	$ 1	$ 2,465	$ 8,014	$ (1,675)	$ (858)	$ 7,947	$ 90	$ 8,037
Change in equity of noncontrolling interest							(1)	(1)
Net income			105			105	1	106
Total other comprehensive income (loss)					(626)	(626)		(626)
Dividends to shareholders, $0.73 per share			(49)			(49)		(49)
Purchase of treasury stock						—		—
Reissuance of treasury stock		13	(3)	2		12		12
Balance, June 30, 2022	$ 1	$ 2,478	$ 8,067	$ (1,673)	$ (1,484)	$ 7,389	$ 90	$ 7,479

	Six months ended June 30, 2023 and 2022							
	Common Stock	Additional Paid In Capital	Retained Earnings	Treasury Stock	Accumulated Other Comprehensive Income (Loss)	Total RGA, Inc. Shareholders' Equity	Noncontrolling Interest	Total Equity
Balance, December 31, 2022	$ 1	$ 2,502	$ 8,169	$ (1,720)	$ (1,871)	7,081	$ 90	$ 7,171
Change in equity of noncontrolling interest							(3)	(3)
Net income			457			457	3	460
Total other comprehensive income (loss)					473	473		473
Dividends to shareholders, $1.60 per share			(107)			(107)		(107)
Purchase of treasury stock				(119)		(119)		(119)
Reissuance of treasury stock		20	(36)	36		20		20
Balance, June 30, 2023	$ 1	$ 2,522	$ 8,483	$ (1,803)	$ (1,398)	$ 7,805	$ 90	$ 7,895
Balance, December 31, 2021	$ 1	$ 2,461	$ 7,871	$ (1,653)	$ (500)	8,180	$ —	$ 8,180
Issuance of preferred interests by subsidiary							90	90
Change in equity of noncontrolling interest							(1)	(1)
Net income			302			302	1	303
Total other comprehensive income (loss)					(984)	(984)		(984)
Dividends to shareholders, $1.46 per share			(98)			(98)		(98)
Purchase of treasury stock				(27)		(27)		(27)
Reissuance of treasury stock		17	(8)	7		16		16
Balance, June 30, 2022	$ 1	$ 2,478	$ 8,067	$ (1,673)	$ (1,484)	$ 7,389	$ 90	$ 7,479

See accompanying notes to condensed consolidated financial statements (unaudited).

REINSURANCE GROUP OF AMERICA, INCORPORATED AND SUBSIDIARIES
CONDENSED CONSOLIDATED STATEMENTS OF CASH FLOWS
(in millions)
(Unaudited)

	Six months ended June 30,	
	2023	2022
Net cash provided by operating activities	$ 1,818	$ 242
Cash flows from investing activities		
Sales of fixed maturity securities available-for-sale	3,420	6,018
Purchases of fixed maturity securities available-for-sale	(5,999)	(9,278)
Maturities of fixed maturity securities available-for-sale	454	419
Sales of equity securities	1	4
Purchases of equity securities	(4)	(5)
Principal payments on mortgage loans	167	552
Cash invested in mortgage loans	(640)	(834)
Net change in policy loans	29	16
Cash invested in funds withheld at interest, net	195	(4)
Sales of limited partnerships and real estate joint ventures	231	509
Purchases of limited partnerships and real estate joint ventures	(295)	(315)
Change in short-term investments	(67)	(200)
Change in other invested assets	32	(88)
Purchases of property and equipment	(12)	(12)
Proceeds from sale of businesses, net of cash transferred of $1	—	7
Net cash used in investing activities	(2,488)	(3,211)
Cash flows from financing activities		
Dividends to shareholders	(107)	(98)
Repayment of collateral finance and securitization notes	—	(29)
Proceeds from long-term debt issuance	900	—
Debt issuance costs	(10)	—
Principal payments of long-term debt	(2)	(2)
Purchases of treasury stock	(119)	(27)
Change in cash collateral for derivative positions and other arrangements	(24)	143
Change in deposit asset on reinsurance	24	(32)
Deposits on investment-type policies and contracts	1,449	3,424
Withdrawals on investment-type policies and contracts	(1,743)	(783)
Net change in noncontrolling interest	—	89
Net cash provided by financing activities	368	2,685
Effect of exchange rate changes on cash	(27)	(108)
Change in cash and cash equivalents	(329)	(392)
Cash and cash equivalents, beginning of period	2,927	2,948
Cash and cash equivalents, end of period	$ 2,598	$ 2,556
Supplemental disclosures of cash flow information		
Interest paid	$ 97	$ 72
Income taxes paid, net of refunds	$ 161	$ 119
Non-cash investing activities		
Transfer of invested assets	$ 698	$ 494
Sale of businesses:		
Assets disposed, net of cash transferred	$ —	$ (6)
Liabilities disposed	$ —	$ 1

See accompanying notes to condensed consolidated financial statements (unaudited).

REINSURANCE GROUP OF AMERICA, INCORPORATED AND SUBSIDIARIES
Notes to Condensed Consolidated Financial Statements
(Unaudited)

NOTE 1 BUSINESS AND BASIS OF PRESENTATION

Business

Reinsurance Group of America, Incorporated ("RGA") is an insurance holding company that was formed on December 31, 1992. RGA and its subsidiaries (collectively, the "Company") is engaged in providing traditional reinsurance, which includes individual and group life and health, disability and critical illness reinsurance. The Company also provides financial solutions, which includes longevity reinsurance, asset-intensive products (primarily annuities), financial reinsurance, capital solutions and stable value products.

Basis of Presentation

The unaudited condensed consolidated financial statements of the Company have been prepared in conformity with accounting principles generally accepted in the United States of America ("GAAP") for interim financial information and with the instructions to Form 10-Q and Article 10 of Regulation S-X of the Securities and Exchange Commission ("SEC"). Accordingly, these condensed consolidated financial statements do not include all of the information and footnotes required by GAAP for complete financial statements and should be read in conjunction with the Company's 2022 Annual Report on Form 10-K filed with the SEC on February 24, 2023 (the "2022 Annual Report").

In the opinion of management, all adjustments, including normal recurring adjustments necessary for a fair presentation have been included. Interim results are not necessarily indicative of the results that may be expected for the year ending December 31, 2023.

Consolidation

These unaudited condensed consolidated financial statements include the accounts of RGA and its subsidiaries and all intercompany accounts and transactions have been eliminated. Entities in which the Company has significant influence over the operating and financing decisions but are not required to be consolidated are reported under the equity method of accounting.

Standards Issued and Implemented

In the first quarter of 2023, the Company adopted Accounting Standards Update ("ASU"): ASU 2018-12, *Financial Services – Insurance (Topic 944): Targeted Improvements to the Accounting for Long-Duration Contracts ("ASU 2018-12").* ASU 2018-12 updates certain requirements for the accounting for long-duration insurance contracts.

- *Cash flow assumptions and measuring liability for future policy benefits* – ASU 2018-12 requires the Company to review its cash flow assumptions at least annually and update, if necessary, with the impact recognized in net income in the period of the change. The liability for future policy benefits includes required adjustments at the cohort level to cap the net premium ratio at 100% and eliminate negative reserves.

  Upon adoption, an adjustment was recorded to retained earnings as a result of capping the net premium ratio at 100% and eliminating negative reserves on certain issue year cohorts.

- *Discount rat*e – The discount rate assumption is prescribed by ASU 2018-12 as an upper-medium (low credit risk) fixed-income yield and is required to be updated every quarter. The change in the liability as a result of updating the discount rate assumption is recognized in other comprehensive income (loss) ("OCI").

  Upon adoption, an adjustment was recorded to accumulated other comprehensive income (loss) ("AOCI") as a result of remeasuring in force contract liabilities using the current upper-medium grade fixed income instrument yields as of the date of transition. The adjustment reflects the difference between discount rates locked-in at contract inception versus current discount rates at transition.

- *Deferred policy acquisition costs and similar balances* – Deferred policy acquisition costs ("DAC") and other capitalized costs such as unearned revenue should be amortized on a constant level or straight-line basis over the expected term of the contracts.

  Upon adoption, an adjustment was recorded to AOCI for the removal of cumulative adjustments to DAC associated with unrealized investment gains and losses previously recorded in accumulated other comprehensive income (loss).

- *Market risk benefits* – Market risk benefits, which are contracts or contract features that provide protection to the policyholder from capital market risk and expose the Company to other-than-nominal capital market risk, are measured at fair value. The periodic change in fair value is recognized in net income with the exception of the periodic change in fair value related to the liability's instrument-specific credit risk, which is recognized in OCI.

Upon adoption, an adjustment was recorded to retained earnings for the difference between the fair value and carrying value of the contracts at the transition date, excluding changes in the instrument-specific credit risks, and an adjustment to AOCI for the cumulative effect of changes in the instrument-specific credit risk between contract issue date and transition date.

Change in Certain Segment Allocations

Investment income for each segment has been adjusted to reflect the impacts of adopting ASU 2018-12 and due to an update to the Company's internally developed economic capital model. Internal excess capital charges, included in each segment's policy acquisition costs and other insurance expenses, were also updated as a result of adopting ASU 2018-12 and updates to the Company's internally developed economic capital model. These changes did not impact the recognition or presentation of investment income or policy acquisition costs and other insurance expenses in the condensed consolidated financial statements.

Significant Accounting Polices – Update

The Company's significant accounting policies are discussed in Note 2 – "*Significant Accounting Policies and Pronouncements*" of the 2022 Annual Report. The significant accounting policies discussed below have been updated to reflect the impact of adopting ASU 2018-12.

Liability for Future Policy Benefits
Utilizing the net premium model, a liability for future policy benefits for life and long-term health business is established to meet the estimated future benefits to be paid on assumed life and health reinsurance in force less the present value of estimated future new premiums to be collected. The liability is estimated using the Company's mortality, morbidity, and persistency assumptions that reflect the Company's historical experience, industry data, cedant specific experience, and discount rates based on the current yields of upper-medium grade fixed income instruments. These assumptions vary with the characteristics of the reinsurance contract, the year the risk was assumed, age of the insured and other appropriate factors. The Company reviews actual and anticipated experience compared to the assumptions used to establish policy benefits on a quarterly basis and will update those assumptions if evidence suggests that they should be revised. The Company expects to complete its annual review and any necessary updates of cash flow assumptions used to calculate the liability for future policy benefits during the third quarter of each year. Updates may occur in other quarters if information becomes available during the quarter that indicates an assumption update is necessary.

Liabilities for future benefits for annuities in the payout phase have been established in an amount adequate to meet the estimated future obligations on policies in force using expected mortality, discount rates and other assumptions. These assumptions vary with the characteristics of the plan of insurance, year of issue, age of insured, and other appropriate factors. The mortality assumptions are based on the Company's historical experience, industry data and cedant specific experience.

A deferred profit liability is established when the insurance benefit extends beyond the period in which premiums are collected, and the gross premium exceeds the net premium. The deferred profit liability is amortized in proportion to insurance in force for traditional life insurance and expected future benefits for annuity contracts. The deferred profit liability is included in the liabilities for future policy benefits, and the amortization of the deferred profit liability is recognized as a reduction in claims and other policy benefits.

For the purpose of calculating the liability for future policy benefits, the Company's reinsurance contracts for its Traditional business are grouped into annual cohorts based on the effective date of the reinsurance contract. The annual groupings are further disaggregated based on:

- How the reinsurance contracts are priced and managed;
- Geographical locations;
- Underlying currency of the contract;
- Ceding company and other factors.

Given the unique risks and highly customized nature of the Company's financial solutions business, reinsurance contracts for the Financial Solutions business are not aggregated with other contracts for the purpose of calculating the liability for future policy benefits.

Each quarter, the Company updates its estimate of cash flows expected over the entire life of a group of contracts using actual historical experience and current future cash flow assumptions. These updated cash flows, discounted using the original contract issuance discount rates, are used to calculate the revised net premium ratio, as of the beginning of the current reporting period. The present value of these updated cash flows is compared to the carrying amount of the liability as of that same date, before updating cash flow assumptions, to determine the current period change in the liability's estimate. This current period change in the liability is a component of the liability remeasurement gain or loss. In subsequent periods, the revised net premium ratio is used to measure the liability for future policy benefits, subject to future revisions. The Company also reviews actual and anticipated experience compared to the assumptions used to establish the liability for future policy benefits on a quarterly basis. If evidence suggests that the assumptions should be revised, the cumulative effect of the change is reflected in future policy benefits remeasurement (gains) losses in the current period. The Company has elected to lock-in claims expense assumptions at contract inception and those assumptions are not subsequently reviewed or updated.

The discount rates used to measure the liability are based on upper-medium grade fixed-income instruments (A rated credit) with similar tenor to the expected liability cash flows. The discount rate assumption is updated quarterly and used to remeasure the liability at the reporting date, with the resulting change reflected in other comprehensive income (loss). For unobservable discount rates, the Company uses estimates consistent with fair value guidance, maximizing the use of relevant, observable market prices and minimizing the use of unobservable inputs.

The Company utilizes the discount rate curve at contract inception for purposes of interest accretion and updating the net premium ratio. Interest accretion is recognized in claims and other policy benefits on the condensed consolidated statements of income. The locked-in discount curve at contract inception for contracts entered into after the adoption of ASU 2018-12 (i.e., January 1, 2021 and after) is based on the average upper-medium grade fixed-income instrument yields during the first calendar year of the reinsurance contract. The locked-in discount rates at contract inception for contracts that were effective prior to the adoption of ASU 2018-12 (i.e., prior to January 1, 2021) are the discount rate assumptions used prior to the adoption of ASU 2018-12, which were based on estimates of expected investment yields.

Included in the liability for future policy benefits are unpaid claims related to long-duration contracts and an accrual for incurred but not reported losses ("IBNR"). The Company's IBNR accrual related to long-duration contracts is determined using case-basis estimates and lag studies of past experience. The time lag from the date of the claim or death to when the ceding company reports the claim to the Company can vary significantly by ceding company, business segment and product type, but generally averages around 3 months. Incurred but not reported claims are estimates on an undiscounted basis, using actuarial estimates of historical claims expense, adjusted for current trends and conditions. These estimates are continually reviewed and the ultimate liability may vary significantly from the amount recognized. Claims payable for incurred but not reported losses for long-duration contracts are included in the liability for future policy benefits on the condensed consolidated balance sheets. Prior to the adoption of ASU 2018-12, unpaid claims and IBNR related to long-duration contracts were included in other policy claims and benefits. Upon adoption of ASU 2018-12, the Company revised prior period amounts to conform to the current period's presentation. See Note 2 – "Impact of New Accounting Standard" for additional information.

Interest-Sensitive Contract Liabilities and Policyholder Account Balances

Liabilities for future benefits on interest-sensitive life and investment-type contract liabilities are carried at the accumulated contract holder values without reduction for potential surrender or withdrawal charges. The Company reinsures asset-intensive products, including annuities and corporate-owned life insurance. The investment portfolios for these products are segregated for management purposes within the general account of the respective legal entity. The liabilities under asset-intensive insurance contracts or reinsurance contracts reinsured on a coinsurance basis are included in interest-sensitive contract liabilities on the condensed consolidated balance sheets. Asset-intensive contracts principally include individual fixed annuities in the accumulation phase, single premium immediate annuities, with no significant life contingency, equity-indexed annuities, individual variable annuities, corporate-owned life, and interest-sensitive whole life insurance contracts. Interest-sensitive contract liabilities are equal to (i) policy account values, which consist of an accumulation of gross premium payments; (ii) credited interest less expenses, mortality charges, and withdrawals; and (iii) fair value adjustments relating to business combinations. Liabilities for immediate annuities are calculated as the present value of the expected cash flows, with the locked-in discount rate determined such that there is no gain or loss at inception.

Equity-indexed annuity contracts reinsured by the Company allow the contract holder to elect an interest rate return or an equity market component where interest credited is based on the performance of common stock market indices, such as the S&P 500 Index®, the Dow Jones Industrial Average, or the NASDAQ. The equity market option is considered an embedded derivative, similar to a call option, which is reflected at fair value on the condensed consolidated balance sheets in interest-sensitive contract liabilities. The fair value of embedded derivatives is computed based on a projection of future equity option costs using a budget methodology, discounted back to the balance sheet date using current market indicators of volatility and interest rates. Changes in the fair value of the embedded derivatives are included as a component of interest credited on the condensed consolidated statements of income (loss).

The Company reviews its estimates of actuarial liabilities for interest-sensitive contract liabilities and compares them with its actual experience. Differences between actual experience and the assumptions used in pricing these guarantees and benefits and in the establishment of the related liabilities result in variances in profit and could result in losses. The effects of changes in such estimated liabilities are included in the results of operations in the period in which the changes occur.

Market Risk Benefits

Market risk benefits are contracts or contract features that both provide protection to the contract holder from other-than-nominal capital market risk and expose the Company to other-than-nominal capital market risk. Market risk benefits are measured at fair value using an option-based valuation model based on current net amounts at risk, market data, Company experience, and other factors. Changes in fair value are recognized in net income each period with the exception of the portion of the change in fair value due to a change in the liability's instrument-specific credit risk, which is recognized in other comprehensive income.

Market risk benefits include the following contract features on certain annuity products that provide minimum guarantees to policyholders:

- Guaranteed minimum income benefits ("GMIB") provide the contract holder, after a specified period of time determined at the time of issuance of the variable annuity contract, with a minimum level of income (annuity) payments. Under the reinsurance treaty, the Company makes a payment to the ceding company equal to the GMIB net amount-at-risk at the time of annuitization.
- Guaranteed minimum withdrawal benefits ("GMWB") guarantee the contract holder a return of their purchase payment via partial withdrawals, even if the account value is reduced to zero, provided that the contract holder's cumulative withdrawals in a contract year do not exceed a certain limit. The initial guaranteed withdrawal amount is equal to the initial benefit base as defined in the contract (typically, the initial purchase payments plus applicable bonus amounts).
- Guaranteed minimum accumulation benefits ("GMAB") provide the contract holder, after a specified period of time determined at the time of issuance of the variable annuity contract, with a minimum accumulation of their purchase payments even if the account value is reduced to zero. The initial guaranteed accumulation amount is equal to the initial benefit base as defined in the contract (typically, the initial purchase payments plus applicable bonus amounts).
- Guaranteed minimum death benefits ("GMDB") provides the beneficiary a guaranteed minimum amount upon the death of the contract holder, regardless of the account balance.

The fair values of the GMIB, GMWB, GMDB and GMAB contract features are reflected in market risk benefits and are calculated based on actuarial and capital market assumptions related to the projected cash flows, including benefits and related contract charges over the lives of the contracts. These projected cash flows incorporate expectations concerning policyholder behavior, such as lapses, withdrawals and benefit selections, and capital market assumptions such as interest rates and equity market volatilities. In measuring the fair value of GMIBs, GMWBs, GMABs and GMDBs, the Company attributes a portion of the fees collected from the policyholder equal to the present value of expected future guaranteed minimum income, withdrawal and accumulation and death benefits (at inception). The changes in fair value are reported in market risk benefits remeasurement (gains) losses. Any additional fees represent "excess" fees and are reported in other revenues. These variable annuity guaranteed living and death benefits may be more costly than expected in volatile or declining equity markets or falling interest rate markets, causing an increase in market risk benefit liabilities.

Deferred Policy Acquisition Costs

Costs of acquiring new business, which vary with and are directly related to the production of new business, have been deferred to the extent that such costs are deemed recoverable from future premiums or gross profits. Such costs include commissions and allowances as well as certain costs of policy issuance and underwriting. Non-commission costs related to the acquisition of new and renewal insurance contracts may be deferred only if they meet the following criteria:

- Incremental direct costs of a successful contract acquisition
- Portions of employees' salaries and benefits directly related to time spent performing specified acquisition activities for a contract that has been acquired or renewed
- Other costs directly related to the specified acquisition or renewal activities that would not have been incurred had that acquisition contract transaction not occurred

DAC related to traditional life and interest-sensitive contracts are grouped by contract type and issue year into cohorts for consistency with the groupings used in estimating the associated liability. DAC is amortized on a constant level basis for the grouped contracts over the expected term of the related contracts to approximate straight-line amortization. The constant level basis used is based on the number of policies or policy face amount of the risk assumed in the reinsurance contract. The constant level bases used for amortization are projected using mortality and actuarial assumptions for policyholder behavior that are based on the Company's experience, industry data and other factors and are consistent with those used for the liability for future policy benefits. Changes in assumptions are reflected in DAC amortization prospectively, and actual experience relating to number of policies reinsured will likely differ from the experience previously estimated.

Amortization of DAC is included in policy acquisition costs and other insurance expenses.

Reinsurance Ceded Receivables

The Company generally reports retrocession activity on a gross basis. Amounts paid or deemed to have been paid for reinsurance are reflected in reinsurance ceded receivables and other. Reinsurance ceded receivables related to long-duration contracts are estimated using mortality, morbidity, and persistency assumptions that are similar to the liability for future policy benefits ceded. The discount rate used to measure the ceded receivable is based on the current yields of an upper-medium grade fixed income instrument. Similar to the liability for future policy benefits, ceded receivables are grouped into annual cohorts based on the effective date of the reinsurance contract.

NOTE 2 IMPACT OF NEW ACCOUNTING STANDARD

As discussed in Note 1, the Company adopted ASU 2018-12 during the first quarter of 2023. The updated guidance materially changed how the Company accounts for its long-duration insurance contracts. Below is a summary of the impact of adopting ASU 2018-12:

- For the liability for future policy benefits, the net transition adjustment recorded in accumulated other comprehensive income (loss) is related to the difference in the discount rate used prior to the adoption of ASU 2018-12 and the discount rate at January 1, 2021, and the removal of shadow adjustments previously recorded in accumulated other comprehensive income (loss) for the impact of unrealized gains and losses that were included in the expected gross profits amortization calculation as of the transition date of $8,593 million, pretax.
- At transition, the Company identified certain cohorts in its Traditional segments where the present value of future expected benefits and expenses exceeded the sum of existing benefit reserve and the present value of future gross premiums, resulting in a decrease to retained earnings, net of reinsurance (and a corresponding increase in the liabilities for future policy benefits and reinsurance recoverable) of approximately $1,462 million, pretax. See “Impact of Adoption by Segment” for the transition impact by reportable segment.
- At transition, the Company identified certain cohorts, primarily longevity swaps, where the present value of future premiums exceeded the present value of future benefits resulting in a negative liability. The elimination of the negative liability at transition resulted in a decrease to retained earnings (and a corresponding increase in the liabilities for future policy benefits) of $284 million, pretax. See “Impact of Adoption by Segment” for the transition impact by reportable segment.
- For DAC, the Company removed shadow adjustments previously recorded in AOCI in the amount of $114 million, pretax, for the impact of unrealized gains and losses that were included in the pre-ASU 2018-12 expected gross profits amortization calculation as of the transition date. See “Impact of Adoption by Segment” for the transition impact by reportable segment.
- For market risk benefits, the transition adjustment of $45 million, pretax, recognized in AOCI relates to the cumulative effect of changes in the instrument-specific credit risk between contract issue date and transition date. The remaining difference of $(72) million, pretax between the fair value and carrying value of the market risk benefits at transition, excluding the amounts recorded in AOCI, was recorded as an adjustment to retained earnings as of the transition date. See “Impact of Adoption by Segment” for the transition impact by reportable segment.

Impact on Shareholders’ Equity

The following table provides the after-tax transition impact on January 1, 2021, to the reinsurance ceded receivables, liability for future policy benefits, market risk benefits, deferred policy acquisition costs and deferred tax asset and liability for the Company's adoption of ASU 2018-12 (dollars in millions):

	January 1, 2021	
	Retained Earnings	Accumulated Other Comprehensive Income (Loss)
Reinsurance ceded receivables and other	$ 254	$ 388
Future policy benefits	(1,746)	(8,593)
Market risk benefits	(72)	45
Deferred policy acquisition costs	—	114
Deferred tax asset (included in other assets)	8	—
Deferred tax liability (included in deferred income taxes)	311	1,778
Total	$ (1,245)	$ (6,268)

Impact of Adoption by Segment

Traditional Business

The following table provides the pre-tax transition impact to the liability for future policy benefits for the Company's adoption of *Financial Services – Insurance* on January 1, 2021, for its Traditional business (dollars in millions):

	U.S. and Latin America – Traditional	Canada – Traditional	Europe, Middle East and Africa – Traditional	Asia Pacific – Traditional
Future policy benefits				
Balance, January 1, 2021 pre-adoption	$ 10,444	$ 3,477	$ 1,379	$ 3,568
Adjustment to retained earnings (1)	896	33	70	463
Effect of changes in discount rate assumptions	4,542	2,651	320	(772)
Reclassification of claims and benefits payable (2)	1,750	203	901	1,160
Balance, January 1, 2021 post-adoption	$ 17,632	$ 6,364	$ 2,670	$ 4,419
Less: reinsurance recoverable	(1,123)	(386)	(85)	(212)
Balance, January 1, 2021 post-adoption, after reinsurance	$ 16,509	$ 5,978	$ 2,585	$ 4,207

(1) Includes adjustments for capping the net premium ratio at 100% and eliminating negative reserves on certain issue year cohorts.

(2) Amount includes certain reclassifications to conform with the revised presentation upon adoption of ASU 2018-12, such as reclassifying claims and benefits payable on long-duration contracts to liability for future policy benefits.

Financial Solutions Business

The following table provides the pre-tax transition impact to the liability for future policy benefits, market risk benefits and deferred policy acquisitions costs for the Company's adoption of *Financial Services – Insurance* on January 1, 2021, for its Financial Solutions business (dollars in millions):

	U.S. and Latin America – Financial Solutions	Canada – Financial Solutions	Europe, Middle East and Africa – Financial Solutions	Asia Pacific – Financial Solutions
Future policy benefits				
Balance, January 1, 2021 pre-adoption	$ 5,037	$ 16	$ 5,657	$ 1,874
Adjustment to retained earnings (1)	—	20	256	8
Effect of changes in discount rate assumptions	857	9	1,011	3
Amounts previously recorded in AOCI (2)	(28)	—	—	—
Reclassification of claims and benefits payable (3)	17	4	67	2
Balance, January 1, 2021 post-adoption	$ 5,883	$ 49	$ 6,991	$ 1,887
Less: reinsurance recoverable	—	—	—	—
Balance, January 1, 2021 post-adoption, after reinsurance	$ 5,883	$ 49	$ 6,991	$ 1,887
Market risk benefits				
Balance, January 1, 2021 pre-adoption	$ —	$ —	$ —	$ —
Cumulative effect of change in credit risk in AOCI	(45)	—	—	—
Cumulative effect to retained earnings	72	—	—	—
Reclassification from interest-sensitive contract liabilities	239	—	—	—
Balance, January 1, 2021 post-adoption	$ 266	$ —	$ —	$ —
Less: reinsurance recoverable	—	—	—	—
Balance, January 1, 2021 post-adoption, after reinsurance	$ 266	$ —	$ —	$ —
Deferred policy acquisition costs				
Balance, January 1, 2021 pre-adoption	$ 254	$ —	$ —	$ 41
Amounts previously recorded in AOCI (2)	114	—	—	—
Balance, January 1, 2021 post-adoption	$ 368	$ —	$ —	$ 41

(1) Includes adjustments for capping the net premium ratio at 100% and eliminating negative reserves on certain issue year cohorts.

(2) Adjustment to remove amounts associated with unrealized gains and losses previously recorded in AOCI (i.e., "shadow adjustments").

(3) Amount includes certain reclassifications to conform with the revised presentation upon adoption of ASU 2018-12, such as reclassifying claims and benefits payable on long-duration contracts to liability for future policy benefits.

Impact to Previously Reported Amounts

The adoption of ASU 2018-12 impacted the Company's previously reported consolidated balance sheets as of December 31, 2021 and 2022, and related statements of income, comprehensive income and equity for the each of the two years in the period ended December 31, 2022 as follows (dollars in millions). The adoption of ASU 2018-12 did not materially impact the Company's previously reported consolidated statements of cash flows for the two years in the period ended December 31, 2022.

	As Previously Reported	Adoption of ASU 2018-12	As Adjusted
Consolidated Balance Sheets			
December 31, 2022			
Assets			
Fixed maturity securities available-for-sale, at fair value	$ 52,901	$ —	$ 52,901
Equity securities, at fair value	134	—	134
Mortgage loans	6,590	—	6,590
Policy loans	1,231	—	1,231
Funds withheld at interest	6,003	—	6,003
Limited partnerships and real estate joint ventures	2,327	—	2,327
Short-term investments	154	—	154
Other invested assets	1,140	—	1,140
Total investments	70,480	—	70,480
Cash and cash equivalents	2,927	—	2,927
Accrued investment income	630	—	630
Premiums receivable and other reinsurance balances	3,013	—	3,013
Reinsurance ceded receivables and other	2,462	209	2,671
Deferred policy acquisition costs	3,974	154	4,128
Other assets	1,220	(165)	1,055
Total assets	$ 84,706	$ 198	$ 84,904
Liabilities and equity			
Future policy benefits	35,220	469	35,689
Interest-sensitive contract liabilities	30,572	(230)	30,342
Market risk benefits, at fair value	—	247	247
Other policy claims and benefits	6,571	(4,091)	2,480
Other reinsurance balances	756	(31)	725
Deferred income taxes	736	647	1,383
Other liabilities	2,655	251	2,906
Long-term debt	3,961	—	3,961
Total liabilities	80,471	(2,738)	77,733
Equity			
Preferred stock	—	—	—
Common stock	1	—	1
Additional paid-in-capital	2,502	—	2,502
Retained earnings	8,967	(798)	8,169
Treasury stock, at cost	(1,720)	—	(1,720)
Accumulated other comprehensive income (loss)	(5,605)	3,734	(1,871)
Total RGA, Inc. shareholders' equity	4,145	2,936	7,081
Noncontrolling interest	90	—	90
Total equity	4,235	2,936	7,171
Total liabilities and shareholders' equity	$ 84,706	$ 198	$ 84,904

	As Previously Reported	Adoption of ASU 2018-12	As Adjusted
December 31, 2021			
Assets			
Fixed maturity securities available-for-sale, at fair value	$ 60,749	$ —	$ 60,749
Equity securities, at fair value	151	—	151
Mortgage loans	6,283	—	6,283
Policy loans	1,234	—	1,234
Funds withheld at interest	6,954	—	6,954
Limited partnerships and real estate joint ventures	1,996	—	1,996
Short-term investments	87	—	87
Other invested assets	1,074	—	1,074
Total investments	78,528	—	78,528
Cash and cash equivalents	2,948	—	2,948
Accrued investment income	533	—	533
Premiums receivable and other reinsurance balances	2,888	—	2,888
Reinsurance ceded receivables and other	2,580	585	3,165
Deferred policy acquisition costs	3,690	170	3,860
Other assets	1,008	11	1,019
Total assets	$ 92,175	$ 766	$ 92,941
Liabilities and equity			
Future policy benefits	35,782	11,667	47,449
Interest-sensitive contract liabilities	26,377	(258)	26,119
Market risk benefits, at fair value	—	262	262
Other policy claims and benefits	6,993	(4,883)	2,110
Other reinsurance balances	613	(56)	557
Deferred income taxes	2,886	(1,387)	1,499
Other liabilities	2,663	255	2,918
Long-term debt	3,667	—	3,667
Collateral finance and securitization notes	180	—	180
Total liabilities	79,161	5,600	84,761
Equity			
Preferred stock	—	—	—
Common stock	1	—	1
Additional paid-in-capital	2,461	—	2,461
Retained earnings	8,563	(692)	7,871
Treasury stock, at cost	(1,653)	—	(1,653)
Accumulated other comprehensive income (loss)	3,642	(4,142)	(500)
Total RGA, Inc. shareholders’ equity	13,014	(4,834)	8,180
Noncontrolling interest	—	—	—
Total equity	13,014	(4,834)	8,180
Total liabilities and shareholders’ equity	$ 92,175	$ 766	$ 92,941

		As Previously Reported		Adoption of ASU 2018-12		As Adjusted
Consolidated Statements of Income						
Year ended December 31, 2022						
Revenues						
Net premiums	$	13,078	$	—	$	13,078
Net investment income		3,161		—		3,161
Investment related gains (losses), net		(506)		(33)		(539)
Other revenues		525		2		527
Total revenues		16,258		(31)		16,227
Benefits and expenses						
Claims and other policy benefits		12,046		(64)		11,982
Future policy benefits remeasurement (gains) losses		—		291		291
Market risk benefits remeasurement (gains) losses		—		10		10
Interest credited		682		—		682
Policy acquisition costs and other insurance expenses		1,499		(155)		1,344
Other operating expenses		1,009		—		1,009
Interest expense		184		—		184
Collateral finance and securitization expense		7		—		7
Total benefits and expenses		15,427		82		15,509
Income before income taxes		831		(113)		718
Provision for income taxes		204		(7)		197
Net income	$	627	$	(106)	$	521
Net income attributable to noncontrolling interest		4		—		4
Net income available to RGA, Inc. shareholders	$	623	$	(106)	$	517

		As Previously Reported		Adoption of ASU 2018-12		As Adjusted
Year ended December 31, 2021						
Revenues						
Net premiums	$	12,513	$	—	$	12,513
Net investment income		3,138		—		3,138
Investment related gains (losses), net		560		7		567
Other revenues		447		2		449
Total revenues		16,658		9		16,667
Benefits and expenses						
Claims and other policy benefits		12,776		(1,103)		11,673
Future policy benefits remeasurement (gains) losses		—		567		567
Market risk benefits remeasurement (gains) losses		—		(58)		(58)
Interest credited		700		—		700
Policy acquisition costs and other insurance expenses		1,416		(91)		1,325
Other operating expenses		936		—		936
Interest expense		127		—		127
Collateral finance and securitization expense		12		—		12
Total benefits and expenses		15,967		(685)		15,282
Income before income taxes		691		694		1,385
Provision for income taxes		74		141		215
Net income	$	617	$	553	$	1,170
Net income attributable to noncontrolling interest		—		—		—
Net income available to RGA, Inc. shareholders	$	617	$	553	$	1,170

	As Previously Reported	Adoption of ASU 2018-12	As Adjusted
Consolidated Statements of Comprehensive Income			
Year ended December 31, 2022			
Net income	$ 627	$ (106)	$ 521
Other comprehensive income (loss), net of tax			
Foreign currency translation adjustments	(162)	60	(102)
Net unrealized investment gains (losses)	(9,108)	(168)	(9,276)
Effect of updating discount rates on future policy benefits	—	7,964	7,964
Change in instrument-specific credit risk for market risk benefits	—	20	20
Defined benefit pension and postretirement plan adjustments	23	—	23
Total other comprehensive income (loss), net of tax	(9,247)	7,876	(1,371)
Total comprehensive income (loss)	(8,620)	7,770	(850)
Comprehensive income (loss) attributable to noncontrolling interest	4	—	4
Total comprehensive income (loss) available to RGA, Inc.	$ (8,624)	$ 7,770	$ (854)
Year ended December 31, 2021			
Net income	$ 617	$ 553	$ 1,170
Other comprehensive income (loss), net of tax			
Foreign currency translation adjustments	60	(4)	56
Net unrealized investment gains (losses)	(1,799)	(34)	(1,833)
Effect of updating discount rates on future policy benefits	—	2,207	2,207
Change in instrument-specific credit risk for market risk benefits	—	(43)	(43)
Defined benefit pension and postretirement plan adjustments	22	—	22
Total other comprehensive income (loss), net of tax	(1,717)	2,126	409
Total comprehensive income (loss)	(1,100)	2,679	1,579
Comprehensive income (loss) attributable to noncontrolling interest	—	—	—
Total comprehensive income (loss) available to RGA, Inc.	$ (1,100)	$ 2,679	$ 1,579

	RGA, Inc. Shareholders' Equity							
	Common Stock	Additional Paid In Capital	Retained Earnings	Treasury Stock	Accumulated Other Comprehensive Income (Loss)	Total RGA, Inc. Shareholders' Equity	Noncontrolling Interest	Total Equity
Balance, December 31, 2020 as previously reported	$ 1	$ 2,406	$ 8,148	$ (1,562)	$ 5,359	$ 14,352	$ —	$ 14,352
Cumulative effect of modified retrospective adoption of *Financial Services – Insurance* on long-duration contracts			(1,187)		(6,304)	(7,491)		(7,491)
Cumulative effect of full retrospective adoption of *Financial Services – Insurance* on market risk benefits			(58)		36	(22)		(22)
Adjusted balance, January 1, 2021	1	2,406	6,903	(1,562)	(909)	6,839	—	6,839
Net income			1,170			1,170		1,170
Total other comprehensive income (loss)					409	409		409
Dividends to shareholders, $2.86 per share			(194)			(194)		(194)
Purchase of treasury stock				(99)		(99)		(99)
Reissuance of treasury stock		55	(8)	8		55		55
Balance, December, 31, 2021	1	2,461	7,871	(1,653)	(500)	8,180	—	8,180
Issuance of preferred interests by subsidiary							90	90
Change in equity of noncontrolling interest							(4)	(4)
Net income			517			517	4	521
Total other comprehensive income (loss)					(1,371)	(1,371)		(1,371)
Dividends to shareholders, $3.06 per share			(205)			(205)		(205)
Purchase of treasury stock				(81)		(81)		(81)
Reissuance of treasury stock		41	(14)	14		41		41
Balance, December 31, 2022	$ 1	$ 2,502	$ 8,169	$ (1,720)	$ (1,871)	$ 7,081	$ 90	$ 7,171

Additional Transition and Other Disclosures

ASU 2018-12 expanded the disclosure requirements for long-duration contracts in the annual and interim financial statements. The following tables provide additional information regarding the transition adjustments and disaggregated rollforwards of beginning to ending balances of the liability for future policy benefits, policyholder account balances, market risk benefits and deferred policy acquisition costs for the years ended December 31, 2022 and 2021 (dollars in millions).

Liability for Future Policy Benefits

For the year ended December 31, 2022:	U.S. and Latin America – Traditional	Canada – Traditional	Europe, Middle East and Africa – Traditional	Asia Pacific – Traditional
Present Value of Expected Net Premiums				
Beginning of year balance at original discount rate	$ 73,447	$ 21,989	$ 14,440	$ 37,943
Effect of changes in cash flow assumptions	(805)	189	123	1,604
Effect of actual variances from expected experience	(4)	212	835	197
Adjusted balance, beginning of year	72,638	22,390	15,398	39,744
Issuances [(1)]	3,329	635	1,083	3,663
Interest accrual [(2)]	3,423	748	500	1,032
Net premiums collected [(3)]	(5,182)	(950)	(1,324)	(1,989)
Derecognition [(4)]	—	—	—	—
Foreign currency translation	(1)	(1,493)	(1,413)	(1,944)
Ending balance at original discount rate	74,207	21,330	14,244	40,506
Effect of changes in discount rate assumptions	(6,303)	(4,899)	(2,639)	(10,927)
Balance, end of period	$ 67,904	$ 16,431	$ 11,605	$ 29,579
Present Value of Expected Future Policy Benefits				
Beginning of year balance at original discount rate	$ 84,075	$ 25,440	$ 15,664	$ 41,971
Effect of changes in cash flow assumptions	(675)	191	136	1,681
Effect of actual variances from expected experience	85	212	813	234
Adjusted balance, beginning of year	83,485	25,843	16,613	43,886
Issuances [(1)]	3,333	635	1,083	3,667
Interest accrual [(2)]	3,940	958	530	1,171
Benefit payments [(5)]	(5,472)	(1,051)	(1,260)	(1,832)
Derecognition [(4)]	—	—	—	—
Foreign currency translation	(1)	(1,730)	(1,512)	(2,107)
Ending balance at original discount rate	85,285	24,655	15,454	44,785
Effect of changes in discount rate assumptions	(7,907)	(4,273)	(2,808)	(12,858)
Balance, end of period	$ 77,378	$ 20,382	$ 12,646	$ 31,927
Liability for future policy benefits	$ 9,474	$ 3,951	$ 1,041	$ 2,348
Less: reinsurance recoverable	(421)	(265)	(31)	(100)
Net liability for future policy benefits	$ 9,053	$ 3,686	$ 1,010	$ 2,248

(1) Issuances: The present value, using the original discount rate, of the expected net premiums or the expected future policy benefits related to new reinsurance contracts that became effective during the current period and new policies assumed on existing contracts.

(2) Interest accrual: The interest earned on the beginning present value of either the expected net premiums or the expected future policy benefits using the original interest rate.

(3) Net premiums collected: The portion of gross premiums collected from the ceding company that is used to fund expected benefit payments.

(4) Derecognition: Includes the effects of treaty recaptures and treaty amendments that resulted in the termination of an existing treaty and the issuance of a new treaty under the internal replacement model.

(5) Benefit payments: The release of the present value, using the original discount rate, of the expected future policy benefits due to death, lapse/withdrawal, and other benefit payments based on current assumptions.

For the year ended December 31, 2021:	U.S. and Latin America – Traditional	Canada – Traditional	Europe, Middle East and Africa – Traditional	Asia Pacific – Traditional
Present Value of Expected Net Premiums				
Balance, beginning of year	$ 70,319	$ 21,332	$ 14,033	$ 34,167
Effect of adoption of *Financial Services – Insurance*	20,758	1,785	2,599	(3,385)
Adjusted balance, beginning of year	$ 91,077	$ 23,117	$ 16,632	$ 30,782
Beginning of year balance at original discount rate	$ 70,317	$ 21,299	$ 13,999	$ 34,133
Effect of changes in cash flow assumptions	984	(45)	48	600
Effect of actual variances from expected experience	254	(24)	379	402
Adjusted balance, beginning of year	71,555	21,230	14,426	35,135
Issuances (1)	3,522	761	2,417	4,575
Interest accrual (2)	3,400	775	553	970
Net premiums collected (3)	(5,025)	(947)	(1,488)	(2,038)
Derecognition (4)	—	—	(1,167)	—
Foreign currency translation	(5)	170	(301)	(699)
Ending balance at original discount rate	73,447	21,989	14,440	37,943
Effect of changes in discount rate assumptions	15,771	(199)	1,280	(5,458)
Balance, end of period	$ 89,218	$ 21,790	$ 15,720	$ 32,485
Present Value of Expected Future Policy Benefits				
Balance, beginning of year	$ 80,275	$ 24,587	$ 15,246	$ 37,335
Effect of adoption of *Financial Services – Insurance*	26,196	4,469	2,989	(3,694)
Adjusted balance, beginning of year	106,471	29,056	18,235	33,641
Beginning of year balance at original discount rate	$ 81,172	$ 24,587	$ 15,281	$ 37,765
Effect of changes in cash flow assumptions	1,021	(45)	42	699
Effect of actual variances from expected experience	517	(24)	422	559
Adjusted balance, beginning of year	82,710	24,518	15,745	39,023
Issuances (1)	3,537	761	2,436	4,585
Interest accrual (2)	3,916	992	598	1,107
Benefit payments (5)	(6,083)	(1,025)	(1,609)	(1,971)
Derecognition (4)	—	—	(1,176)	—
Foreign currency translation	(5)	194	(330)	(773)
Ending balance at original discount rate	84,075	25,440	15,664	41,971
Effect of changes in discount rate assumptions	19,185	1,905	1,445	(6,475)
Balance, end of period	$ 103,260	$ 27,345	$ 17,109	$ 35,496
Liability for future policy benefits	$ 14,042	$ 5,555	$ 1,389	$ 3,011
Less: reinsurance recoverable	(697)	(367)	(34)	(116)
Net liability for future policy benefits	$ 13,345	$ 5,188	$ 1,355	$ 2,895

(1) Issuances: The present value, using the original discount rate, of the expected net premiums or the expected future policy benefits related to new reinsurance contracts that became effective during the current period and new policies assumed on existing contracts.

(2) Interest accrual: The interest earned on the beginning present value of either the expected net premiums or the expected future policy benefits using the original interest rate.

(3) Net premiums collected: The portion of gross premiums collected from the ceding company that is used to fund expected benefit payments.

(4) Derecognition: Includes the effects of treaty recaptures and treaty amendments that resulted in the termination of an existing treaty and the issuance of a new treaty under the internal replacement model.

(5) Benefit payments: The release of the present value, using the original discount rate, of the expected future policy benefits due to death, lapse/withdrawal, and other benefit payments based on the revised assumptions.

For the year ended December 31, 2022:	U.S. and Latin America – Financial Solutions	Canada – Financial Solutions	Europe, Middle East and Africa – Financial Solutions	Asia Pacific – Financial Solutions
Present Value of Expected Net Premiums				
Beginning of year balance at original discount rate	$ 228	$ 3,329	$ 31,973	$ 1,051
Effect of changes in cash flow assumptions	(31)	—	(126)	3
Effect of actual variances from expected experience	(22)	(12)	573	29
Adjusted balance, beginning of year	175	3,317	32,420	1,083
Issuances (1)	1,580	574	12,594	1,465
Interest accrual (2)	41	112	698	24
Net premiums collected (3)	(125)	(354)	(3,169)	(764)
Derecognition (4)	—	—	—	—
Foreign currency translation	—	(255)	(3,761)	(203)
Ending balance at original discount rate	1,671	3,394	38,782	1,605
Effect of changes in discount rate assumptions	(284)	(433)	(8,805)	25
Balance, end of period	$ 1,387	$ 2,961	$ 29,977	$ 1,630
Present Value of Expected Future Policy Benefits				
Beginning of year balance at original discount rate	$ 4,628	$ 3,393	$ 38,196	$ 6,062
Effect of changes in cash flow assumptions	(34)	—	(140)	3
Effect of actual variances from expected experience	(46)	(24)	566	36
Adjusted balance, beginning of year	4,548	3,369	38,622	6,101
Issuances (1)	1,580	574	12,594	1,465
Interest accrual (2)	220	115	856	70
Benefit payments (5)	(525)	(351)	(3,355)	(227)
Derecognition (4)	—	—	—	—
Foreign currency translation	—	(260)	(4,387)	(848)
Ending balance at original discount rate	5,823	3,447	44,330	6,561
Effect of changes in discount rate assumptions	(617)	(432)	(9,719)	(435)
Balance, end of period	$ 5,206	$ 3,015	$ 34,611	$ 6,126
Liability for future policy benefits	$ 3,819	$ 54	$ 4,634	$ 4,496
Less: reinsurance recoverable	—	—	—	—
Net liability for future policy benefits	$ 3,819	$ 54	$ 4,634	$ 4,496

(1) Issuances: The present value, using the original discount rate, of the expected net premiums or the expected future policy benefits related to new reinsurance contracts that became effective during the current period and new policies assumed on existing contracts.

(2) Interest accrual: The interest earned on the beginning present value of either the expected net premiums or the expected future policy benefits using the original interest rate.

(3) Net premiums collected: The portion of gross premiums collected from the ceding company that is used to fund expected benefit payments.

(4) Derecognition: Includes the effects of treaty recaptures and treaty amendments that resulted in the termination of an existing treaty and the issuance of a new treaty under the internal replacement model.

(5) Benefit payments: The release of the present value, using the original discount rate, of the expected future policy benefits due to death, lapse/withdrawal, and other benefit payments based on current assumptions.

For the year ended December 31, 2021:	U.S. and Latin America – Financial Solutions	Canada – Financial Solutions	Europe, Middle East and Africa – Financial Solutions	Asia Pacific – Financial Solutions
Present Value of Expected Net Premiums				
Balance, beginning of year	$ 285	$ 3,568	$ 28,055	$ 781
Effect of adoption of *Financial Services – Insurance*	102	343	3,634	114
Adjusted balance, beginning of year	387	3,911	31,689	895
Beginning of year balance at original discount rate	$ 314	$ 3,556	$ 27,799	$ 781
Effect of changes in cash flow assumptions	(33)	(30)	(76)	—
Effect of actual variances from expected experience	(29)	17	997	777
Adjusted balance, beginning of year	252	3,543	28,720	1,558
Issuances (1)	—	—	8,357	3,156
Interest accrual (2)	3	109	714	28
Net premiums collected (3)	(27)	(349)	(3,590)	(3,621)
Derecognition (4)	—	—	(1,669)	—
Foreign currency translation	—	26	(559)	(70)
Ending balance at original discount rate	228	3,329	31,973	1,051
Effect of changes in discount rate assumptions	28	97	668	247
Balance, end of period	$ 256	$ 3,426	$ 32,641	$ 1,298
Present Value of Expected Future Policy Benefits				
Balance, beginning of year	$ 4,951	$ 3,584	$ 33,410	$ 2,645
Effect of adoption of *Financial Services – Insurance*	931	372	4,901	125
Adjusted balance, beginning of year	5,882	3,956	38,311	2,770
Beginning of year balance at original discount rate	$ 4,951	$ 3,592	$ 33,410	$ 2,653
Effect of changes in cash flow assumptions	(33)	6	(76)	—
Effect of actual variances from expected experience	(37)	6	1,000	777
Adjusted balance, beginning of year	4,881	3,604	34,334	3,430
Issuances (1)	—	—	8,357	3,156
Interest accrual (2)	193	112	890	63
Benefit payments (5)	(446)	(350)	(3,064)	(162)
Derecognition (4)	—	—	(1,682)	—
Foreign currency translation	—	27	(639)	(425)
Ending balance at original discount rate	4,628	3,393	38,196	6,062
Effect of changes in discount rate assumptions	575	114	1,174	250
Balance, end of period	$ 5,203	$ 3,507	$ 39,370	$ 6,312
Liability for future policy benefits	$ 4,947	$ 81	$ 6,729	$ 5,014
Less: reinsurance recoverable	—	—	—	—
Net liability for future policy benefits	$ 4,947	$ 81	$ 6,729	$ 5,014

(1) Issuances: The present value, using the original discount rate, of the expected net premiums or the expected future policy benefits related to new reinsurance contracts that became effective during the current period and new policies assumed on existing contracts.

(2) Interest accrual: The interest earned on the beginning present value of either the expected net premiums or the expected future policy benefits using the original interest rate.

(3) Net premiums collected: The portion of gross premiums collected from the ceding company that is used to fund expected benefit payments.

(4) Derecognition: Includes the effects of treaty recaptures and treaty amendments that resulted in the termination of an existing treaty and the issuance of a new treaty under the internal replacement model.

(5) Benefit payments: The release of the present value, using the original discount rate, of the expected future policy benefits due to death, lapse/withdrawal, and other benefit payments based on current assumptions.

Policyholder Account Balances

The following tables provide the balances and changes in the Company’s policyholder account balances as of and for the years ending December 31, 2022 and 2021 (dollars in millions):

For the year ended December 31, 2022:	U.S. and Latin America – Traditional	U.S. and Latin America – Financial Solutions	Asia Pacific – Financial Solutions
Balance, beginning of year	$ 1,719	$ 18,758	$ 1,621
Deposits	24	1,289	2,521
Policy charges	(32)	(33)	(134)
Surrenders and withdrawals	(17)	(1,258)	(639)
Benefit payments	(76)	(448)	(46)
Interest credited	65	598	51
Foreign currency translation	—	—	(23)
Balance, end of period	$ 1,683	$ 18,906	$ 3,351
Less: reinsurance recoverable	—	(1,543)	—
Balance, end of period, after reinsurance	$ 1,683	$ 17,363	$ 3,351

For the year ended December 31, 2021:	U.S. and Latin America – Traditional	U.S. and Latin America – Financial Solutions	Asia Pacific – Financial Solutions
Balance, beginning of year	$ 1,752	$ 16,273	$ 809
Deposits	25	3,290	868
Policy charges	(32)	(31)	(1)
Surrenders and withdrawals	(13)	(1,015)	(36)
Benefit payments	(79)	(404)	(24)
Interest credited	66	645	19
Foreign currency translation	—	—	(14)
Balance, end of period	$ 1,719	$ 18,758	$ 1,621
Less: reinsurance recoverable	—	(1,561)	—
Balance, end of period, after reinsurance	$ 1,719	$ 17,197	$ 1,621

Market Risk Benefits

The following tables provide the balances and changes in the Company's liabilities for market risk benefits as of and for the years ending December 31, 2022 and 2021 (dollars in millions):

For the year ended December 31, 2022:	U.S. and Latin America – Financial Solutions
Balance, beginning of year	$ 262
Balance, beginning of year, before effect of changes in the instrument-specific credit risk	254
Interest accrual	54
Attributed fees collected	28
Benefit payments	(9)
Effect of changes in future assumptions	18
Effect of changes in interest rates	(175)
Effect of changes in equity markets	48
Effect of changes in volatility	19
Other market impacts	7
Actual policyholder behavior different from expected behavior	19
Balance, end of period, before effect of changes in the instrument-specific credit risk	263
Effect of changes in the instrument-specific credit risk	(16)
Balance, end of period	247
Less: reinsurance recoverable	—
Balance, end of period, after reinsurance	$ 247

For the year ended December 31, 2021:	U.S. and Latin America – Financial Solutions
Balance, beginning of year	$ —
Effect of adoption of *Financial Services – Insurance*	266
Adjusted balance, beginning of year	266
Balance, beginning of year, before effect of changes in the instrument-specific credit risk	311
Interest accrual	3
Attributed fees collected	12
Benefit payments	(14)
Effect of changes in future assumptions	25
Effect of changes in interest rates	(51)
Effect of changes in equity markets	(49)
Effect of changes in volatility	(2)
Other market impacts	5
Actual policyholder behavior different from expected behavior	14
Balance, end of period, before effect of changes in the instrument-specific credit risk	254
Effect of changes in the instrument-specific credit risk	8
Balance, end of period	262
Less: reinsurance recoverable	—
Balance, end of period, after reinsurance	$ 262

Deferred Policy Acquisition Costs

The following tables provide the balances and changes in the Company's deferred policy acquisition costs as of and for the years ending December 31, 2022 and 2021 (dollars in millions):

For the year ended December 31, 2022:	U.S. and Latin America – Traditional	Canada – Traditional	Europe, Middle East and Africa – Traditional	Asia Pacific – Traditional
Balance, beginning of year	$ 1,947	$ 191	$ 270	$ 1,056
Capitalization	284	10	83	86
Amortization expense	(144)	(17)	(38)	(67)
Foreign currency translation	—	(13)	(21)	(32)
Balance, end of period	$ 2,087	$ 171	$ 294	$ 1,043

For the year ended December 31, 2022:	U.S. and Latin America – Financial Solutions	Canada – Financial Solutions	Europe, Middle East and Africa – Financial Solutions	Asia Pacific – Financial Solutions
Balance, beginning of year	$ 312	$ —	$ —	$ 81
Capitalization	87	—	—	121
Amortization expense	(58)	—	—	(13)
Foreign currency translation	—	—	—	(1)
Balance, end of period	$ 341	$ —	$ —	$ 188

For the year ended December 31, 2021:	U.S. and Latin America – Traditional	Canada – Traditional	Europe, Middle East and Africa – Traditional	Asia Pacific – Traditional
Balance, beginning of year	$ 1,816	$ 195	$ 264	$ 1,046
Effect of adoption of *Financial Services – Insurance*	—	—	—	—
Adjusted balance, beginning of year	1,816	195	264	1,046
Capitalization	254	8	42	83
Amortization expense	(123)	(13)	(24)	(55)
Foreign currency translation	—	1	(12)	(18)
Balance, end of period	$ 1,947	$ 191	$ 270	$ 1,056

For the year ended December 31, 2021:	U.S. and Latin America – Financial Solutions	Canada – Financial Solutions	Europe, Middle East and Africa – Financial Solutions	Asia Pacific – Financial Solutions
Balance, beginning of year	$ 254	$ —	$ —	$ 41
Effect of adoption of *Financial Services – Insurance*	114	—	—	—
Adjusted balance, beginning of year	368	—	—	41
Capitalization	8	—	—	49
Amortization expense	(64)	—	—	(8)
Foreign currency translation	—	—	—	(1)
Balance, end of period	$ 312	$ —	$ —	$ 81

NOTE 3 EARNINGS PER SHARE

The following table sets forth the computation of basic and diluted earnings per share on net income (in millions, except per share information):

	Three months ended June 30,		Six months ended June 30,	
	2023	2022	2023	2022
Earnings:				
Net income	$ 207	$ 106	$ 460	$ 303
Less: Net income attributable to noncontrolling interest	2	1	3	1
Net income available to RGA, Inc. shareholders	$ 205	$ 105	$ 457	$ 302
Shares:				
Weighted average outstanding shares	67	67	67	67
Equivalent shares from outstanding stock awards	1	1	1	1
Denominator for diluted calculation	68	68	68	68
Earnings per share:				
Basic	$ 3.09	$ 1.57	$ 6.86	$ 4.50
Diluted	$ 3.05	$ 1.55	$ 6.77	$ 4.46

The calculation of common equivalent shares does not include the impact of stock awards with a conversion price that exceeds the average stock price for the earnings period as the result would be antidilutive. The calculation of common equivalent shares also excludes the impact of outstanding performance contingent awards as the conditions necessary for their issuance have not been satisfied as of the end of the reporting period.

NOTE 4 EQUITY

Common stock

The changes in number of common stock shares issued, held in treasury and outstanding are as follows for the periods indicated:

	Issued	Held In Treasury	Outstanding
Balance, December 31, 2022	85,310,598	18,634,390	66,676,208
Common stock acquired	—	722,774	(722,774)
Stock-based compensation [(1)]	—	(258,365)	258,365
Balance, June 30, 2023	85,310,598	19,098,799	66,211,799

	Issued	Held In Treasury	Outstanding
Balance, December 31, 2021	85,310,598	18,139,868	67,170,730
Common Stock acquired	—	219,116	(219,116)
Stock-based compensation [(1)]	—	(55,654)	55,654
Balance, June 30, 2022	85,310,598	18,303,330	67,007,268

(1) Represents net shares issued from treasury pursuant to the Company’s equity-based compensation programs.

Common Stock Held in Treasury

Common stock held in treasury is accounted for at average cost. Gains resulting from the reissuance of common stock held in treasury are credited to additional paid-in capital. Losses resulting from the reissuance of common stock held in treasury are charged first to additional paid-in capital to the extent the Company has previously recorded gains on treasury share transactions, then to retained earnings.

On February 25, 2022, RGA's board of directors authorized a share repurchase program for up to $400 million of RGA's outstanding common stock. The authorization was effective immediately and does not have an expiration date. During the six months ended June 30, 2023, RGA repurchased 722,774 shares of common stock under this program.

Noncontrolling Interest

In 2022, Papara Financing LLC ("Papara"), a subsidiary of RGA Reinsurance Company, issued nonconvertible preferred interests to an unaffiliated third party. The membership interests in Papara consist of (1) common interests, which are held by RGA Reinsurance Company and (2) preferred interests. The preferred interests total $90 million. The preferred interests are included in noncontrolling interest, and net income attributable to noncontrolling interest was $3 million for the six months ended June 30, 2023.

Accumulated Other Comprehensive Income (Loss)

The balance of and changes in each component of accumulated other comprehensive income (loss) ("AOCI") for the six months ended June 30, 2023 and 2022 are as follows (dollars in millions):

	Accumulated Other Comprehensive Income (Loss), Net of Income Tax					
	Foreign Currency Translation Adjustments	Net Unrealized Investment Gains (Losses)(1)	Pension and Postretirement Benefits	Effect of Updating Discount Rates on Future Policy Benefits	Instrument-Specific Credit Risk for Market Risk Benefits	Total
Balance, December 31, 2022	$ (116)	$ (5,496)	$ (27)	$ 3,755	$ 13	$ (1,871)
Other comprehensive income (loss) before reclassifications	169	687	11	(377)	—	490
Amounts reclassified to (from) AOCI	—	99	—	—	—	99
Deferred income tax benefit (expense)	(27)	(169)	(2)	82	—	(116)
Balance, June 30, 2023	$ 26	$ (4,879)	$ (18)	$ 3,460	$ 13	$ (1,398)

	Accumulated Other Comprehensive Income (Loss), Net of Income Tax					
	Foreign Currency Translation Adjustments	Net Unrealized Investment Gains (Losses)(1)	Pension and Postretirement Benefits	Effect of Updating Discount Rates on Future Policy Benefits	Instrument-Specific Credit Risk for Market Risk Benefits	Total
Balance, December 31, 2021	$ (13)	$ 3,779	$ (50)	$ (4,209)	$ (7)	$ (500)
Other comprehensive income (loss) before reclassifications	47	(9,458)	(3)	8,100	(3)	(1,317)
Amounts reclassified to (from) AOCI	—	107	2	—	—	109
Deferred income tax benefit (expense)	(31)	2,023	—	(1,769)	1	224
Balance, June 30, 2022	$ 3	$ (3,549)	$ (51)	$ 2,122	$ (9)	$ (1,484)

(1) Includes cash flow hedges of $(228) and $(205) as of June 30, 2023 and December 31, 2022, respectively, and $(206) and $(22) as of June 30, 2022 and December 31, 2021, respectively. See Note 12 – "Derivative Instruments" for additional information on cash flow hedges.

The following table presents the amounts of AOCI reclassifications for the three and six months ended June 30, 2023 and 2022 (dollars in millions):

	Amount Reclassified from AOCI				
	Three months ended June 30,		Six months ended June 30,		
Details about AOCI Components	2023	2022	2023	2022	Affected Line Item in Statements of Income
Net unrealized investment gains (losses):					
Net unrealized gains (losses) on available-for-sale securities	$ (9)	$ (68)	$ (96)	$ (103)	Investment related gains (losses), net
Cash flow hedges – Interest rate	2	(1)	4	(2)	(1)
Cash flow hedges – Currency/Interest rate	(4)	(2)	(7)	(2)	(1)
Total	(11)	(71)	(99)	(107)	
Provision for income taxes	5	15	23	22	
Net unrealized gains (losses), net of tax	$ (6)	$ (56)	$ (76)	$ (85)	
Amortization of defined benefit plan items:					
Prior service cost (credit)	$ 1	$ 1	$ 1	$ 1	(2)
Actuarial gains (losses)	—	(2)	(1)	(3)	(2)
Total	1	(1)	—	(2)	
Provision for income taxes	—	—	—	—	
Amortization of defined benefit plans, net of tax	$ 1	$ (1)	$ —	$ (2)	
Total reclassifications for the period	$ (5)	$ (57)	$ (76)	$ (87)	

(1) See Note 12 – "Derivative Instruments" for additional information on cash flow hedges.

(2) This AOCI component is included in the computation of the net periodic pension cost. See Note 15 – "Employee Benefit Plans" for additional details.

Equity Based Compensation

Equity compensation expense was $22 million and $17 million for the six months ended June 30, 2023 and 2022, respectively. In the first quarter of 2023, the Company granted 129,146 stock appreciation rights at $138.34 weighted average exercise price per share, 185,311 performance contingent shares and 105,122 restricted stock units to employees. As of June 30, 2023, 1,664,556 share awards at a weighted average strike price per share of $113.93 were vested and exercisable with a remaining weighted average exercise period of 4.3 years. As of June 30, 2023, the total compensation cost of non-vested awards not yet recognized in the financial statements was $49 million. It is estimated that these costs will vest over a weighted average period of 0.9 years.

NOTE 5 FUTURE POLICY BENEFITS

Liability for Future Policy Benefits – Traditional Business

The Company reviews actual and anticipated experience compared to the assumptions used to establish policy benefits on a quarterly basis and will update those assumptions if evidence suggests that they should be revised. During the six months ended June 30, 2023, and 2022, there were no material changes to the Traditional business assumptions. The Company expects to complete its annual review and any necessary updates of cash flow assumptions used to calculate the liability for future policy benefits during the third quarter of each year. Updates may occur in other quarters if information becomes available during the quarter that indicates an assumption update is necessary.

The following tables provide the balances of and changes in the Company's liability for future policy benefits for long-duration reinsurance contracts for its Traditional business, which primarily consists of individual life, group life and critical illness reinsurance for the six months ended June 30, 2023 and 2022 (dollars in millions):

Six months ended June 30, 2023:	U.S. and Latin America – Traditional	Canada – Traditional	Europe, Middle East and Africa – Traditional	Asia Pacific – Traditional
Present Value of Expected Net Premiums				
Beginning of year balance at original discount rate	$ 74,207	$ 21,330	$ 14,244	$ 40,506
Effect of changes in cash flow assumptions	—	—	—	(8)
Effect of actual variances from expected experience	(83)	347	(51)	50
Adjusted balance, beginning of year	74,124	21,677	14,193	40,548
Issuances (1)	1,653	240	610	1,264
Interest accrual (2)	1,710	370	243	515
Net premiums collected (3)	(2,534)	(466)	(696)	(997)
Derecognition (4)	(35)	—	—	—
Foreign currency translation	3	498	445	(914)
Ending balance at original discount rate	74,921	22,319	14,795	40,416
Effect of changes in discount rate assumptions	(5,424)	(4,436)	(3,427)	(10,296)
Balance, end of period	$ 69,497	$ 17,883	$ 11,368	$ 30,120
Present Value of Expected Future Policy Benefits				
Beginning of year balance at original discount rate	$ 85,285	$ 24,655	$ 15,454	$ 44,785
Effect of changes in cash flow assumptions	—	—	—	(8)
Effect of actual variances from expected experience	(49)	347	(44)	27
Adjusted balance, beginning of year	85,236	25,002	15,410	44,804
Issuances (1)	1,653	240	610	1,264
Interest accrual (2)	1,972	474	259	588
Benefit payments (5)	(2,801)	(507)	(682)	(894)
Derecognition (4)	(54)	—	—	—
Foreign currency translation	4	580	488	(979)
Ending balance at original discount rate	86,010	25,789	16,085	44,783
Effect of changes in discount rate assumptions	(6,721)	(3,626)	(3,669)	(12,197)
Balance, end of period	$ 79,289	$ 22,163	$ 12,416	$ 32,586
Liability for future policy benefits	$ 9,792	$ 4,280	$ 1,048	$ 2,466
Less: reinsurance recoverable	(407)	(285)	(36)	(99)
Net liability for future policy benefits	$ 9,385	$ 3,995	$ 1,012	$ 2,367
Weighted-average duration of the liability (in years)	12	15	8	17
Weighted-average interest accretion rate	4.7 %	3.6 %	3.4 %	2.6 %
Weighted-average current discount rate	5.1 %	4.6 %	6.1 %	4.2 %

(1) Issuances: The present value, using the original discount rate, of the expected net premiums or the expected future policy benefits related to new reinsurance contracts that became effective during the current period and new policies assumed on existing contracts.

(2) Interest accrual: The interest earned on the beginning present value of either the expected net premiums or the expected future policy benefits using the original interest rate.

(3) Net premiums collected: The portion of gross premiums collected from the ceding company that is used to fund expected benefit payments.

(4) Derecognition: Includes the effects of treaty recaptures and treaty amendments that resulted in the termination of an existing treaty and the issuance of a new treaty under the internal replacement model.

(5) Benefit payments: The release of the present value, using the original discount rate, of the expected future policy benefits due to death, lapse/withdrawal, and other benefit payments based on current assumptions.

Six months ended June 30, 2022:	U.S. and Latin America – Traditional	Canada – Traditional	Europe, Middle East and Africa – Traditional	Asia Pacific – Traditional
Present Value of Expected Net Premiums				
Beginning of year balance at original discount rate	$ 73,447	$ 21,989	$ 14,440	$ 37,943
Effect of changes in cash flow assumptions	—	—	—	58
Effect of actual variances from expected experience	(250)	(327)	215	(847)
Adjusted balance, beginning of year	73,197	21,662	14,655	37,154
Issuances [1]	1,567	400	515	2,145
Interest accrual [2]	1,695	379	250	479
Net premiums collected [3]	(2,488)	(485)	(679)	(967)
Derecognition [4]	—	—	—	—
Foreign currency translation	—	(404)	(1,299)	(1,892)
Ending balance at original discount rate	73,971	21,552	13,442	36,919
Effect of changes in discount rate assumptions	(1,668)	(4,736)	(1,574)	(9,770)
Balance, end of period	$ 72,303	$ 16,816	$ 11,868	$ 27,149
Present Value of Expected Future Policy Benefits				
Beginning of year balance at original discount rate	$ 84,075	$ 25,440	$ 15,664	$ 41,971
Effect of changes in cash flow assumptions	—	—	—	35
Effect of actual variances from expected experience	(153)	(310)	226	(798)
Adjusted balance, beginning of year	83,922	25,130	15,890	41,208
Issuances [1]	1,571	400	516	2,085
Interest accrual [2]	1,945	489	266	545
Benefit payments [5]	(2,798)	(571)	(669)	(917)
Derecognition [4]	—	—	—	—
Foreign currency translation	—	(465)	(1,404)	(2,035)
Ending balance at original discount rate	84,640	24,983	14,599	40,886
Effect of changes in discount rate assumptions	(2,193)	(4,050)	(1,651)	(11,532)
Balance, end of period	$ 82,447	$ 20,933	$ 12,948	$ 29,354
Liability for future policy benefits	$ 10,144	$ 4,117	$ 1,080	$ 2,205
Less: reinsurance recoverable	(482)	(279)	(30)	(98)
Net liability for future policy benefits	$ 9,662	$ 3,838	$ 1,050	$ 2,107
Weighted-average duration of the liability (in years)	12	15	9	16
Weighted-average interest accretion rate	4.7 %	3.7 %	3.6 %	2.6 %
Weighted-average current discount rate	4.7 %	4.8 %	4.8 %	4.4 %

(1) Issuances: The present value, using the original discount rate, of the expected net premiums or the expected future policy benefits related to new reinsurance contracts that became effective during the current period and new policies assumed on existing contracts.

(2) Interest accrual: The interest earned on the beginning present value of either the expected net premiums or the expected future policy benefits using the original interest rate.

(3) Net premiums collected: The portion of gross premiums collected from the ceding company that is used to fund expected benefit payments.

(4) Derecognition: Includes the effects of treaty recaptures and treaty amendments that resulted in the termination of an existing treaty and the issuance of a new treaty under the internal replacement model.

(5) Benefit payments: The release of the present value, using the original discount rate, of the expected future policy benefits due to death, lapse/withdrawal, and other benefit payments based on current assumptions.

Significant assumptions used to compute the liability for future policy benefits for the Traditional business include mortality, morbidity, lapse rates and discount rates (both accretion and current). The Company updated the underlying market data used to determine the current discount rate resulting in changes to the discount rate assumption used to measure the net liability for future policy benefits each period. The Company's Traditional business actual-to-expected variances and the effects of changes in discount rate assumption for the six months ending June 30, 2023 and 2022, are summarized in the tables below:

Six months ended June 30, 2023:

Segment	Net liability for future policy benefits at original discount rate	Changes in cash flow assumptions	Actual-to-expected variance	Impact of updating discount rate recognized in OCI	Commentary
U.S. and Latin America – Traditional	$11.1 billion	None	$34 million	$307 million	The Company reviewed the significant assumptions used to measure the liability for future policy benefits and did not make any changes to the segment's mortality, morbidity, and lapse assumptions as actual experience was consistent with the underlying assumptions.
	0.1% increase		0.3% increase	2.8% increase	
Canada – Traditional	$3.5 billion	None	$—	$184 million	The Company reviewed the significant assumptions used to measure the liability for future policy benefits and did not make any changes to the segment's mortality, morbidity, and lapse assumptions as actual experience was consistent with the underlying assumptions.
	4.4% increase		—%	5.5% increase	
Europe, Middle East and Africa – Traditional	$1.3 billion	None	$7 million	$(73) million	The Company reviewed the significant assumptions used to measure the liability for future policy benefits and did not make any material changes to the segment's mortality, morbidity, and lapse assumptions as actual experience was consistent with the underlying assumptions.
	6.6% increase		0.6% increase	6.0% decrease	
Asia Pacific – Traditional	$4.4 billion	None	$(23) million	$30 million	The Company reviewed the significant assumptions used to measure the liability for future policy benefits and did not make any material changes to the segment's mortality, morbidity, and lapse assumptions as actual experience was consistent with the underlying assumptions.
	2.1% increase		0.5% decrease	0.7% increase	

Six months ended June 30, 2022:

Segment	Net liability for future policy benefits at original discount rate	Changes in cash flow assumptions	Actual-to-expected variance	Impact of updating discount rate recognized in OCI	Commentary
U.S. and Latin America – Traditional	$10.7 billion	None	$97 million	$(3,939) million	The Company reviewed the significant assumptions used to measure the liability for future policy benefits and did not make any changes to the segment's mortality, morbidity, and lapse assumptions as actual experience was consistent with the underlying assumptions. The actual-to-expected variance was predominately related to COVID-19.
	0.4% increase		0.9% increase	37.1% decrease	
Canada – Traditional	$3.4 billion	None	$17 million	$(1,418) million	The Company reviewed the significant assumptions used to measure the liability for future policy benefits and did not make any changes to the segment's mortality, morbidity, and lapse assumptions as actual experience was consistent with the underlying assumptions.
	0.6% decrease		0.5% increase	41.1% decrease	
Europe, Middle East and Africa – Traditional	$1.2 billion	None	$11 million	$(242) million	The Company reviewed the significant assumptions used to measure the liability for future policy benefits and did not make any changes to the segment's mortality, morbidity, and lapse assumptions as actual experience was consistent with the underlying assumptions.
	5.5% decrease		0.9% increase	19.8% decrease	
Asia Pacific – Traditional	$4.0 billion	$(23) million	$49 million	$(745) million	The Company reviewed the significant assumptions used to measure the liability for future policy benefits and did not make any changes to the segment's mortality, morbidity, and lapse assumptions as actual experience was consistent with the underlying assumptions. The Company did update future premium assumptions as a result of anticipated management actions that will be effective in future periods.
	1.5% decrease	0.6% decrease	1.2% increase	18.5% decrease	

Liability for Future Policy Benefits – Financial Solutions Business

The Company reviews actual and anticipated experience compared to the assumptions used to establish policy benefits on a quarterly basis and will update those assumptions if evidence suggests that they should be revised. During the six months ended June 30, 2023, and 2022, there were no material changes to the Financial Solutions business assumptions. The Company expects to complete its annual review and any necessary updates of cash flow assumptions used to calculate the liability for future policy benefits during the third quarter of each year. Updates may occur in other quarters if information becomes available during the quarter that indicates an assumption update is necessary.

The following tables provide the balances of and changes in the Company's liability for future policy benefits, including the deferred profit liability related to the longevity business, for its Financial Solutions business, which primarily consists of longevity reinsurance, asset-intensive products, primarily annuities and financial reinsurance for the six months ending June 30, 2023 and 2022 (dollars in millions):

Six months ended June 30, 2023:	U.S. and Latin America – Financial Solutions	Canada – Financial Solutions	Europe, Middle East and Africa – Financial Solutions	Asia Pacific – Financial Solutions
Present Value of Expected Net Premiums				
Beginning of year balance at original discount rate	$ 1,671	$ 3,394	$ 38,782	$ 1,605
Effect of changes in cash flow assumptions	—	—	1	—
Effect of actual variances from expected experience	(18)	(3)	200	(3)
Adjusted balance, beginning of year	1,653	3,391	38,983	1,602
Issuances (1)	146	—	4,929	2,163
Interest accrual (2)	26	54	428	12
Net premiums collected (3)	(225)	(168)	(2,186)	(1,528)
Derecognition (4)	—	—	—	—
Foreign currency translation	1	77	1,673	(164)
Ending balance at original discount rate	1,601	3,354	43,827	2,085
Effect of changes in discount rate assumptions	(255)	(356)	(10,656)	82
Balance, end of period	$ 1,346	$ 2,998	$ 33,171	$ 2,167
Present Value of Expected Future Policy Benefits				
Beginning of year balance at original discount rate	$ 5,823	$ 3,447	$ 44,330	$ 6,561
Effect of changes in cash flow assumptions	—	—	1	—
Effect of actual variances from expected experience	(23)	(10)	186	(4)
Adjusted balance, beginning of year	5,800	3,437	44,517	6,557
Issuances (1)	154	—	4,929	2,209
Interest accrual (2)	114	55	508	39
Benefit payments (5)	(270)	(166)	(1,782)	(132)
Derecognition (4)	—	—	—	—
Foreign currency translation	(16)	79	1,938	(686)
Ending balance at original discount rate	5,782	3,405	50,110	7,987
Effect of changes in discount rate assumptions	(551)	(354)	(11,829)	(209)
Balance, end of period	$ 5,231	$ 3,051	$ 38,281	$ 7,778
Liability for future policy benefits	$ 3,885	$ 53	$ 5,110	$ 5,611
Less: reinsurance recoverable	—	—	—	—
Net liability for future policy benefits	$ 3,885	$ 53	$ 5,110	$ 5,611
Weighted-average duration of the liability (in years)	8	7	9	16
Weighted-average interest accretion rate	3.6 %	3.2 %	2.1 %	1.2 %
Weighted-average current discount rate	5.2 %	4.8 %	5.5 %	1.6 %

(1) Issuances: The present value, using the original discount rate, of the expected net premiums or the expected future policy benefits related to new reinsurance contracts that became effective during the current period and new policies assumed on existing contracts.

(2) Interest accrual: The interest earned on the beginning present value of either the expected net premiums or the expected future policy benefits using the original interest rate.

(3) Net premiums collected: The portion of gross premiums collected from the ceding company that is used to fund expected benefit payments.

(4) Derecognition: Includes the effects of treaty recaptures and treaty amendments that resulted in the termination of an existing treaty and the issuance of a new treaty under the internal replacement model.

(5) Benefit payments: The release of the present value, using the original discount rate, of the expected future policy benefits due to death, lapse/withdrawal, and other benefit payments based on current assumptions.

Six months ended June 30, 2022:	U.S. and Latin America – Financial Solutions	Canada – Financial Solutions	Europe, Middle East and Africa – Financial Solutions	Asia Pacific – Financial Solutions
Present Value of Expected Net Premiums				
Beginning of year balance at original discount rate	$ 228	$ 3,329	$ 31,973	$ 1,051
Effect of changes in cash flow assumptions	—	—	—	—
Effect of actual variances from expected experience	(6)	(7)	366	98
Adjusted balance, beginning of year	222	3,322	32,339	1,149
Issuances (1)	—	581	10,932	1,326
Interest accrual (2)	1	56	358	13
Net premiums collected (3)	(14)	(181)	(1,542)	(681)
Derecognition (4)	—	—	—	—
Foreign currency translation	—	(68)	(3,861)	(260)
Ending balance at original discount rate	209	3,710	38,226	1,547
Effect of changes in discount rate assumptions	(82)	(419)	(6,867)	131
Balance, end of period	$ 127	$ 3,291	$ 31,359	$ 1,678
Present Value of Expected Future Policy Benefits				
Beginning of year balance at original discount rate	$ 4,628	$ 3,393	$ 38,196	$ 6,062
Effect of changes in cash flow assumptions	—	—	—	—
Effect of actual variances from expected experience	(27)	(14)	354	98
Adjusted balance, beginning of year	4,601	3,379	38,550	6,160
Issuances (1)	—	581	10,932	1,326
Interest accrual (2)	93	58	441	36
Benefit payments (5)	(215)	(180)	(1,734)	(111)
Derecognition (4)	—	—	—	—
Foreign currency translation	—	(70)	(4,469)	(1,060)
Ending balance at original discount rate	4,479	3,768	43,720	6,351
Effect of changes in discount rate assumptions	(246)	(415)	(7,448)	(97)
Balance, end of period	$ 4,233	$ 3,353	$ 36,272	$ 6,254
Liability for future policy benefits	$ 4,106	$ 62	$ 4,913	$ 4,576
Less: reinsurance recoverable	—	—	—	—
Net liability for future policy benefits	$ 4,106	$ 62	$ 4,913	$ 4,576
Weighted-average duration of the liability (in years)	9	7	9	16
Weighted-average interest accretion rate	2.5 %	3.3 %	2.1 %	1.6 %
Weighted-average current discount rate	4.7 %	4.8 %	3.9 %	1.5 %

(1) Issuances: The present value, using the original discount rate, of the expected net premiums or the expected future policy benefits related to new reinsurance contracts that became effective during the current period and new policies assumed on existing contracts.

(2) Interest accrual: The interest earned on the beginning present value of either the expected net premiums or the expected future policy benefits using the original interest rate.

(3) Net premiums collected: The portion of gross premiums collected from the ceding company that is used to fund expected benefit payments.

(4) Derecognition: Includes the effects of treaty recaptures and treaty amendments that resulted in the termination of an existing treaty and the issuance of a new treaty under the internal replacement model.

(5) Benefit payments: The release of the present value, using the original discount rate, of the expected future policy benefits due to death, lapse/withdrawal, and other benefit payments based on current assumptions.

Significant assumptions used to compute the liability for future policy benefits for the Financial Solutions business include mortality, morbidity, lapse rates and discount rates (both accretion and current). The Company updated the underlying market data used to determine the current discount rate resulting in changes to the discount rate assumption used to measure the net liability for future policy benefits. The Company's Financial Solutions business actual-to-expected variances and the effects of changes in discount rate assumptions for the six months ended June 30, 2023 and 2022, are summarized in the tables below:

Six months ended June 30, 2023:

Segment	Net liability for future policy benefits at original discount rate	Changes in cash flow assumptions	Actual-to-expected variance	Impact of updating discount rate recognized in OCI	Commentary
U.S. and Latin America – Financial Solutions	$4.2 billion 0.7% increase	None	$(5) million 0.1% decrease	$37 million 0.9% increase	The Company reviewed the significant assumptions used to measure the liability for future policy benefits and did not make any changes to the segment's mortality, morbidity, and lapse assumptions as actual experience was consistent with the underlying assumptions.
Canada – Financial Solutions	$51 million 3.8% decrease	None	$(7) million 13.2% decrease	$1 million 2% increase	The Company reviewed the significant assumptions used to measure the liability for future policy benefits and did not make any changes to the segment's mortality, morbidity, and lapse assumptions as actual experience was consistent with the underlying assumptions.
Europe, Middle East and Africa – Financial Solutions	$6.3 billion 13.2% increase	None	$(14) million 0.3% decrease	$(259) million 4.63% decrease	The Company reviewed the significant assumptions used to measure the liability for future policy benefits and did not make any changes to the segment's mortality, morbidity, and lapse assumptions as actual experience was consistent with the underlying assumptions.
Asia Pacific – Financial Solutions	$5.9 billion 19.1% increase	None	$(1) million —%	$169 million 2.7% increase	The Company reviewed the significant assumptions used to measure the liability for future policy benefits and did not make any changes to the segment's mortality, morbidity, and lapse assumptions as actual experience was consistent with the underlying assumptions.

Six months ended June 30, 2022:

Segment	Net liability for future policy benefits at original discount rate	Changes in cash flow assumptions	Actual-to-expected variance	Impact of updating discount rate recognized in OCI	Commentary
U.S. and Latin America – Financial Solutions	$4.3 billion 3.0% decrease	None	$(21) million 0.5% decrease	$(711) million 16.2% decrease	The Company reviewed the significant assumptions used to measure the liability for future policy benefits and did not make any changes to the segment's mortality, morbidity, and lapse assumptions as actual experience was consistent with the underlying assumptions.
Canada – Financial Solutions	$58 million 9.4% decrease	None	$(7) million 10.9% decrease	$(13) million 20.3% decrease	The Company reviewed the significant assumptions used to measure the liability for future policy benefits and did not make any changes to the segment's mortality, morbidity, and lapse assumptions as actual experience was consistent with the underlying assumptions.
Europe, Middle East and Africa – Financial Solutions	$5.5 billion 11.7% decrease	None	$(12) million 0.2% decrease	$(1,087) million 17.5% decrease	The Company reviewed the significant assumptions used to measure the liability for future policy benefits and did not make any changes to the segment's mortality, morbidity, and lapse assumptions as actual experience was consistent with the underlying assumptions.
Asia Pacific – Financial Solutions	$4.8 billion 4.1% decrease	None	$— —%	$(231) million 4.6% decrease	The Company reviewed the significant assumptions used to measure the liability for future policy benefits and did not make any changes to the segment's mortality, morbidity, and lapse assumptions as actual experience was consistent with the underlying assumptions.

Reconciliation and Other Disclosures

The reconciliation of the rollforward of the liability for future policy benefits to the condensed consolidated balance sheets as of June 30, 2023 and 2022 is as follows (dollars in millions):

	June 30,	
	2023	2022
Liability for future policy benefits included in the rollforwards:		
Traditional:		
U.S. and Latin America	$ 9,792	$ 10,144
Canada	4,280	4,117
Europe, Middle East and Africa	1,048	1,080
Asia Pacific	2,466	2,205
Financial Solutions:		
U.S. and Latin America	3,885	4,106
Canada	53	62
Europe, Middle East and Africa	5,110	4,913
Asia Pacific	5,611	4,576
Other long-duration contracts	187	184
Claims liability and incurred but not reported claims	5,289	5,085
Unearned revenue liability	518	556
Total liability for future policy benefits	$ 38,239	$ 37,028

The amount of undiscounted and discounted expected future gross premiums and expected future benefit payments for the liability for future policy benefits included in the rollforwards as of June 30, 2023 and 2022 is as follows (dollars in millions):

	June 30,			
	2023		2022	
	Undiscounted	Discounted	Undiscounted	Discounted
Expected future gross premiums				
Traditional:				
U.S. and Latin America	$ 172,520	$ 81,058	$ 172,995	$ 84,638
Canada	55,059	22,193	53,583	20,908
Europe, Middle East and Africa	25,185	13,178	23,736	13,747
Asia Pacific	91,057	38,197	82,264	34,636
Financial Solutions:				
U.S. and Latin America	3,062	1,912	956	628
Canada	4,749	3,141	5,255	3,428
Europe, Middle East and Africa	67,116	36,502	52,745	34,604
Asia Pacific	3,939	3,257	2,949	2,515
Expected future benefit payments				
Traditional:				
U.S. and Latin America	$ 181,424	$ 79,289	$ 181,945	$ 82,447
Canada	58,011	22,163	57,185	20,933
Europe, Middle East and Africa	24,714	12,416	23,198	12,948
Asia Pacific	87,425	32,586	80,108	29,354
Financial Solutions:				
U.S. and Latin America	9,066	5,231	7,249	4,233
Canada	4,608	3,051	5,139	3,353
Europe, Middle East and Africa	70,992	38,281	55,398	36,272
Asia Pacific	10,844	7,778	8,317	6,254

The amount of gross premiums and interest expense recognized in the consolidated statements of income for the liability for future policy benefits included in the rollforwards for the six months ended June 30, 2023 and 2022 is as follows (dollars in millions):

	Gross Premiums		Interest Expense	
	June 30,		June 30,	
	2023	2022	2023	2022
Traditional:				
U.S. and Latin America	$ 2,935	$ 2,879	$ 262	$ 250
Canada	535	552	104	110
Europe, Middle East and Africa	697	708	16	16
Asia Pacific	1,257	1,237	73	66
Financial Solutions:				
U.S. and Latin America	166	15	88	92
Canada	46	48	1	2
Europe, Middle East and Africa	335	319	80	83
Asia Pacific	108	103	27	23
Total	$ 6,079	$ 5,861	$ 651	$ 642

There were no material charges incurred for the six months ended June 30, 2023 and 2022, resulting from net premiums exceeding gross premiums.

NOTE 6 POLICYHOLDER ACCOUNT BALANCES

Policyholder Account Balances

The following tables provide the balances of and changes in the Company’s liability for its policyholder account balances for the six months ended June 30, 2023 and 2022 (dollars in millions):

Six months ended June 30, 2023:	U.S. and Latin America – Traditional	U.S. and Latin America – Financial Solutions	Asia Pacific – Financial Solutions
Balance, beginning of year	$ 1,683	$ 18,906	$ 3,351
Deposits	6	66	605
Policy charges	(15)	(17)	(1)
Surrenders and withdrawals	(8)	(1,046)	(50)
Benefit payments	(60)	(238)	(43)
Interest credited	33	283	53
Foreign currency translation	—	—	(17)
Balance, end of period	$ 1,639	$ 17,954	$ 3,898
Less: reinsurance recoverable	—	(1,519)	—
Balance, end of period, after reinsurance	$ 1,639	$ 16,435	$ 3,898
Weighted-average crediting rate	4.0 %	3.3 %	2.9 %
Net amount at risk	$ 686	$ 2,439	$ —
Cash surrender value	$ 1,624	$ 17,907	$ 3,695

Six months ended June 30, 2022:	U.S. and Latin America – Traditional	U.S. and Latin America – Financial Solutions	Asia Pacific – Financial Solutions
Balance, beginning of year	$ 1,719	$ 18,758	$ 1,621
Deposits	7	738	954
Policy charges	(16)	(16)	(22)
Surrenders and withdrawals	(10)	(576)	(170)
Benefit payments	(40)	(228)	(16)
Interest credited	33	304	15
Foreign currency translation	—	—	(23)
Balance, end of period	$ 1,693	$ 18,980	$ 2,359
Less: reinsurance recoverable	—	(1,545)	—
Balance, end of period, after reinsurance	$ 1,693	$ 17,435	$ 2,359
Weighted-average crediting rate	4.0 %	3.2 %	1.8 %
Net amount at risk	$ 710	$ 2,547	$ —
Cash surrender value	$ 1,678	$ 18,925	$ 2,277

Information regarding the Company's policyholder account balances as of June 30, 2023 and 2022 is as follows (dollars in millions):

	June 30, 2023	June 30, 2022
Policyholder account balances included in the rollforwards:		
Traditional:		
U.S. and Latin America	$ 1,639	$ 1,693
Financial Solutions:		
U.S. and Latin America	17,954	18,980
Asia Pacific	3,898	2,359
Other policyholder account balances		
U.S. and Latin America – Financial Solutions	52	71
Total policyholder account balances	$ 23,543	$ 23,103

The balance of account values by range of guaranteed minimum crediting rates and the related range of difference, in basis points, between rates being credited to policyholders and the respective guaranteed minimums as of June 30 , 2023 and 2022 is as follows (dollars in millions):

	June 30, 2023						
	Range of Guaranteed Minimum Crediting Rate	At Guaranteed Minimum	1 Basis Point – 50 Basis Points Above	51 Basis Points – 100 Basis Points Above	101 Basis Points – 150 Basis Points Above	Greater Than 150 Basis Points Above	Total
U.S. and Latin America – Traditional	Less than 1.00%	$ —	$ —	$ —	$ —	$ —	$ —
	1.00 – 1.99%	—	—	—	—	—	—
	2.00 – 2.99%	—	—	—	—	—	—
	3.00 – 3.99%	—	—	—	—	—	—
	4.00% and Greater	521	1,118	—	—	—	1,639
	Total	$ 521	$ 1,118	$ —	$ —	$ —	$ 1,639
U.S. and Latin America – Financial Solutions	Less than 1.00%	$ —	$ —	$ —	$ —	$ —	$ —
	1.00 – 1.99%	1,759	14	16	70	40	1,899
	2.00 – 2.99%	1,724	13	57	637	31	2,462
	3.00 – 3.99%	4,515	249	70	—	—	4,834
	4.00% and Greater	8,717	42	—	—	—	8,759
	Total	$ 16,715	$ 318	$ 143	$ 707	$ 71	$ 17,954
Asia Pacific – Financial Solutions	Less than 1.00%	$ 314	$ —	$ —	$ —	$ —	$ 314
	1.00 – 1.99%	757	—	—	—	—	757
	2.00 – 2.99%	694	—	—	—	—	694
	3.00 – 3.99%	1,160	—	—	—	—	1,160
	4.00% and Greater	973	—	—	—	—	973
	Total	$ 3,898	$ —	$ —	$ —	$ —	$ 3,898

	Range of Guaranteed Minimum Crediting Rate	June 30, 2022 At Guaranteed Minimum	1 Basis Point – 50 Basis Points Above	51 Basis Points – 100 Basis Points Above	101 Basis Points – 150 Basis Points Above	Greater Than 150 Basis Points Above	Total
U.S. and Latin America – Traditional	Less than 1.00%	$ —	$ —	$ —	$ —	$ —	$ —
	1.00 – 1.99%	—	—	—	—	—	—
	2.00 – 2.99%	—	—	—	—	—	—
	3.00 – 3.99%	—	—	—	—	—	—
	4.00% and Greater	1,693	—	—	—	—	1,693
	Total	$ 1,693	$ —	$ —	$ —	$ —	$ 1,693
U.S. and Latin America – Financial Solutions	Less than 1.00%	$ —	$ —	$ —	$ —	$ —	$ —
	1.00 – 1.99%	1,978	15	16	58	45	2,112
	2.00 – 2.99%	2,074	6	129	632	—	2,841
	3.00 – 3.99%	4,888	243	62	12	1	5,206
	4.00% and Greater	8,771	49	—	—	1	8,821
	Total	$ 17,711	$ 313	$ 207	$ 702	$ 47	$ 18,980
Asia Pacific – Financial Solutions	Less than 1.00%	$ 573	$ —	$ —	$ —	$ —	$ 573
	1.00 – 1.99%	952	—	—	—	—	952
	2.00 – 2.99%	476	—	—	—	—	476
	3.00 – 3.99%	350	—	—	—	—	350
	4.00% and Greater	8	—	—	—	—	8
	Total	$ 2,359	$ —	$ —	$ —	$ —	$ 2,359

NOTE 7 UNPAID CLAIMS AND CLAIM EXPENSE – SHORT-DURATION CONTRACTS

Rollforward of Claims and Claim Adjustment Expenses

The liability for unpaid claims for short-duration contracts is reported in other policy claims and benefits on the Company's condensed consolidated balance sheets. Activity associated with unpaid claims is summarized below (dollars in millions):

	Six months ended June 30, 2023	2022
Balance, beginning of year	$ 2,480	$ 2,110
Less: reinsurance recoverable	(57)	(81)
Net balance, beginning of year	2,423	2,029
Incurred:		
Current year	789	1,047
Prior years	(55)	(74)
Total incurred	734	973
Payments:		
Current year	(119)	(117)
Prior years	(539)	(484)
Total payments	(658)	(601)
Other changes:		
Interest accretion	17	14
Foreign exchange adjustments	(7)	(44)
Total other changes	10	(30)
Net balance, end of period	2,509	2,371
Plus: reinsurance recoverable	70	76
Balance, end of period	$ 2,579	$ 2,447

Incurred claims associated with prior periods are primarily due to the development of short-duration business claims for prior years being different than were anticipated when the liabilities for unpaid claims were originally estimated. These trends have been considered in establishing the current year liability for unpaid claims.

NOTE 8 MARKET RISK BENEFITS

The following table provides the balances of and changes in the Company's market risk benefits for the six months ended June 30, 2023 and 2022 (dollars in millions):

	U.S. and Latin America – Financial Solutions	
	Six months ended June 30,	
	2023	2022
Balance, beginning of year	$ 247	$ 262
Balance, beginning of year, before effect of changes in the instrument-specific credit risk	263	248
Interest accrual	6	—
Attributed fees collected	13	7
Benefit payments	(1)	(4)
Effect of changes in interest rates	(2)	(66)
Effect of changes in equity markets	(34)	46
Effect of changes in volatility	(7)	12
Other market impacts	(2)	4
Actual policyholder behavior different from expected behavior	9	12
Balance, end of period, before effect of changes in the instrument-specific credit risk	245	259
Effect of changes in the instrument-specific credit risk	(16)	12
Balance, end of period	229	271
Less: reinsurance recoverable		—
Balance, end of period, after reinsurance	$ 229	$ 271
Net amount at risk	$ 1,411	$ 1,317
Weighted-average attained age of contract holders (in years)	71	67

The reconciliation of the rollforward for market risk benefits to the condensed consolidated balance sheets as of June 30, 2023 and 2022 is as follows (dollars in millions):

	June 30, 2023			June 30, 2022		
	Asset [(1)]	Liability	Net	Asset [(1)]	Liability	Net
U.S. and Latin America – Financial Solutions	$ 6	$ 235	$ (229)	$ —	$ 271	$ (271)
Total market risk benefits	$ 6	$ 235	$ (229)	$ —	$ 271	$ (271)

(1) Included in Other assets

Fair Value Measurement

See Note 13 – "Fair Value of Assets and Liabilities" for information about fair value measurement of assets and liabilities, except for market risk benefits.

Market risk benefits are classified within Level 3 on the fair value hierarchy. The fair value of market risk benefits is monitored through the use of attribution reports to quantify the effect of underlying sources of fair value change, including capital market inputs based on policyholder account values, interest rates and short-term and long-term implied volatility from period to period.

During the six months ended June 30, 2023 and 2022, there were no material changes made to the inputs in the market risk benefit calculations, and nonfinancial assumptions were unchanged.

NOTE 9 DEFERRED POLICY ACQUISITION COSTS

The following tables provide the balances of and changes in deferred policy acquisition costs for the Company's Traditional business for the six months ended June 30, 2023 and 2022 (dollars in millions):

Six months ended June 30, 2023:	U.S. and Latin America – Traditional	Canada – Traditional	Europe, Middle East and Africa – Traditional	Asia Pacific – Traditional
Balance, beginning of year	$ 2,087	$ 171	$ 294	$ 1,043
Capitalization	119	5	44	52
Amortization expense	(73)	(6)	(18)	(30)
Foreign currency translation	1	4	(2)	(15)
Balance, end of period	$ 2,134	$ 174	$ 318	$ 1,050

Six months ended June 30, 2022:	U.S. and Latin America – Traditional	Canada – Traditional	Europe, Middle East and Africa – Traditional	Asia Pacific – Traditional
Balance, beginning of year	$ 1,947	$ 191	$ 270	$ 1,056
Capitalization	131	4	39	54
Amortization expense	(71)	(7)	(19)	(37)
Foreign currency translation	—	(3)	(18)	(32)
Balance, end of period	$ 2,007	$ 185	$ 272	$ 1,041

The following tables provide the balances of and changes in deferred policy acquisition costs for the Company's Financial Solutions business for the six months ended June 30, 2023 and 2022 (dollars in millions):

Six months ended June 30, 2023:	U.S. and Latin America – Financial Solutions	Canada – Financial Solutions	Europe, Middle East and Africa – Financial Solutions	Asia Pacific – Financial Solutions
Balance, beginning of year	$ 341	$ —	$ —	$ 188
Capitalization	—	—	—	116
Amortization expense	(21)	—	—	(15)
Foreign currency translation	—	—	—	(4)
Balance, end of period	$ 320	$ —	$ —	$ 285

Six months ended June 30, 2022:	U.S. and Latin America – Financial Solutions	Canada – Financial Solutions	Europe, Middle East and Africa – Financial Solutions	Asia Pacific – Financial Solutions
Balance, beginning of year	$ 312	$ —	$ —	$ 81
Capitalization	31	—	—	42
Amortization expense	(35)	—	—	(6)
Foreign currency translation	—	—	—	(1)
Balance, end of period	$ 308	$ —	$ —	$ 116

The reconciliation of deferred policy acquisition costs to the condensed consolidated balance sheets as of June 30, 2023 and 2022 is as follows (dollars in millions):

	June 30,	
	2023	2022
Deferred policy acquisition costs included in the rollforwards:		
Traditional:		
U.S. and Latin America	$ 2,134	$ 2,007
Canada	174	185
Europe, Middle East and Africa	318	272
Asia Pacific	1,050	1,041
Financial Solutions:		
U.S. and Latin America	320	308
Canada	—	—
Europe, Middle East and Africa	—	—
Asia Pacific	285	116
Other long-duration business:		
Corporate and Other	5	6
Total deferred policy acquisition costs	$ 4,286	$ 3,935

NOTE 10 REINSURANCE CEDED RECEIVABLES AND OTHER

Retrocession reinsurance treaties do not relieve the Company from its obligations to direct writing companies. Failure of retrocessionaires to honor their obligations could result in losses to the Company. Consequently, allowances would be established for amounts deemed uncollectible. The Company regularly evaluates the financial condition of the insurance companies from which it assumes and to which it cedes reinsurance. At June 30, 2023 and December 31, 2022, no allowances were deemed necessary.

Two major reinsurance companies account for approximately 77% of reinsurance ceded receivables and other as of June 30, 2023. Retrocessions are arranged through the Company’s retrocession pools for amounts in excess of the Company’s retention limit. As of June 30, 2023, all rated retrocession pool participants followed by the A.M. Best Company were rated “A- (excellent)” or better. The Company verifies retrocession pool participants’ ratings on a quarterly basis. For a majority of the retrocessionaires that were not rated, security in the form of letters of credit or trust assets have been posted. In addition, the Company performs annual financial reviews of its retrocessionaires to evaluate financial stability and performance.

Included in the total reinsurance ceded receivables and other balance are $157 million and $183 million of claims recoverable, of which $12 million and $16 million were in excess of 90 days past due, as of June 30, 2023 and December 31, 2022, respectively. Also included in the total reinsurance ceded receivable and other is a deposit asset on reinsurance of $1.5 billion and $1.6 billion as of June 30, 2023 and December 31, 2022, respectively.

NOTE 11 INVESTMENTS

Fixed Maturity Securities Available-for-Sale

The Company holds various types of fixed maturity securities available-for-sale and classifies them as corporate securities ("Corporate"), Canadian and Canadian provincial government securities ("Canadian government"), Japanese government and agencies ("Japanese government"), asset-backed securities ("ABS"), commercial mortgage-backed securities ("CMBS"), residential mortgage-backed securities ("RMBS"), U.S. government and agencies ("U.S. government"), state and political subdivisions, and other foreign government, supranational and foreign government-sponsored enterprises ("Other foreign government"). ABS, CMBS and RMBS are collectively "structured securities."

The following tables provide information relating to investments in fixed maturity securities by type as of June 30, 2023 and December 31, 2022 (dollars in millions):

June 30, 2023:	Amortized Cost	Allowance for Credit Losses	Unrealized Gains	Unrealized Losses	Estimated Fair Value	% of Total
Available-for-sale:						
Corporate	$ 40,751	$ 62	$ 252	$ 4,763	$ 36,178	64.3 %
Canadian government	3,395	—	404	47	3,752	6.7
Japanese government	3,315	—	10	279	3,046	5.4
ABS	4,510	12	15	348	4,165	7.4
CMBS	1,932	1	2	234	1,699	3.1
RMBS	1,145	—	3	111	1,037	1.8
U.S. government	1,573	—	1	208	1,366	2.4
State and political subdivisions	1,247	—	7	145	1,109	2.0
Other foreign government	4,317	—	34	467	3,884	6.9
Total fixed maturity securities	$ 62,185	$ 75	$ 728	$ 6,602	$ 56,236	100.0 %

December 31, 2022:	Amortized Cost	Allowance for Credit Losses	Unrealized Gains	Unrealized Losses	Estimated Fair Value	% of Total
Available-for-sale:						
Corporate	$ 38,963	$ 27	$ 168	$ 5,135	$ 33,969	64.2 %
Canadian government	3,311	—	381	66	3,626	6.9
Japanese government	3,033	—	4	478	2,559	4.8
ABS	4,324	10	4	440	3,878	7.3
CMBS	1,835	—	—	212	1,623	3.1
RMBS	1,054	—	1	114	941	1.8
U.S. government	1,690	—	4	212	1,482	2.8
State and political subdivisions	1,282	—	10	173	1,119	2.1
Other foreign government	4,171	—	22	489	3,704	7.0
Total fixed maturity securities	$ 59,663	$ 37	$ 594	$ 7,319	$ 52,901	100.0 %

The Company enters into various collateral arrangements with counterparties that require both the pledging and acceptance of fixed maturity securities as collateral. Pledged fixed maturity securities are included in fixed maturity securities available-for-sale in the condensed consolidated balance sheets. Fixed maturity securities received as collateral are held in separate custodial accounts and are not recorded on the Company's condensed consolidated balance sheets. Subject to certain constraints, the Company is permitted by contract to sell or repledge collateral it receives; however, as of June 30, 2023 and December 31, 2022, none of the collateral received had been sold or repledged. The Company also holds assets in trust to satisfy collateral requirements under derivative transactions and certain third-party reinsurance treaties. The following table includes fixed maturity securities pledged and received as collateral and assets in trust held to satisfy collateral requirements under derivative transactions and certain third-party reinsurance treaties as of June 30, 2023 and December 31, 2022 (dollars in millions):

	June 30, 2023		December 31, 2022	
	Amortized Cost	Estimated Fair Value	Amortized Cost	Estimated Fair Value
Fixed maturity securities pledged as collateral	$ 401	$ 352	$ 355	$ 292
Fixed maturity securities received as collateral	n/a	1,742	n/a	1,428
Assets in trust held to satisfy collateral requirements	32,516	29,259	31,510	27,817

The Company monitors its concentrations of financial instruments on an ongoing basis and mitigates credit risk by maintaining a diversified investment portfolio that limits exposure to any one issuer. The Company's exposure to concentrations of credit risk from single issuers greater than 10% of the Company's equity included securities of the U.S. government and its agencies and the Japanese government and its agencies, as well as the securities disclosed below, as of June 30, 2023 and December 31, 2022 (dollars in millions).

	June 30, 2023		December 31, 2022	
	Amortized Cost	Estimated Fair Value	Amortized Cost	Estimated Fair Value
Fixed maturity securities guaranteed or issued by:				
Canadian province of Quebec	$ 1,432	$ 1,668	$ 1,436	$ 1,649
Canadian province of Ontario	1,014	1,104	982	1,068

The amortized cost and estimated fair value of fixed maturity securities classified as available-for-sale as of June 30, 2023, are shown by contractual maturity in the table below (dollars in millions). Actual maturities can differ from contractual maturities because borrowers may have the right to call or prepay obligations with or without call or prepayment penalties. Structured securities are shown separately in the table below, as they are not due at a single maturity date.

	Amortized Cost	Estimated Fair Value
Available-for-sale:		
Due in one year or less	$ 1,883	$ 1,887
Due after one year through five years	10,281	9,970
Due after five years through ten years	11,237	10,257
Due after ten years	31,197	27,221
Structured securities	7,587	6,901
Total	$ 62,185	$ 56,236

Corporate Fixed Maturity Securities

The tables below show the major sectors of the Company's corporate fixed maturity holdings as of June 30, 2023 and December 31, 2022 (dollars in millions):

June 30, 2023:	Amortized Cost	Estimated Fair Value	% of Total
Finance	$ 14,948	$ 13,120	36.3 %
Industrial	20,574	18,548	51.2
Utility	5,229	4,510	12.5
Total	$ 40,751	$ 36,178	100.0 %

December 31, 2022:	Amortized Cost	Estimated Fair Value	% of Total
Finance	$ 14,551	$ 12,680	37.3 %
Industrial	19,624	17,257	50.8
Utility	4,788	4,032	11.9
Total	$ 38,963	$ 33,969	100.0 %

Allowance for Credit Losses and Impairments – Fixed Maturity Securities Available-for-Sale

As discussed in Note 2 – "Significant Accounting Policies and Pronouncements" of the Company's 2022 Annual Report, allowances for credit losses on fixed maturity securities are recognized in investment related gains (losses), net. The amount recognized represents the difference between the amortized cost of the security and the net present value of its projected future cash flows discounted at the effective interest rate implicit in the fixed maturity security prior to the allowance for credit losses. Any remaining difference between the fair value and amortized cost is recognized in OCI.

The following tables present the rollforward of the allowance for credit losses in fixed maturity securities by type for the six months ended June 30, 2023 and 2022 (dollars in millions):

Six months ended June 30, 2023:

	Corporate	ABS	CMBS	Other Foreign Government	Total
Balance, beginning of year	$ 27	$ 10	$ —	$ —	$ 37
Credit losses recognized on securities for which credit losses were not previously recorded	44	—	1	—	45
Reductions for securities sold during the period	(10)	—	—	—	(10)
Additional increases or decreases for credit losses on securities that had an allowance recorded in a previous period	1	2	—	—	3
Balance, end of period	$ 62	$ 12	$ 1	$ —	$ 75

Six months ended June 30, 2022:

	Corporate	ABS	CMBS	Other Foreign Government	Total
Balance, beginning of year	$ 26	$ —	$ 1	$ 4	$ 31
Credit losses recognized on securities for which credit losses were not previously recorded	18	5	—	1	24
Reductions for securities sold during the period	(6)	—	—	(1)	(7)
Additional increases or decreases for credit losses on securities that had an allowance recorded in a previous period	5	—	—	2	7
Balance, end of period	$ 43	$ 5	$ 1	$ 6	$ 55

Unrealized Losses for Fixed Maturity Securities Available-for-Sale

The Company's determination of whether a decline in value necessitates the recording of an allowance for credit losses includes an analysis of whether the issuer is current on its contractual payments, evaluating whether it is probable that the Company will be able to collect all amounts due according to the contractual terms of the security and analyzing the overall ability of the Company to recover the amortized cost of the investment.

The following tables present the estimated fair value and gross unrealized losses for the 6,456 and 6,441 fixed maturity securities for which an allowance for credit loss has not been recorded as of June 30, 2023 and December 31, 2022, and the estimated fair value had declined and remained below amortized cost (dollars in millions). These investments are presented by class and grade of security, as well as the length of time the related fair value has continuously remained below amortized cost.

June 30, 2023:	Less than 12 months		12 months or greater		Total	
	Estimated Fair Value	Gross Unrealized Losses	Estimated Fair Value	Gross Unrealized Losses	Estimated Fair Value	Gross Unrealized Losses
Investment grade securities:						
Corporate	$ 9,095	$ 496	$ 19,800	$ 4,161	$ 28,895	$ 4,657
Canadian government	436	17	168	30	604	47
Japanese government	245	2	2,154	277	2,399	279
ABS	503	17	3,069	316	3,572	333
CMBS	331	16	1,311	212	1,642	228
RMBS	385	17	532	94	917	111
U.S. government	749	14	596	194	1,345	208
State and political subdivisions	303	13	660	132	963	145
Other foreign government	988	42	1,900	362	2,888	404
Total investment grade securities	13,035	634	30,190	5,778	43,225	6,412
Below investment grade securities:						
Corporate	481	21	660	83	1,141	104
ABS	16	1	53	13	69	14
Other foreign government	—	—	183	63	183	63
Total below investment grade securities	497	22	896	159	1,393	181
Total fixed maturity securities	$ 13,532	$ 656	$ 31,086	$ 5,937	$ 44,618	$ 6,593

December 31, 2022:	Less than 12 months		12 months or greater		Total	
	Estimated Fair Value	Gross Unrealized Losses	Estimated Fair Value	Gross Unrealized Losses	Estimated Fair Value	Gross Unrealized Losses
Investment grade securities:						
Corporate	$ 21,867	$ 2,756	$ 6,840	$ 2,225	$ 28,707	$ 4,981
Canadian government	554	42	71	23	625	65
Japanese government	815	86	1,694	392	2,509	478
ABS	1,596	153	1,931	269	3,527	422
CMBS	1,314	144	281	65	1,595	209
RMBS	664	62	181	53	845	115
U.S. government	1,202	64	253	148	1,455	212
State and political subdivisions	819	124	131	50	950	174
Other foreign government	1,942	167	1,026	260	2,968	427
Total investment grade securities	30,773	3,598	12,408	3,485	43,181	7,083
Below investment grade securities:						
Corporate	767	87	305	61	1,072	148
ABS	52	6	38	9	90	15
Other foreign government	39	2	164	60	203	62
Total below investment grade securities	858	95	507	130	1,365	225
Total fixed maturity securities	$ 31,631	$ 3,693	$ 12,915	$ 3,615	$ 44,546	$ 7,308

The Company did not intend to sell, and it was not more likely than not that it would be required to sell, the securities outlined in the tables above, as of the dates indicated. However, unforeseen facts and circumstances may cause the Company to sell fixed maturity securities in the ordinary course of managing its portfolio to meet certain diversification, credit quality and liquidity guidelines. Changes in unrealized losses are primarily driven by changes in risk-free interest rates and credit spreads.

Net Investment Income

Major categories of net investment income consist of the following (dollars in millions):

	Three months ended June 30,		Six months ended June 30,	
	2023	2022	2023	2022
Fixed maturity securities available-for-sale	$ 683	$ 559	$ 1,328	$ 1,092
Equity securities	1	1	3	3
Mortgage loans	80	76	154	149
Policy loans	13	14	26	27
Funds withheld at interest	80	57	152	108
Limited partnerships and real estate joint ventures	19	77	73	238
Short-term investments and cash and cash equivalents	22	2	43	4
Other invested assets	3	—	12	2
Investment income	901	786	1,791	1,623
Investment expense	(44)	(32)	(78)	(59)
Net investment income	$ 857	$ 754	$ 1,713	$ 1,564

Investment Related Gains (Losses), Net

Investment related gains (losses), net consist of the following (dollars in millions):

	Three months ended June 30,		Six months ended June 30,	
	2023	2022	2023	2022
Fixed maturity securities available-for-sale:				
Change in allowance for credit losses	$ 4	$ (13)	$ (38)	$ (24)
Impairments on fixed maturities	—	(2)	(1)	(3)
Realized gains on investment activity	11	34	42	45
Realized losses on investment activity	(37)	(94)	(112)	(130)
Net losses on equity securities	(4)	(15)	(2)	(23)
Change in mortgage loan allowance for credit losses	(9)	(1)	(6)	(3)
Change in fair value of certain limited partnership investments	10	10	7	29
Other, net	15	11	17	19
Net losses on free-standing derivatives	(93)	(114)	(124)	(200)
Net gains (losses) on embedded derivatives	(20)	(56)	17	(89)
Total investment related gains (losses), net	$ (123)	$ (240)	$ (200)	$ (379)

Securities Borrowing, Lending and Repurchase/Reverse Repurchase Agreements

The following table provides information relating to securities borrowing, lending and repurchase/reverse repurchase agreements as of June 30, 2023 and December 31, 2022 (dollars in millions):

	June 30, 2023		December 31, 2022	
	Amortized Cost	Estimated Fair Value	Amortized Cost	Estimated Fair Value
Securities borrowing agreements:				
Securities borrowed [1]	n/a	$ 805	n/a	$ 852
Securities pledged as collateral [2]	$ 795	691	$ 859	693
Securities lending agreements:				
Securities loaned [2]	60	55	59	55
Securities received as collateral [3]	n/a	66	n/a	66
Repurchase/reverse repurchase agreements:				
Securities sold [2]	919	817	898	779
Securities purchased [3]	n/a	498	n/a	619
Cash received [4]	248	248	149	149

(1) Securities borrowed are not reflected on the condensed consolidated balance sheets. Collateral associated with certain borrowed securities is not included within this table as the collateral pledged to the counterparty is the right to reinsurance treaty cash flows.

(2) Securities loaned, pledged or sold to counterparties are included within fixed maturity securities.

(3) Securities received as collateral or purchased from counterparties are not reflected on the condensed consolidated financial statements.

(4) A payable for the cash received by the Company is included within other liabilities.

The following tables present information on the remaining contractual maturity of the Company’s securities lending and repurchase agreements as of June 30, 2023 and December 31, 2022 (dollars in millions):

	June 30, 2023				
	Remaining Contractual Maturity of the Agreements				
	Overnight and Continuous	Up to 30 Days	30 – 90 Days	Greater than 90 Days	Total
Securities lending agreements:					
Corporate	$ —	$ —	$ —	$ 39	$ 39
Canadian government	—	—	—	5	5
State and political subdivisions	—	—	—	6	6
Other foreign government	—	—	—	5	5
Total	—	—	—	55	55
Repurchase agreements:					
Corporate	—	—	—	340	340
Japanese government	—	—	151	—	151
ABS	—	—	—	58	58
CMBS	—	—	—	109	109
RMBS	—	—	—	44	44
U.S. government	—	—	—	13	13
Other foreign government	—	—	—	102	102
Total	—	—	151	666	817
Total agreements	$ —	$ —	$ 151	$ 721	$ 872

	December 31, 2022				
	Remaining Contractual Maturity of the Agreements				
	Overnight and Continuous	Up to 30 Days	30 – 90 Days	Greater than 90 Days	Total
Securities lending agreements:					
Corporate	$ —	$ —	$ —	$ 42	$ 42
Canadian government	—	—	—	5	5
State and political subdivisions	—	—	—	3	3
Other foreign government	—	—	—	5	5
Total	—	—	—	55	55
Repurchase agreements:					
Corporate	—	—	—	279	279
Japanese government	—	—	—	278	278
ABS	—	—	—	54	54
CMBS	—	—	—	63	63
RMBS	—	—	—	10	10
U.S. government	—	—	—	—	—
Other foreign government	—	—	—	95	95
Total	—	—	—	779	779
Total agreements	$ —	$ —	$ —	$ 834	$ 834

Mortgage Loans

As of June 30, 2023, mortgage loans were geographically dispersed throughout the U.S. with the largest concentrations in California (13.3%), Texas (11.8%) and Washington (8.1%), in addition to loans secured by properties in Canada (4.0%) and the United Kingdom (2.3%). The recorded investment in mortgage loans presented below is gross of unamortized deferred loan origination fees and expenses and allowance for credit losses.

The following table presents the distribution of the Company's recorded investment in mortgage loans by property type as of June 30, 2023 and December 31, 2022 (dollars in millions):

	June 30, 2023		December 31, 2022	
Property type:	Carrying Value	% of Total	Carrying Value	% of Total
Office	$ 1,682	23.7 %	$ 1,706	25.6 %
Retail	2,367	33.3	2,290	34.4
Industrial	1,717	24.1	1,518	22.8
Apartment	894	12.6	763	11.5
Other commercial	449	6.3	376	5.7
Recorded investment	7,109	100.0 %	6,653	100.0 %
Unamortized balance of loan origination fees and expenses	(14)		(12)	
Allowance for credit losses	(57)		(51)	
Total mortgage loans	$ 7,038		$ 6,590	

The following table presents the maturities of the Company's recorded investment in mortgage loans as of June 30, 2023 and December 31, 2022 (dollars in millions):

	June 30, 2023		December 31, 2022	
	Recorded Investment	% of Total	Recorded Investment	% of Total
Due within five years	$ 3,085	43.4 %	$ 2,652	39.9 %
Due after five years through ten years	3,058	43.0	2,930	44.0
Due after ten years	966	13.6	1,071	16.1
Total	$ 7,109	100.0 %	$ 6,653	100.0 %

The following tables set forth certain key credit quality indicators of the Company's recorded investment in mortgage loans as of June 30, 2023 and December 31, 2022 (dollars in millions):

	Recorded Investment					
	Debt Service Ratios					
	>1.20x	1.00x – 1.20x	<1.00x	Construction loans	Total	% of Total
June 30, 2023:						
Loan-to-Value Ratio						
0% – 59.99%	$ 3,908	$ 240	$ 64	$ 40	$ 4,252	59.8 %
60% – 69.99%	1,795	219	80	—	2,094	29.5
70% – 79.99%	466	30	18	—	514	7.2
80% or greater	93	43	113	—	249	3.5
Total	$ 6,262	$ 532	$ 275	$ 40	$ 7,109	100.0 %

	Recorded Investment					
	Debt Service Ratios					
	>1.20x	1.00x – 1.20x	<1.00x	Construction loans	Total	% of Total
December 31, 2022:						
Loan-to-Value Ratio						
0% – 59.99%	$ 3,466	$ 215	$ 56	$ 18	$ 3,755	56.4 %
60% – 69.99%	1,894	119	71	—	2,084	31.3
70% – 79.99%	475	49	91	—	615	9.3
80% or greater	81	—	118	—	199	3.0
Total	$ 5,916	$ 383	$ 336	$ 18	$ 6,653	100.0 %

The following table sets forth credit quality grades by year of origination of the Company's recorded investment in mortgage loans as of June 30, 2023 and December 31, 2022 (dollars in millions):

	Recorded Investment						
	Year of Origination						
	2023	2022	2021	2020	2019	Prior	Total
June 30, 2023:							
Internal credit quality grade:							
High investment grade	$ 146	$ 695	$ 676	$ 334	$ 530	$ 1,903	$ 4,284
Investment grade	473	609	283	219	322	687	2,593
Average	—	—	6	18	23	185	232
Watch list	—	—	—	—	—	—	—
In or near default	—	—	—	—	—	—	—
Total	$ 619	$ 1,304	$ 965	$ 571	$ 875	$ 2,775	$ 7,109

	Recorded Investment						
	Year of Origination						
	2022	2021	2020	2019	2018	Prior	Total
December 31, 2022:							
Internal credit quality grade:							
High investment grade	$ 698	$ 684	$ 327	$ 561	$ 422	$ 1,565	$ 4,257
Investment grade	586	284	248	279	252	531	2,180
Average	—	6	—	39	52	83	180
Watch list	—	—	—	—	—	—	—
In or near default	—	—	—	—	—	36	36
Total	$ 1,284	$ 974	$ 575	$ 879	$ 726	$ 2,215	$ 6,653

The following table presents the current and past due composition of the Company's recorded investment in mortgage loans as of June 30, 2023 and December 31, 2022.

	June 30, 2023	December 31, 2022
Current	$ 7,096	$ 6,617
31 – 60 days past due	13	—
Greater than 90 days past due	—	36
Total	$ 7,109	$ 6,653

The following table presents information regarding the Company's allowance for credit losses for mortgage loans for the three and six months ended June 30, 2023 and 2022 (dollars in millions):

	Three months ended June 30,		Six months ended June 30,	
	2023	2022	2023	2022
Balance, beginning of period	$ 48	$ 37	$ 51	$ 35
Change in allowance for credit losses	9	1	6	3
Balance, end of period	$ 57	$ 38	$ 57	$ 38

During the six months ended June 30, 2023, the Company modified two mortgage loans for borrowers experiencing financial difficulty providing interest only payments and a maturity extension. The total recorded investment before allowance for credit losses for the modified loans were $17 million as of June 30, 2023. During the six months ended June 30, 2022, the Company restructured three mortgage loans to interest only payments, one of which was paid in full as of December 31, 2022. The total recorded investment before allowance for credit losses for mortgage loans that were modified and met the criteria of Troubled Debt Restructuring ("TDR") was $77 million as of June 30, 2022.

During the six months ended June 30, 2023, the Company converted two mortgage loans in the total amount of $36 million to owned properties through foreclosure-type transactions. The Company had one mortgage loan in the amount of $7 million that was on a nonaccrual status as of June 30, 2023. The Company had no mortgage loans that were on a nonaccrual status as of June 30, 2022. The Company did not acquire any impaired mortgage loans during the six months ended June 30, 2023 and 2022.

Policy Loans

The majority of policy loans are associated with one client. These policy loans present no credit risk as the amount of the loan cannot exceed the obligation due to the ceding company upon the death of the insured or surrender of the underlying policy. The provisions of the treaties in force and the underlying policies determine the policy loan interest rates. The Company earns a spread between the interest rate earned on policy loans and the interest rate credited to corresponding liabilities.

Funds Withheld at Interest

As of June 30, 2023, $3.6 billion of the funds withheld at interest balance is primarily associated with two clients. For reinsurance agreements written on a modco basis and certain agreements written on a coinsurance funds withheld basis, assets equal to the net statutory reserves are withheld and legally owned and managed by the ceding company and are reflected as funds withheld at interest. In the event of a ceding company's insolvency, the Company would need to assert a claim on the assets supporting its reserve liabilities. However, the risk of loss to the Company is mitigated by its ability to offset amounts it owes the ceding company for claims or allowances against amounts owed to the Company from the ceding company.

Limited Partnerships and Real Estate Joint Ventures

The carrying values of limited partnerships and real estate joint ventures as of June 30, 2023 and December 31, 2022 are as follows (dollars in millions):

	June 30, 2023	December 31, 2022
Limited partnerships – equity method	$ 928	$ 934
Limited partnerships – fair value	768	683
Limited partnerships – cost method	62	49
Real estate joint ventures	715	661
Total limited partnerships and real estate joint ventures	$ 2,473	$ 2,327

Other Invested Assets

Other invested assets include lifetime mortgages and derivative contracts. Other invested assets also includes FHLB common stock, unit-linked investments, and real estate held for investment, which are included in "Other" in the table below. As of

June 30, 2023 and December 31, 2022, the allowance for credit losses for lifetime mortgages was not material. The carrying values of other invested assets as of June 30, 2023 and December 31, 2022 are as follows (dollars in millions):

	June 30, 2023	December 31, 2022
Lifetime mortgages	$ 930	$ 868
Derivatives	61	170
Other	128	102
Total other invested assets	$ 1,119	$ 1,140

NOTE 12 DERIVATIVE INSTRUMENTS

See Note 2 – "Significant Accounting Policies and Pronouncements" of the Company's 2022 Annual Report for a detailed discussion of the accounting treatment for derivative instruments, including embedded derivatives. See Note 13 – "Fair Value of Assets and Liabilities" for additional disclosures related to the fair value hierarchy for derivative instruments, including embedded derivatives.

Commonly used derivative instruments include, but are not necessarily limited to: credit default swaps, equity futures, equity options, foreign currency swaps, foreign currency forwards, interest rate swaps, interest rate options, interest rate futures, total return swaps, synthetic guaranteed investment contracts ("GICs"), consumer price index ("CPI") swaps, forward bond purchase commitments, other derivatives and embedded derivatives. For detailed information on these derivative instruments and the related strategies, see Note 5 – "Derivative Instruments" of the Company's 2022 Annual Report.

Summary of Derivative Positions

Derivatives, except for embedded derivatives, are included in other invested assets or other liabilities, at fair value. Embedded derivative assets and liabilities on modco or funds withheld arrangements are included on the condensed consolidated balance sheets with the host contract in funds withheld at interest or other liabilities, at fair value. Embedded derivative liabilities on indexed annuity products are included on the condensed consolidated balance sheets with the host contract in interest-sensitive contract liabilities, at fair value. The following table presents the notional amounts and gross fair value of derivative instruments prior to taking into account the netting effects of master netting agreements as of June 30, 2023 and December 31, 2022 (dollars in millions):

		June 30, 2023			December 31, 2022		
		Notional	Carrying Value/Fair Value		Notional	Carrying Value/Fair Value	
	Primary Underlying Risk	Amount	Assets	Liabilities	Amount	Assets	Liabilities
Derivatives not designated as hedging instruments:							
Interest rate swaps	Interest rate	$ 1,683	$ 6	$ 4	$ 1,271	$ 2	$ 2
Interest rate options	Interest rate	6,555	8	—	7,756	34	—
Total return swaps	Interest rate	500	25	3	500	18	—
Interest rate futures	Interest rate	96	—	—	96	—	—
Equity futures	Equity	241	—	—	164	—	—
Foreign currency swaps	Foreign currency	150	26	—	150	18	—
Foreign currency forwards	Foreign currency	850	—	28	766	50	—
CPI swaps	CPI	477	14	2	496	20	3
Credit default swaps	Credit	1,515	4	10	1,523	2	21
Equity options	Equity	306	12	—	358	38	—
Synthetic GICs	Interest rate	17,027	—	—	17,411	—	—
Embedded derivatives in:							
Modco or funds withheld arrangements		—	368	359	—	363	371
Indexed annuity products		—	—	472	—	—	530
Total non-hedging derivatives		29,400	463	878	30,491	545	927
Derivatives designated as hedging instruments:							
Interest rate swaps	Foreign currency/Interest rate	1,997	5	148	1,310	3	113
Foreign currency swaps	Foreign currency	104	—	3	114	—	—
Foreign currency forwards	Foreign currency	1,158	14	9	1,019	38	1
Forward bond purchase commitments	Interest rate	775	1	84	407	—	96
Total hedging derivatives		4,034	20	244	2,850	41	210
Total derivatives		$ 33,434	$ 483	$ 1,122	$ 33,341	$ 586	$ 1,137

Fair Value Hedges

The Company designates and reports certain foreign currency swaps to hedge the foreign currency fair value exposure of foreign currency denominated assets as fair value hedges when they meet the requirements of the general accounting principles for *Derivatives and Hedging*. The gain or loss on the hedged item attributable to a change in foreign currency and the offsetting gain or loss on the related foreign currency swaps as of June 30, 2023 and 2022 were as follows (dollars in millions):

Type of Fair Value Hedge	Hedged Item	Gains (Losses) Recognized for Derivatives	Gains (Losses) Recognized for Hedged Items
		Investment Related Gains (Losses), Net	
For the three months ended June 30, 2023:			
Foreign currency swaps	Foreign-denominated fixed maturity securities	$ —	$ —
For the three months ended June 30, 2022:			
Foreign currency swaps	Foreign-denominated fixed maturity securities	$ (8)	$ 8
For the six months ended June 30, 2023:			
Foreign currency swaps	Foreign-denominated fixed maturity securities	$ (3)	$ 2
For the six months ended June 30, 2022:			
Foreign currency swaps	Foreign-denominated fixed maturity securities	$ (1)	$ 5

Cash Flow Hedges

Certain derivative instruments are designated as cash flow hedges when they meet the requirements of the general accounting principles for *Derivatives and Hedging*. The Company designates and accounts for the following as cash flow hedges: (i) certain interest rate swaps, in which the cash flows of assets and liabilities are variable based on a benchmark rate; (ii) certain interest rate swaps, in which the cash flows of assets are denominated in different currencies, commonly referred to as cross-currency swaps; (iii) certain interest rate swaps, in which floating rate assets are converted to fixed rate assets; and (iv) forward bond purchase commitments.

The following table presents the components of AOCI, before income tax, and the condensed consolidated income statement classification where the gain or loss is recognized related to cash flow hedges for the three and six months ended June 30, 2023 and 2022 (dollars in millions):

	Three months ended June 30,	
	2023	2022
Balance, beginning of period	$ (198)	$ (81)
Gains (losses), net deferred in other comprehensive income (loss)	(32)	(128)
Amounts reclassified to net investment income	4	2
Amounts reclassified to interest expense	(2)	1
Balance, end of period	$ (228)	$ (206)

	Six months ended June 30,	
	2023	2022
Balance, beginning of period	$ (205)	$ (22)
Gains (losses), net deferred in other comprehensive income (loss)	(26)	(188)
Amounts reclassified to net investment income	7	2
Amounts reclassified to interest expense	(4)	2
Balance, end of period	$ (228)	$ (206)

As of June 30, 2023, approximately $12 million of before-tax deferred net losses recorded in AOCI are expected to be reclassified to net investment income during the next twelve months. For the same time period, $11 million of before-tax deferred net gains on derivative instruments recorded in AOCI are expected to be reclassified to interest expense during the next twelve months.

The following table presents the effect of derivatives in cash flow hedging relationships on the condensed consolidated statements of income and the condensed consolidated statements of comprehensive income for the three and six months ended June 30, 2023 and 2022 (dollars in millions):

Derivative Type	Gains (Losses) Deferred in OCI	Gains (Losses) Reclassified into Income from AOCI	
		Net Investment Income	Interest Expense
For the three months ended June 30, 2023:			
Interest rate	$ (8)	$ —	$ 2
Foreign currency/interest rate	(24)	(4)	—
Total	$ (32)	$ (4)	$ 2
For the three months ended June 30, 2022:			
Interest rate	$ (106)	$ —	$ (1)
Foreign currency/interest rate	(22)	(2)	—
Total	$ (128)	$ (2)	$ (1)
For the six months ended June 30, 2023:			
Interest rate	$ 6	$ —	$ 4
Foreign currency/interest rate	(32)	(7)	—
Total	$ (26)	$ (7)	$ 4
For the six months ended June 30, 2022:			
Interest rate	$ (170)	$ —	$ (2)
Foreign currency/interest rate	(18)	(2)	—
Total	$ (188)	$ (2)	$ (2)

For the three and six months ended June 30, 2023 and 2022, there were no material amounts reclassified into earnings relating to instances in which the Company discontinued cash flow hedge accounting because the forecasted transaction did not occur by the anticipated date or within the additional time period permitted by the authoritative guidance for the accounting for derivatives and hedging.

Hedges of Net Investments in Foreign Operations

The Company uses foreign currency swaps and foreign currency forwards to hedge a portion of its net investment in certain foreign operations against adverse movements in exchange rates. The following table illustrates the Company's net investments in foreign operations ("NIFO") hedges and the gains (losses) deferred in OCI for the three and six months ended June 30, 2023 and 2022 (dollars in millions):

	Derivative Gains (Losses) Deferred in OCI			
	Three months ended June 30,		Six months ended June 30,	
Type of NIFO Hedge	2023	2022	2023	2022
Foreign currency swaps	$ —	$ 1	$ —	$ 1
Foreign currency forwards	(21)	38	(21)	22
Total	$ (21)	$ 39	$ (21)	$ 23

The cumulative foreign currency translation gain recorded in AOCI related to these hedges was $189 million and $210 million as of June 30, 2023 and December 31, 2022, respectively. If a hedged foreign operation was sold or substantially liquidated, the amounts in AOCI would be reclassified to the condensed consolidated statements of income. A pro rata portion would be reclassified upon partial sale of a hedged foreign operation. There were no sales or substantial liquidations of net investments in foreign operations that would have required the reclassification of gains or losses from AOCI into investment income during the periods presented.

Non-qualifying Derivatives and Derivatives for Purposes Other Than Hedging

The Company uses various other derivative instruments for risk management purposes that either do not qualify or have not been elected for hedge accounting treatment. The gain or loss related to the change in fair value for these derivative instruments is recognized in investment related gains (losses), net, except where otherwise noted.

A summary of the effect of non-hedging derivatives, including embedded derivatives, on the Company's condensed consolidated statements of income for the three and six months ended June 30, 2023 and 2022 is as follows (dollars in millions):

		Gains (Losses) for the three months ended June 30,	
Type of Non-hedging Derivative	Income Statement Location of Gains (Losses)	2023	2022
Interest rate swaps	Investment related gains (losses), net	$ (30)	$ (44)
Interest rate options	Investment related gains (losses), net	(3)	(6)
Total return swaps	Investment related gains (losses), net	5	—
Interest rate futures	Investment related gains (losses), net	2	1
Equity futures	Investment related gains (losses), net	(10)	23
Foreign currency swaps	Investment related gains (losses), net	12	11
Foreign currency forwards	Investment related gains (losses), net	(74)	(76)
CPI swaps	Investment related gains (losses), net	6	(11)
Credit default swaps	Investment related gains (losses), net	10	(33)
Equity options	Investment related gains (losses), net	(11)	21
Subtotal		(93)	(114)
Embedded derivatives in:			
Modco or funds withheld arrangements	Investment related gains (losses), net	(20)	(56)
Indexed annuity products	Interest credited	(5)	44
Total non-hedging derivatives		$ (118)	$ (126)

		Gains (Losses) for the six months ended June 30,	
Type of Non-hedging Derivative	Income Statement Location of Gains (Losses)	2023	2022
Interest rate swaps	Investment related gains (losses), net	$ (10)	$ (96)
Interest rate options	Investment related gains (losses), net	(26)	(6)
Total return swaps	Investment related gains (losses), net	8	—
Interest rate futures	Investment related gains (losses), net	2	3
Equity futures	Investment related gains (losses), net	(19)	28
Foreign currency swaps	Investment related gains (losses), net	12	18
Foreign currency forwards	Investment related gains (losses), net	(93)	(99)
CPI swaps	Investment related gains (losses), net	7	18
Credit default swaps	Investment related gains (losses), net	21	(91)
Equity options	Investment related gains (losses), net	(25)	21
Subtotal		(123)	(204)
Embedded derivatives in:			
Modco or funds withheld arrangements	Investment related gains (losses), net	17	(89)
Indexed annuity products	Interest credited	11	80
Total non-hedging derivatives		$ (95)	$ (213)

Credit Derivatives

The following table presents the estimated fair value, maximum amount of future payments and weighted average years to maturity of credit default swaps sold by the Company at June 30, 2023 and December 31, 2022 (dollars in millions):

	June 30, 2023			December 31, 2022		
Rating Agency Designation of Referenced Credit Obligations(1)	Estimated Fair Value of Credit Default Swaps	Maximum Amount of Future Payments under Credit Default Swaps(2)	Weighted Average Years to Maturity(3)	Estimated Fair Value of Credit Default Swaps	Maximum Amount of Future Payments under Credit Default Swaps(2)	Weighted Average Years to Maturity(3)
AAA/AA+/AA/AA-/A+/A/A-						
Single name credit default swaps	$ (9)	$ 420	18.6	$ (18)	$ 428	18.7
BBB+/BBB/BBB-						
Single name credit default swaps	3	155	3.1	1	155	3.3
Credit default swaps referencing indices	1	915	4.5	—	915	6.2
Subtotal	4	1,070	4.3	1	1,070	5.8
BB+/BB/BB-						
Single name credit default swaps	(1)	25	2.7	(2)	25	3.2
Total	$ (6)	$ 1,515	8.2	$ (19)	$ 1,523	9.4

(1) The rating agency designations are based on ratings from Standard and Poor's ("S&P").

(2) Assumes the value of the referenced credit obligations is zero.

(3) The weighted average years to maturity of the credit default swaps is calculated based on weighted average notional amounts.

Netting Arrangements and Credit Risk

Certain of the Company's derivatives are subject to enforceable master netting arrangements and reported as a net asset or liability in the condensed consolidated balance sheets. The Company nets all derivatives that are subject to such arrangements.

The Company has elected to include all derivatives, except embedded derivatives, in the table below, irrespective of whether they are subject to an enforceable master netting arrangement or a similar agreement. See Note 11 – "Investments" for information regarding the Company's securities borrowing, lending and repurchase/reverse repurchase agreements.

The following table provides information relating to the netting of the Company's derivative instruments as of June 30, 2023 and December 31, 2022 (dollars in millions):

	Gross Amounts Recognized	Gross Amounts Offset in the Balance Sheet	Net Amounts Presented in the Balance Sheet	Financial Instruments/Collateral (1)	Net Amount
June 30, 2023:					
Derivative assets	$ 115	$ (54)	$ 61	$ (61)	$ —
Derivative liabilities	291	(54)	237	(237)	—
December 31, 2022:					
Derivative assets	223	(53)	170	(170)	—
Derivative liabilities	236	(53)	183	(183)	—

(1) Includes initial margin posted to a central clearing partner for financial instruments and excludes the excess of collateral received/pledged from/to the counterparty.

The Company may be exposed to credit-related losses in the event of non-performance by counterparties to derivative financial instruments. Generally, the credit exposure of the Company's derivative contracts is limited to the fair value and accrued interest of non-collateralized derivative contracts in an asset position at the reporting date. As of June 30, 2023, the Company had credit exposure of $14 million.

Derivatives may be exchange-traded or they may be privately negotiated contracts, which are referred to as over-the-counter ("OTC") derivatives. Certain of the Company's OTC derivatives are cleared and settled through central clearing counterparties ("OTC cleared") and others are bilateral contracts between two counterparties. The Company manages its credit risk related to OTC derivatives by entering into transactions with creditworthy counterparties, maintaining collateral arrangements and through the use of master netting agreements that provide for a single net payment to be made by one counterparty to another at each due date and upon termination. The Company is only exposed to the default of the central clearing counterparties for OTC cleared derivatives, and these transactions require initial and daily variation margin collateral postings. Exchange-traded derivatives are settled on a daily basis, thereby reducing the credit risk exposure in the event of non-performance by counterparties to such financial instruments.

NOTE 13 FAIR VALUE OF ASSETS AND LIABILITIES

Fair Value Measurement

General accounting principles for *Fair Value Measurements and Disclosures* define fair value as the exchange price that would be received for an asset or paid to transfer a liability (an exit price) in the principal or most advantageous market for the asset or liability in an orderly transaction between market participants on the measurement date. These principles also establish a three-level fair value hierarchy that requires an entity to maximize the use of observable inputs and to minimize the use of unobservable inputs when measuring fair value:

Level 1 – Unadjusted quoted prices in active markets for identical assets or liabilities. Active markets are defined through various characteristics for the measured asset/liability, such as having many transactions and narrow bid/ask spreads.

Level 2 – Observable inputs other than Level 1 prices such as quoted prices for similar assets or liabilities; quoted prices in markets that are not active; or market standard valuation techniques and assumptions that use significant inputs that are observable or can be corroborated by observable market data for substantially the full term of the assets or liabilities.

Level 3 – Unobservable inputs that are supported by little or no market activity and that are significant to the fair value of the related assets or liabilities and include those whose value is determined using market standard valuation techniques described above. Prices are determined using valuation methodologies such as discounted cash flow models and other similar techniques that require management’s judgment or estimation in developing inputs that are consistent with those other market participants would use when pricing similar assets and liabilities.

For a discussion of the Company’s valuation methodologies for assets and liabilities measured at fair value and the fair value hierarchy, see Note 6 – “Fair Value of Assets and Liabilities” in the Notes to Consolidated Financial Statements included in the Company’s 2022 Annual Report.

See Note 8 – “Market Risk Benefits” for information about fair value measurement of market risk benefits.

Assets and Liabilities by Hierarchy Level

Assets and liabilities measured at fair value on a recurring basis as of June 30, 2023 and December 31, 2022 are summarized below (dollars in millions):

June 30, 2023:		Fair Value Measurements Using:		
	Total	Level 1	Level 2	Level 3
Assets: [1]				
Fixed maturity securities available-for-sale:				
Corporate	$ 36,178	$ —	$ 31,524	$ 4,654
Canadian government	3,752	—	3,752	—
Japanese government	3,046	—	3,046	—
ABS	4,165	—	2,826	1,339
CMBS	1,699	—	1,642	57
RMBS	1,037	—	1,036	1
U.S. government	1,366	1,272	86	8
State and political subdivisions	1,109	—	1,088	21
Other foreign government	3,884	—	3,849	35
Total fixed maturity securities available-for-sale	56,236	1,272	48,849	6,115
Equity securities	136	68	—	68
Funds withheld at interest – embedded derivatives	(353)	—	—	(353)
Funds withheld at interest	53	—	—	53
Cash equivalents	1,329	1,326	3	—
Short-term investments	193	93	94	6
Other invested assets:				
Derivatives	61	—	61	—
Other	21	—	21	—
Total other invested assets	82	—	82	—
Total	$ 57,676	$ 2,759	$ 49,028	$ 5,889
Liabilities:				
Interest-sensitive contract liabilities – embedded derivatives	$ 472	$ —	$ —	$ 472
Other liabilities:				
Funds withheld at interest – embedded derivatives	(362)	—	—	(362)
Derivatives	237	—	237	—
Total	$ 347	$ —	$ 237	$ 110

(1) Excludes limited partnerships that are measured at estimated fair value using the NAV per share (or its equivalent) as a practical expedient. As of June 30, 2023, the fair value of such investments was $768 million.

December 31, 2022:		Fair Value Measurements Using:		
	Total	Level 1	Level 2	Level 3
Assets: [(1)]				
Fixed maturity securities available-for-sale:				
Corporate	$ 33,969	$ —	$ 29,670	$ 4,299
Canadian government	3,626	—	3,626	—
Japanese government	2,559	—	2,559	—
ABS	3,878	—	2,603	1,275
CMBS	1,623	—	1,555	68
RMBS	941	—	931	10
U.S. government	1,482	1,388	85	9
State and political subdivisions	1,119	—	1,093	26
Other foreign government	3,704	—	3,669	35
Total fixed maturity securities available-for-sale	52,901	1,388	45,791	5,722
Equity securities	134	68	—	66
Funds withheld at interest – embedded derivatives	(371)	—	—	(371)
Funds withheld at interest	54	—	—	54
Cash equivalents	1,535	1,535	—	—
Short-term investments	121	54	54	13
Other invested assets:				
Derivatives	170	—	170	—
Other	23	—	23	—
Total other invested assets	193	—	193	—
Total	$ 54,567	$ 3,045	$ 46,038	$ 5,484
Liabilities:				
Interest-sensitive contract liabilities – embedded derivatives	$ 530	$ —	$ —	$ 530
Other liabilities:				
Funds withheld at interest – embedded derivatives	(363)	—	—	(363)
Derivatives	183	—	183	—
Total	$ 350	$ —	$ 183	$ 167

(1) Excludes limited partnerships that are measured at estimated fair value using the NAV per share (or its equivalent) as a practical expedient. As of December 31, 2022, the fair value of such investments was $683 million.

Quantitative Information Regarding Internally Priced Assets and Liabilities

The following table presents quantitative information about significant unobservable inputs used in Level 3 fair value measurements that are developed internally by the Company as of June 30, 2023 and December 31, 2022 (dollars in millions):

	Estimated Fair Value				Range (Weighted Average)	
	June 30, 2023	December 31, 2022	Valuation Technique	Unobservable Inputs	June 30, 2023	December 31, 2022
Assets:						
Corporate	$ 4	$ 25	Market comparable securities	Liquidity premium	N/A	1%
				EBITDA Multiple	5.3x-8.0x (6.0x)	5.3x
ABS	267	274	Market comparable securities	Liquidity premium	0-18% (2%)	0-18% (2%)
U.S. government	8	9	Market comparable securities	Liquidity premium	0-1% (1%)	0-1% (1%)
Equity securities	21	9	Market comparable securities	Liquidity premium	1%	N/A
				EBITDA Multiple	8.4x-11.2x (10.4x)	8.4x-11.2x (9.6x)
Funds withheld at interest – embedded derivatives	(16)	(34)	Total return swap	Mortality	0-100% (3%)	0-100% (3%)
				Lapse	0-35% (15%)	0-35% (17%)
				Withdrawal	0-5% (4%)	0-5% (4%)
				CVA	0-5% (0%)	0-5% (0%)
				Crediting rate	1-4% (2%)	1-4% (2%)
Liabilities:						
Interest-sensitive contract liabilities – embedded derivatives – indexed annuities	472	530	Discounted cash flow	Mortality	0-100% (3%)	0-100% (3%)
				Lapse	0-35% (14%)	0-35% (16%)
				Withdrawal	0-5% (4%)	0-5% (3%)
				Option budget projection	1-4% (2%)	1-4% (2%)

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Changes in Level 3 Assets and Liabilities

Assets and liabilities transferred into Level 3 are due to a lack of observable market transactions and price information. Transfers out of Level 3 are primarily the result of the Company obtaining observable pricing information or a third-party pricing quotation that appropriately reflects the fair value of those assets and liabilities.

For further information on the Company’s valuation processes, see Note 6 – “Fair Value of Assets and Liabilities” in the Notes to Consolidated Financial Statements included in the Company’s 2022 Annual Report.

The reconciliations for all assets and liabilities measured at fair value on a recurring basis using significant unobservable inputs (Level 3) are as follows (dollars in millions):

Three months ended June 30, 2023:	Fixed maturity securities available-for-sale									
	Corporate	Foreign govt	Structured securities	U.S. and local govt	Equity securities	Cash equivalents	Short-term investments	Funds withheld at interest – embedded derivatives, net [1]	Funds withheld at interest	Interest-sensitive contract liabilities – embedded derivatives
Fair value, beginning of period	$ 4,613	$ 37	$ 1,461	$ 28	$ 68	$ 1	$ 7	$ 29	$ 53	$ (495)
Total gains/losses (realized/unrealized)										
Included in earnings, net:										
Net investment income	1	—	2	—	—	—	—	—	(1)	—
Investment related gains (losses), net	1	—	(2)	—	(2)	—	—	(20)	—	—
Interest credited	—	—	—	—	—	—	—	—	—	(5)
Included in other comprehensive income (loss)	(64)	(2)	11	1	—	—	—	—	2	—
Purchases [2]	192	—	17	—	6	—	—	—	1	9
Sales [2]	(32)	—	(4)	—	(4)	—	—	—	—	—
Settlements [2]	(59)	—	(60)	—	—	—	—	—	(2)	19
Transfers into Level 3	8	—	—	—	—	—	6	—	—	—
Transfers out of Level 3	(6)	—	(28)	—	—	(1)	(7)	—	—	—
Fair value, end of period	$ 4,654	$ 35	$ 1,397	$ 29	$ 68	$ —	$ 6	$ 9	$ 53	$ (472)
Total gains/losses (realized/unrealized) recorded for the period relating to those Level 3 assets and liabilities that were still held at the end of the period										
Included in earnings, net:										
Net investment income	$ 1	$ —	$ 2	$ —	$ —	$ —	$ —	$ —	$ (1)	$ —
Investment related gains (losses), net	—	—	(2)	—	(2)	—	—	(20)	—	—
Interest credited	—	—	—	—	—	—	—	—	—	(23)
Included in other comprehensive income (loss)	(65)	(2)	10	1	—	—	—	—	2	—

(1) Funds withheld at interest – embedded derivative assets and liabilities are presented net for purposes of the rollforward.

(2) The amount reported within purchases, sales and settlements is the purchase price (for purchases) and the sales/settlement proceeds (for sales and settlements) based upon the actual date purchased or sold/settled. Items purchased and sold/settled in the same period are excluded from the rollforward. The Company had no issuances during the period.

Six months ended June 30, 2023:	Fixed maturity securities available-for-sale									
	Corporate	Foreign govt	Structured securities	U.S. and local govt	Equity securities	Cash equivalents	Short-term investments	Funds withheld at interest – embedded derivatives, net [(1)]	Funds withheld at interest	Interest-sensitive contract liabilities – embedded derivatives
Fair value, beginning of period	$ 4,299	$ 35	$ 1,353	$ 35	$ 66	$ —	$ 13	$ (8)	$ 54	$ (530)
Total gains/losses (realized/unrealized)										
Included in earnings, net:										
Net investment income	2	—	3	—	—	—	—	—	(3)	—
Investment related gains (losses), net	—	—	(1)	—	(2)	—	(1)	17	—	—
Interest credited	—	—	—	—	—	—	—	—	—	11
Included in other comprehensive income (loss)	(9)	—	44	—	—	—	—	—	3	—
Purchases [(2)]	510	—	115	—	8	1	1	—	1	10
Sales [(2)]	(32)	—	(4)	—	(4)	—	—	—	—	—
Settlements [(2)]	(118)	—	(122)	(1)	—	—	—	—	(2)	37
Transfers into Level 3	8	—	64	—	—	—	6	—	—	—
Transfers out of Level 3	(6)	—	(55)	(5)	—	(1)	(13)	—	—	—
Fair value, end of period	$ 4,654	$ 35	$ 1,397	$ 29	$ 68	$ —	$ 6	$ 9	$ 53	$ (472)
Total gains/losses (realized/unrealized) recorded for the period relating to those Level 3 assets and liabilities that were still held at the end of the period										
Included in earnings, net:										
Net investment income	$ 2	$ —	$ 3	$ —	$ —	$ —	$ —	$ —	$ (3)	$ —
Investment related gains (losses), net	(2)	—	(2)	—	(2)	—	(1)	17	—	—
Interest credited	—	—	—	—	—	—	—	—	—	(25)
Included in other comprehensive income (loss)	(13)	—	43	—	—	—	—	—	3	—

(1) Funds withheld at interest – embedded derivative assets and liabilities are presented net for purposes of the rollforward.

(2) The amount reported within purchases, sales and settlements is the purchase price (for purchases) and the sales/settlement proceeds (for sales and settlements) based upon the actual date purchased or sold/settled. Items purchased and sold/settled in the same period are excluded from the rollforward. The Company had no issuances during the period.

Three months ended June 30, 2022:	Fixed maturity securities available-for-sale									
	Corporate	Foreign govt	Structured securities	U.S. and local govt	Equity securities	Cash equivalents	Short-term investments	Funds withheld at interest – embedded derivatives, net [1]	Funds withheld at interest	Interest-sensitive contract liabilities – embedded derivatives
Fair value, beginning of period	$ 4,046	$ 29	$ 1,121	$ 44	$ 48	$ —	$ 48	$ 132	$ 75	$ (645)
Total gains/losses (realized/unrealized)										
Included in earnings, net:										
Net investment income	2	—	—	—	—	—	—	—	(5)	—
Investment related gains (losses), net	(6)	—	—	—	(5)	—	1	(56)	—	—
Interest credited	—	—	—	—	—	—	—	—	—	44
Included in other comprehensive income (loss)	(157)	(6)	(73)	(3)	—	—	(1)	—	(5)	—
Purchases [2]	571	—	207	—	4	—	1	—	2	1
Sales [2]	(108)	—	—	(1)	—	—	—	—	—	—
Settlements [2]	(153)	—	(21)	(1)	—	—	(28)	—	(5)	16
Transfers into Level 3	57	13	32	4	—	—	—	—	—	—
Transfers out of Level 3	(14)	—	(19)	—	—	—	—	—	—	—
Fair value, end of period	$ 4,238	$ 36	$ 1,247	$ 43	$ 47	$ —	$ 21	$ 76	$ 62	$ (584)
Total gains/losses (realized/unrealized) recorded for the period relating to those Level 3 assets and liabilities that were still held at the end of the period										
Included in earnings, net:										
Net investment income	$ 1	$ —	$ —	$ —	$ —	$ —	$ —	$ —	$ (5)	$ —
Investment related gains (losses), net	(8)	—	—	—	(5)	—	—	(56)	—	—
Interest credited	—	—	—	—	—	—	—	—	—	27
Included in other comprehensive income (loss)	(157)	(6)	(73)	(3)	—	—	—	—	(5)	—

(1) Funds withheld at interest – embedded derivative assets and liabilities are presented net for purposes of the rollforward.

(2) The amount reported within purchases, sales and settlements is the purchase price (for purchases) and the sales/settlement proceeds (for sales and settlements) based upon the actual date purchased or sold/settled. Items purchased and sold/settled in the same period are excluded from the rollforward. The Company had no issuances during the period.

Six months ended June 30, 2022:	Fixed maturity securities available-for-sale									
	Corporate	Foreign govt	Structured securities	U.S. and local govt	Equity securities	Cash equivalents	Short-term investments	Funds withheld at interest – embedded derivatives, net (1)	Funds withheld at interest	Interest-sensitive contract liabilities – embedded derivatives
Fair value, beginning of period	$ 3,888	$ 33	$ 1,179	$ 45	$ 50	$ —	$ 28	$ 165	$ 83	$ (693)
Total gains/losses (realized/unrealized)										
Included in earnings, net:										
Net investment income	3	—	—	—	—	—	—	—	(10)	—
Investment related gains (losses), net	(6)	—	(5)	—	(6)	—	1	(89)	—	—
Interest credited	—	—	—	—	—	—	—	—	—	80
Included in other comprehensive income (loss)	(301)	(10)	(145)	(4)	—	—	(1)	—	(7)	—
Purchases (2)	936	—	302	—	4	—	21	—	3	(5)
Sales (2)	(124)	—	(51)	(1)	(1)	—	—	—	—	—
Settlements (2)	(179)	—	(59)	(3)	—	—	(28)	—	(7)	34
Transfers into Level 3	57	13	45	10	—	—	—	—	—	—
Transfers out of Level 3	(36)	—	(19)	(4)	—	—	—	—	—	—
Fair value, end of period	$ 4,238	$ 36	$ 1,247	$ 43	$ 47	$ —	$ 21	$ 76	$ 62	$ (584)
Total gains/losses (realized/unrealized) recorded for the period relating to those Level 3 assets and liabilities that were still held at the end of the period										
Included in earnings, net:										
Net investment income	$ 2	$ —	$ —	$ —	$ —	$ —	$ —	$ —	$ (10)	$ —
Investment related gains (losses), net	(8)	—	(5)	—	(6)	—	—	(89)	—	—
Interest credited	—	—	—	—	—	—	—	—	—	45
Included in other comprehensive income (loss)	(301)	(10)	(144)	(4)	—	—	—	—	(7)	—

(1) Funds withheld at interest – embedded derivative assets and liabilities are presented net for purposes of the rollforward.

(2) The amount reported within purchases, sales and settlements is the purchase price (for purchases) and the sales/settlement proceeds (for sales and settlements) based upon the actual date purchased or sold/settled. Items purchased and sold/settled in the same period are excluded from the rollforward. The Company had no issuances during the period.

Nonrecurring Fair Value Measurements

The Company has certain assets subject to measurement at fair value on a nonrecurring basis, in periods subsequent to their initial recognition if they are determined to be impaired. During the six months ended June 30, 2023 and 2022, the Company did not have any material assets that were measured at fair value due to impairment.

Fair Value of Financial Instruments Carried at Other Than Fair Value

The following table presents the carrying values and estimated fair values of the Company's financial instruments, which were not measured at fair value on a recurring basis, as of June 30, 2023 and December 31, 2022 (dollars in millions). For additional information regarding the methods and significant assumptions used by the Company to estimate these fair values, see Note 6 – "Fair Value of Assets and Liabilities" in the Notes to Consolidated Financial Statements included in the Company's 2022 Annual Report. This table excludes any payables or receivables for collateral under repurchase/reverse repurchase agreements and other transactions. The estimated fair value of the excluded amount approximates carrying value as they equal the amount of cash collateral received/paid.

June 30, 2023:	Carrying Value (1)	Estimated Fair Value	Fair Value Measurement Using: Level 1	Level 2	Level 3
Assets:					
Mortgage loans	$ 7,038	$ 6,481	$ —	$ —	$ 6,481
Policy loans	1,202	1,202	—	1,202	—
Funds withheld at interest	6,162	5,734	—	—	5,734
Limited partnerships – cost method	62	65	—	—	65
Cash and cash equivalents	1,269	1,269	1,269	—	—
Short-term investments	31	31	31	—	—
Other invested assets	1,008	762	4	64	694
Accrued investment income	702	702	—	702	—
Liabilities:					
Interest-sensitive contract liabilities	$ 23,073	22,565	$ —	$ —	$ 22,565
Other liabilities – funds withheld at interest	1,580	1,289	—	—	1,289
Long-term debt	4,850	4,574	—	—	4,574
December 31, 2022:					
Assets:					
Mortgage loans	$ 6,590	$ 6,109	$ —	$ —	$ 6,109
Policy loans	1,231	1,231	—	1,231	—
Funds withheld at interest	6,319	5,884	—	—	5,884
Limited partnerships – cost method	49	52	—	—	52
Cash and cash equivalents	1,392	1,392	1,392	—	—
Short-term investments	33	33	33	—	—
Other invested assets	947	758	4	65	689
Accrued investment income	630	630	—	630	—
Liabilities:					
Interest-sensitive contract liabilities	$ 23,493	$ 23,065	$ —	$ —	$ 23,065
Other liabilities – funds withheld at interest	1,596	1,321	—	—	1,321
Long-term debt	3,961	3,670	—	—	3,670

(1) Carrying values presented herein may differ from those in the Company's condensed consolidated balance sheets because certain items within the respective financial statement captions may be measured at fair value on a recurring basis.

NOTE 14 INCOME TAX

On August 16, 2022, the Inflation Reduction Act of 2022 ("the Act") was enacted in the U.S. The Act includes law changes relating to tax, climate change, energy and health care. In particular, for tax years ending after December 31, 2022, the Act imposes a 15% minimum tax on adjusted financial statement income for "applicable corporations" with average financial statement income exceeding $1 billion for the previous 3-year period ending in 2022 or after. Based on the current guidance, the Company is not an applicable corporation for 2023. The Act also imposes a 1% excise tax on stock buybacks of a publicly traded corporation. The Act is not expected to have a material impact to the Company's tax expense.

The effective tax rate for the three and six months ending June 30, 2023, was 21.7% and 25.2% on pre-tax income. The tax rate differed from the U.S. statutory rate primarily due to income earned in jurisdictions with tax rates greater than the U.S. statutory tax rate, and adjustments to the valuation allowance. These increases were partially offset with benefits received from tax credits generated during the year.

The effective tax rate for the three and six months ending June 30, 2022, was 27.7% and 26.8%. The Company's effective tax rate for the three and six months ended June 30, 2022, differed from the U.S. statutory rate of 21% primarily due to income in jurisdictions with tax rates higher than the U.S., tax basis adjustments, adjustments to the valuation allowance and foreign tax credits.

NOTE 15 EMPLOYEE BENEFIT PLANS

The components of net periodic benefit cost, included in other operating expenses on the Company's condensed consolidated statements of income, for the three and six months ended June 30, 2023 and 2022 were as follows (dollars in millions):

	Pension Benefits		Other Benefits	
	Three months ended June 30,		Three months ended June 30,	
	2023	2022	2023	2022
Service cost	$ 4	$ 4	$ 1	$ —
Interest cost	3	2	—	1
Expected return on plan assets	(2)	(3)	—	—
Amortization of prior service cost (credit)	—	—	(1)	(1)
Amortization of prior actuarial losses	—	1	—	1
Net periodic benefit cost	$ 5	$ 4	$ —	$ 1

	Pension Benefits		Other Benefits	
	Six months ended June 30,		Six months ended June 30,	
	2023	2022	2023	2022
Service cost	$ 7	$ 8	$ 1	$ 1
Interest cost	5	3	1	1
Expected return on plan assets	(5)	(6)	—	—
Amortization of prior service cost (credit)	—	—	(1)	(1)
Amortization of prior actuarial losses	1	2	—	1
Net periodic benefit cost	$ 8	$ 7	$ 1	$ 2

NOTE 16 COMMITMENTS, CONTINGENCIES AND GUARANTEES

Commitments

Funding of Investments

The Company's commitments to fund investments as of June 30, 2023 and December 31, 2022, are presented in the following table (dollars in millions):

	June 30, 2023	December 31, 2022
Limited partnerships and real estate joint ventures	$ 1,128	$ 937
Mortgage loans	147	137
Bank loans and private placements	631	682
Lifetime mortgages	1	59

The Company anticipates that the majority of its current commitments will be invested over the next five years; however, these commitments could become due any time at the request of the counterparties. Bank loans and private placements are included in fixed maturity securities available-for-sale.

The Company has an immaterial liability, included in other liabilities, for expected credit losses associated with unfunded commitments as of June 30, 2023 and December 31, 2022.

Funding Agreements

Federal Home Loan Bank of Des Moines

The Company is a member of the FHLB and, through membership, has issued funding agreements to the FHLB in exchange for cash advances. As of June 30, 2023 and December 31, 2022, the Company had $1.3 billion of FHLB funding agreements outstanding. The Company is required to provide collateral in excess of the funding agreement amounts outstanding, considering any discounts to the securities posted and prepayment penalties.

Funding Agreement Backed Notes

The Company's Funding Agreement Backed Notes ("FABN") program allows RGA Global Funding, a special-purpose, unaffiliated statutory trust, to offer its senior secured medium-term notes to investors. RGA Global Funding uses the net proceeds from each sale to purchase one or more funding agreements from the Company. As of both June 30, 2023 and December 31, 2022, the Company had $900 million of FABN agreements outstanding and are included within interest-sensitive contract liabilities.

Contingencies

Litigation

The Company is subject to litigation and regulatory investigations or actions from time to time. Based on current knowledge, management does not believe that loss contingencies arising from pending legal, regulatory and governmental matters will have a material adverse effect on the financial condition, results of operations or cash flows of the Company. However, in light of the inherent uncertainties involved in future or pending legal, regulatory and governmental matters, some of which are beyond the Company's control, and indeterminate or potentially substantial amount of damages sought in any such matters, an adverse outcome could be material to the Company's financial condition, results of operations or cash flows for any particular reporting period. A legal reserve is established when the Company is notified of an arbitration demand, litigation or regulatory action or is notified that an arbitration demand, litigation or regulatory action is imminent, it is probable that the Company will incur a loss as a result and the amount of the probable loss is reasonably capable of being estimated.

Other Contingencies

The Company indemnifies its directors and officers as provided in its charters and by-laws. Since this indemnity generally is not subject to limitation with respect to duration or amount, the Company does not believe that it is possible to determine the maximum potential amount due under this indemnity in the future.

Guarantees

Statutory Reserve Support

Certain RGA subsidiaries have committed to provide statutory reserve support to third parties, in exchange for a fee, by funding loans if certain defined events occur. Such statutory reserves are required under the U.S. Valuation of Life Policies Model Regulation (commonly referred to as Regulation XXX for term life insurance policies and Regulation A-XXX for universal life secondary guarantees). In addition, certain subsidiaries have also committed to provide capital support to a third party, in exchange for a fee, by agreeing to assume real estate leases in the event of a severe and prolonged decline in the commercial lease market. Upon assumption of a lease, the Company would recognize a right to use asset and lease obligation. As of June 30, 2023, the Company does not believe that it will be required to provide any funding under these commitments as the occurrence of the defined events is considered remote. The following table presents the maximum potential obligation for these commitments as of June 30, 2023 (dollars in millions):

Commitment Period	Maximum Potential Obligation
2034	$ 1,243
2035	1,922
2036	3,599
2037	6,850
2038	800
2039	8,751
2041	720
2046	3,000

NOTE 17 SEGMENT INFORMATION

The accounting policies of the segments are the same as those described in Note 2 – "Significant Accounting Policies and Pronouncements" in the Notes to Consolidated Financial Statements included in the Company's 2022 Annual Report. The Company measures segment performance primarily based on profit or loss from operations before income taxes. There are no intersegment reinsurance transactions and the Company does not have any material long-lived assets.

The Company allocates capital to its segments based on an internally developed economic capital model, the purpose of which is to measure the risk in the business and to provide a basis upon which capital is deployed. The economic capital model considers the unique and specific nature of the risks inherent in the Company's businesses. As a result of the economic capital allocation process, a portion of investment income is attributed to the segments based on the level of allocated capital. In addition, the segments are charged for excess capital utilized above the allocated economic capital basis. This charge is included in policy acquisition costs and other insurance expenses.

The Company has geographic-based and business-based operational segments. Geographic-based operations are further segmented into Traditional and Financial Solutions businesses. Information related to revenues, income (loss) before income taxes and total assets of the Company for each reportable segment are summarized below (dollars in millions):

	Three months ended June 30,		Six months ended June 30,	
Revenues:	2023	2022	2023	2022
U.S. and Latin America:				
Traditional	$ 1,932	$ 1,846	$ 3,744	$ 3,697
Financial Solutions	278	286	793	519
Total	2,210	2,132	4,537	4,216
Canada:				
Traditional	373	371	732	736
Financial Solutions	26	29	53	55
Total	399	400	785	791
Europe, Middle East and Africa:				
Traditional	451	443	911	916
Financial Solutions	130	135	299	318
Total	581	578	1,210	1,234
Asia Pacific:				
Traditional	752	701	1,481	1,404
Financial Solutions	136	43	267	63
Total	888	744	1,748	1,467
Corporate and Other	78	49	127	112
Total	$ 4,156	$ 3,903	$ 8,407	$ 7,820

	Three months ended June 30,		Six months ended June 30,	
Income (loss) before income taxes:	2023	2022	2023	2022
U.S. and Latin America:				
Traditional	$ 62	$ 90	$ 183	$ 150
Financial Solutions	68	43	182	100
Total	130	133	365	250
Canada:				
Traditional	35	27	64	42
Financial Solutions	6	7	16	16
Total	41	34	80	58
Europe, Middle East and Africa:				
Traditional	4	4	31	38
Financial Solutions	52	25	111	92
Total	56	29	142	130
Asia Pacific:				
Traditional	89	59	168	167
Financial Solutions	20	(54)	7	(110)
Total	109	5	175	57
Corporate and Other	(71)	(54)	(146)	(81)
Total	$ 265	$ 147	$ 616	$ 414

Assets:	June 30, 2023	December 31, 2022
U.S. and Latin America:		
Traditional	$ 22,454	$ 22,612
Financial Solutions	24,273	25,203
Total	46,727	47,815
Canada:		
Traditional	4,967	4,826
Financial Solutions	206	177
Total	5,173	5,003
Europe, Middle East and Africa:		
Traditional	4,190	3,652
Financial Solutions	5,995	5,215
Total	10,185	8,867
Asia Pacific:		
Traditional	9,845	9,254
Financial Solutions	14,738	12,023
Total	24,583	21,277
Corporate and Other	2,372	1,942
Total	$ 89,040	$ 84,904

NOTE 18 FINANCING ACTIVITIES

On June 8, 2023, the Company issued 6.0% fixed rate senior notes due 2033 with a face amount of $400 million and will be used to repay upon maturity the $400 million 4.70% Senior Notes that mature on September 15, 2023. Capitalized issuance costs were $4 million.

On March 23, 2023, Chesterfield Reinsurance Company, a subsidiary of RGA, issued 7.125% Surplus Notes due 2043, with a face amount of $500 million. Capitalized issue costs were $6 million.

On March 13, 2023, the Company entered into a new syndicated revolving credit facility with a five year term and an overall capacity of $850 million, replacing its existing $850 million syndicated revolving credit facility, which was scheduled to mature in August 2023. The Company may borrow cash and may obtain letters of credit in multiple currencies under this facility.

NOTE 19 NEW ACCOUNTING STANDARDS NOT YET ADOPTED

Changes to the general accounting principles are established by the Financial Accounting Standards Board (“FASB”) in the form of accounting standards updates to the FASB Accounting Standards Codification™. There are no accounting standards not yet adopted that are applicable or are expected to have more than a minimal impact on the Company’s condensed consolidated financial statements.

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

Cautionary Note Regarding Forward-Looking Statements

This document contains forward-looking statements within the meaning of the Private Securities Litigation Reform Act of 1995 and federal securities laws including, among others, statements relating to projections of the future operations, strategies, earnings, revenues, income or loss, ratios, financial performance and growth potential of the Company. Forward-looking statements often contain words and phrases such as "anticipate," "assume," "believe," "continue," "could," "estimate," "expect," "if," "intend," "likely," "may," "plan," "potential," "pro forma," "project," "should," "will," "would," and other words and terms of similar meaning or that are otherwise tied to future periods or future performance, in each case in all derivative forms. Forward-looking statements are based on management's current expectations and beliefs concerning future developments and their potential effects on the Company. Forward-looking statements are not a guarantee of future performance and are subject to risks and uncertainties, some of which cannot be predicted or quantified. Future events and actual results, performance, and achievements could differ materially from those set forth in, contemplated by or underlying the forward-looking statements.

Factors that could also cause results or events to differ, possibly materially, from those expressed or implied by forward-looking statements, include, among others: (1) adverse changes in mortality (whether related to COVID-19 or otherwise), morbidity, lapsation or claims experience, (2) inadequate risk analysis and underwriting, (3) adverse capital and credit market conditions and their impact on the Company's liquidity, access to capital and cost of capital, (4) changes in the Company's financial strength and credit ratings and the effect of such changes on the Company's future results of operations and financial condition, (5) the availability and cost of collateral necessary for regulatory reserves and capital, (6) requirements to post collateral or make payments due to declines in the market value of assets subject to the Company's collateral arrangements, (7) action by regulators who have authority over the Company's reinsurance operations in the jurisdictions in which it operates, (8) the effect of the Company parent's status as an insurance holding company and regulatory restrictions on its ability to pay principal of and interest on its debt obligations, (9) general economic conditions or a prolonged economic downturn affecting the demand for insurance and reinsurance in the Company's current and planned markets, (10) the impairment of other financial institutions and its effect on the Company's business, (11) fluctuations in U.S. or foreign currency exchange rates, interest rates, or securities and real estate markets, (12) market or economic conditions that adversely affect the value of the Company's investment securities or result in the impairment of all or a portion of the value of certain of the Company's investment securities that in turn could affect regulatory capital, (13) market or economic conditions that adversely affect the Company's ability to make timely sales of investment securities, (14) risks inherent in the Company's risk management and investment strategy, including changes in investment portfolio yields due to interest rate or credit quality changes, (15) the fact that the determination of allowances and impairments taken on the Company's investments is highly subjective, (16) the stability of and actions by governments and economies in the markets in which the Company operates, including ongoing uncertainties regarding the amount of U.S. sovereign debt and the credit ratings thereof, (17) the Company's dependence on third parties, including those insurance companies and reinsurers to which the Company cedes some reinsurance, third-party investment managers and others, (18) financial performance of the Company's clients, (19) the threat of natural disasters, catastrophes, terrorist attacks, pandemics, epidemics or other major public health issues anywhere in the world where the Company or its clients do business, (20) competitive factors and competitors' responses to the Company's initiatives, (21) development and introduction of new products and distribution opportunities, (22) execution of the Company's entry into new markets, (23) integration of acquired blocks of business and entities, (24) interruption or failure of the Company's telecommunication, information technology or other operational systems, or the Company's failure to maintain adequate security to protect the confidentiality or privacy of personal or sensitive data and intellectual property stored on such systems, (25) adverse developments with respect to litigation, arbitration or regulatory investigations or actions (26) the adequacy of reserves, resources and accurate information relating to settlements, awards and terminated and discontinued lines of business, (27) changes in laws, regulations, and accounting standards applicable to the Company or its business, including Long Duration Targeted Improvement accounting changes and (28) other risks and uncertainties described in this document and in the Company's other filings with the Securities and Exchange Commission ("SEC").

Forward-looking statements should be evaluated together with the many risks and uncertainties that affect the Company's business, including those mentioned in this document and described in the periodic reports the Company files with the SEC. These forward-looking statements speak only as of the date on which they are made. The Company does not undertake any obligation to update the forward-looking statements, even though the Company's situation may change in the future. For a discussion of these risks and uncertainties that could cause actual results to differ materially from those contained in the forward-looking statements, you are advised to see Item 1A – "Risk Factors" in the 2022 Annual Report, as may be supplemented by Item 1A – "Risk Factors" in the Company's subsequent Quarterly Reports on Form 10-Q.

Overview

The Company is among the leading global providers of life reinsurance and financial solutions, with $3.5 trillion of life reinsurance in force and assets of $89.0 billion as of June 30, 2023. Traditional reinsurance includes individual and group life and health, disability, and critical illness reinsurance. Financial Solutions includes longevity reinsurance, asset-intensive reinsurance, capital solutions, including financial reinsurance and stable value products. The Company derives revenues primarily from renewal premiums from existing reinsurance treaties, new business premiums from existing or new reinsurance treaties, fee income from Financial Solutions business and income earned on invested assets.

Historically, the Company's primary business has been traditional life reinsurance, which involves reinsuring life insurance policies that are often in force for the remaining lifetime of the underlying individuals insured, with premiums earned typically over a period of 10 to 30 years. To a lesser extent, the Company also reinsures health business typically reinsured for one to three years. Each year, however, a portion of the business under existing treaties terminates due to, among other things, lapses or voluntary surrenders of underlying policies, deaths of insureds, and the exercise of recapture options by ceding companies. The Company has expanded its Financial Solutions business, including significant asset-intensive and longevity risk transactions, which allow its clients to take advantage of growth opportunities and manage their capital, longevity and investment risk.

For its traditional business, the Company's profitability largely depends on the volume and amount of death- and health-related claims incurred and the ability to adequately price the risks it assumes. While death claims are reasonably predictable over a period of many years, claims become less predictable over shorter periods and are subject to significant fluctuation from quarter to quarter and year to year. For longevity business, the Company's profitability depends on the lifespan of the underlying contract holders and the investment performance for certain contracts. Additionally, the Company generates profits on investment spreads associated with the reinsurance of investment type contracts and generates fees from financial reinsurance transactions, which are typically shorter duration than its traditional life reinsurance business. The Company believes its sources of liquidity are sufficient to cover potential claims payments on both a short-term and long-term basis.

As is customary in the reinsurance business, clients continually update, refine, and revise reinsurance information provided to the Company. Such revised information is used by the Company in preparation of its condensed consolidated financial statements and the financial effects resulting from the incorporation of revised data are reflected in the current period.

In the first quarter of 2023, the Company adopted Accounting Standards Update ("ASU"): ASU 2018-12, *Financial Services – Insurance (Topic 944): Targeted Improvements to the Accounting for Long-Duration Contracts ("ASU 2018-12").* ASU 2018-12 updates certain requirements for the accounting for long-duration insurance contracts. See Note 2 – "Impact of New Accounting Standard" in the Notes to Condensed Consolidated Financial Statements for additional information.

Segment Presentation

The Company has geographic-based and business-based operational segments. Geographic-based operations are further segmented into Traditional and Financial Solutions businesses. The Company allocates capital to its segments based on an internally developed economic capital model, the purpose of which is to measure the risk in the business and to provide a consistent basis upon which capital is deployed. The economic capital model considers the unique and specific nature of the risks inherent in RGA's businesses.

As a result of the economic capital allocation process, a portion of investment income is credited to the segments based on the level of allocated capital. In addition, the segments are charged for excess capital utilized above the allocated economic capital basis. This charge is included in policy acquisition costs and other insurance expenses. Segment investment performance varies with the composition of investments and the relative allocation of capital to the operating segments.

Segment revenue levels can be significantly influenced by currency fluctuations, large transactions, mix of business and reporting practices of ceding companies, and therefore may fluctuate from period to period. Although reasonably predictable over a period of years, segment claims experience can be volatile over shorter periods. See "Results of Operations by Segment" below for further information about the Company's segments.

Critical Accounting Policies

The preparation of financial statements in conformity with GAAP requires the application of accounting policies that often involve a significant degree of judgment. Management, on an ongoing basis, reviews estimates and assumptions used in the preparation of financial statements. If management determines that modifications in assumptions and estimates are appropriate given current facts and circumstances, results of operations and financial position as reported in the condensed consolidated financial statements could change significantly.

Management believes the critical accounting policies relating to the following areas are most dependent on the application of estimates and assumptions:

Premiums receivable;

Deferred policy acquisition costs;

Liabilities for future policy benefits and incurred but not reported claims;

Valuation of investments, allowance for credit losses and impairments to specific investments;

Valuation of embedded derivatives and market risk benefits; and

Income taxes.

A discussion of each of the critical accounting policies may be found in the Company's 2022 Annual Report under "Management's Discussion and Analysis of Financial Condition and Results of Operations – Critical Accounting Policies." The critical accounting polices related to Deferred Policy Acquisition Costs, estimating the Company's Liability for Future Policy Benefits and Valuation of Embedded Derivatives and Market Risk Benefits presented below have been updated to reflect the adoption of ASU 2018-12.

Deferred Policy Acquisition Costs

ASU 2018-12 simplified the accounting for deferred policy acquisition costs by eliminating the requirement to test deferred policy acquisition costs for impairment or recoverability, an interest component is no longer accrued, and the requirement to adjust deferred policy acquisition costs for unrealized gains and losses (i.e., "shadow adjustments") has been eliminated. ASU 2018-12 also clarified that deferred policy acquisition costs should only include costs that have been incurred and estimates of future contract renewal costs shall no longer be included, and capitalized costs should be amortized using a simplified method that approximates straight line amortization. As a result of these simplifications, the Company no longer considers the accounting for deferred policy acquisition costs to be a critical accounting policy.

Liabilities for Future Policy Benefits and Incurred but Not Reported Claims

The liability for future policy benefits is estimated using the Company's mortality, morbidity, and persistency assumptions that reflect the Company's historical experience, industry data, cedant specific experience, and discount rates based on the current yields of upper-medium grade fixed income instruments (A rated credit). These assumptions vary with the characteristics of the reinsurance contract, the year the risk was assumed, age of the insured and other appropriate factors.

The liability for annuities in the payout phase is calculated using expected mortality, discount rates and other assumptions. These assumptions vary with the characteristics of the plan of insurance, year of issue, age of insured, and other appropriate factors. The mortality assumptions are based on the Company's experience as well as industry experience and standards.

For the purpose of calculating the liability for future policy benefits, the Company's reinsurance contracts for its Traditional business are grouped into annual cohorts based on the effective date of the reinsurance contract. The annual groupings are further disaggregated based on:

- How the reinsurance contracts are priced and managed;
- Geographical locations;
- Underlying currency of the contract;
- Ceding company and other factors.

Given the unique risks and highly customized nature the Company's financial reinsurance business, reinsurance contracts for the Financial Solutions business are not aggregated with other contracts for the purpose of calculating the liability for future policy benefits.

With the exception of claim expense assumptions, the Company reviews actual and anticipated experience compared to the assumptions used to establish policy benefits on a quarterly basis and will update those assumptions if evidence suggests the assumptions should be revised. The Company expects to complete its annual review and any necessary updates of the cash flow assumptions used to calculate the liability for future policy benefits during the third quarter of each year. Updates may occur in other quarters if information becomes available during the quarter that indicates an assumption update is necessary. The Company has elected to lock-in claims expense assumptions at contract inception and those assumptions are not subsequently reviewed or updated.

The discount rates used to estimate the liability are based on upper-medium grade fixed-income instruments (A rated credit) with similar tenor to the expected liability cash flows. The discount rate assumption is updated quarterly and used to remeasure the liability at the reporting date, with the resulting change reflected in other comprehensive income (loss). For unobservable discount rates, the Company uses estimates consistent with fair value guidance, maximizing the use of relevant, observable market prices and minimizing the use of unobservable inputs.

Valuation of Market Risk Benefits and Embedded Derivatives

The Company reinsures certain annuity products that contain terms that are deemed to be market risk benefits or embedded derivatives, primarily variable annuities with guaranteed minimum benefits and equity-indexed annuities.

Variable annuities with guaranteed minimum benefits have been identified as market risk benefits. Market risk benefits are contracts or contract features that both provide protection to the contract holder from other-than-nominal capital market risk and expose the Company to other-than-nominal capital market risk. Market risk benefits are measured at fair value using an option-based valuation model based on current net amounts at risk, market data, Company experience, and other factors. Changes in fair value are recognized in net income each period with the exception of the portion of the change in fair value due to a change in the liability's credit valuation adjustment ("CVA"), which is recognized in other comprehensive income (loss).

The Company reinsures certain annuity products that contain terms that are deemed to be embedded derivatives, primarily equity-indexed annuities and variable annuities with guaranteed minimum benefits. The Company assesses each identified embedded derivative to determine whether it is required to be bifurcated under the general accounting principles for Derivatives and Hedging. If the instrument would not be reported in its entirety at fair value and it is determined that the terms of the embedded derivative are not clearly and closely related to the economic characteristics of the host contract, and that a separate instrument with the same terms would qualify as a derivative instrument, the embedded derivative is bifurcated from the host contract and accounted for as a freestanding derivative. Such embedded derivatives are carried on the consolidated balance sheets at fair value with the host contract.

Additionally, reinsurance treaties written on a modified coinsurance or funds withheld basis are subject to the general accounting principles for Derivatives and Hedging related to embedded derivatives. The majority of the Company's funds withheld at interest balances are associated with its reinsurance of annuity contracts, the majority of which are subject to the general accounting principles for Derivatives and Hedging related to embedded derivatives. Management believes the embedded derivative feature in each of these reinsurance treaties is similar to a total return swap on the assets held by the ceding companies.

The valuation of the various embedded derivatives requires complex calculations based on actuarial and capital markets inputs and assumptions related to estimates of future cash flows and interpretations of the primary accounting guidance continue to evolve in practice. The valuation of embedded derivatives is sensitive to the investment credit spread environment. Changes in investment credit spreads are also affected by the application of a credit valuation adjustment ("CVA"). The fair value calculation of an embedded derivative in an asset position utilizes a CVA based on the ceding company's credit risk. Conversely, the fair value calculation of an embedded derivative in a liability position utilizes a CVA based on the Company's credit risk. Generally, an increase in investment credit spreads, ignoring changes in the CVA, will have a negative impact on the fair value of the embedded derivative (decrease in income).

Consolidated Results of Operations

Results from Operations – 2023 compared to 2022

The following table summarizes net income for the periods presented.

For the three months ended June 30,	Three months ended June 30,			Six months ended June 30,		
(Dollars in millions, except per share data)	2023	2022	2023 vs 2022	2023	2022	2023 vs 2022
Revenues						
Net premiums	$ 3,337	$ 3,230	$ 107	$ 6,722	$ 6,385	$ 337
Net investment income	857	754	103	1,713	1,564	149
Investment related losses, net	(123)	(240)	117	(200)	(379)	179
Other revenues	85	159	(74)	172	250	(78)
Total revenues	4,156	3,903	253	8,407	7,820	587
Benefits and expenses						
Claims and other policy benefits	3,013	2,938	75	6,076	5,809	267
Future policy benefits remeasurement (gains) losses	13	18	(5)	(13)	76	(89)
Market risk benefits remeasurement (gains) losses	(31)	40	(71)	(17)	6	(23)
Interest credited	209	138	71	424	279	145
Policy acquisition costs and other insurance expenses	349	336	13	680	680	—
Other operating expenses	275	242	33	525	469	56
Interest expense	63	44	19	116	87	29
Total benefits and expenses	3,891	3,756	135	7,791	7,406	385
Income before income taxes	265	147	118	616	414	202
Provision for income taxes	58	41	17	156	111	45
Net income	$ 207	$ 106	$ 101	$ 460	$ 303	$ 157
Net income attributable to noncontrolling interest	2	1	1	3	1	2
Net income available to RGA, Inc. shareholders	$ 205	$ 105	$ 100	$ 457	$ 302	$ 155
Earnings per share						
Basic earnings per share	$ 3.09	$ 1.57	$ 1.52	$ 6.86	$ 4.50	$ 2.36
Diluted earnings per share	$ 3.05	$ 1.55	$ 1.50	$ 6.77	$ 4.46	$ 2.31

Three months ended June 30, 2023 compared to three months ended June 30, 2022

The increase in income for the three months ended June 30, 2023, was primarily the result of:

- An increase in net investment income attributable to an increase in the average invested asset base and higher interest rates earned on new investments.
- A $20 million decrease in the investment related losses associated with the changes in the fair value of embedded derivatives on modco/funds withheld treaties for the three month period ended June 30, 2023, compared to a decrease of $56 million for the three month period ended June 30, 2022.
- A decrease in other revenue, which was the result of a recapture fee received in the prior year related to a U.S. Capital Solutions transaction.

Six months ended June 30, 2023 compared to three months ended June 30, 2022

The increase in income for the six months ended June 30, 2023, was primarily the result of:

- An increase in net investment income attributable to an increase in the average invested asset base and higher interest rates earned on new investments.
- A $17 million improvement in investment related losses associated with changes in the fair value of embedded derivative on modco/funds withheld treaties for the six month period ended June 30, 2023, compared to a decrease of $89 million for the six month period ended June 30, 2022.
- Favorable claims experience in the U.S. and Latin America and Asia Traditional segment during the six month period ended June 30, 2023. The unfavorable experience in the prior period, included in future policy benefits remeasurement (gains) losses, was primarily attributable to higher than expected claims as a result of COVID-19 incurred in the first quarter of 2022.

Foreign currency fluctuations can result in variances in the financial statement line items. Foreign currency exchange fluctuations decreased income before taxes for the three and six months ended June 30, 2023, by $4 million and $17 million, respectively, primarily due to the weakening of the Canadian Dollar compared to the U.S. dollar. Unless otherwise stated, all amounts discussed below are net of foreign currency fluctuations.

Premiums and business growth

The increase in premiums in the first six months of 2023 is primarily due to a single premium pension risk transfer ("PRT") transaction completed in the first quarter of 2023. The PRT single premium was offset by an increase in reserves. The remaining increase in premiums for the three and six months end June 30, 2023, is attributable to organic growth on existing treaties and new business production, measured by the face amount of life reinsurance in force, of $168.8 billion and $215.7 billion during the six months ended June 30, 2023 and 2022, respectively. Consolidated assumed life reinsurance in force increased to $3,479.6 billion as of June 30, 2023, from $3,380.9 billion as of June 30, 2022, due to new business production and changes in foreign exchange rates.

Net investment income and investment related gains (losses), net

The increase in net investment income is primarily attributable to an increase in the average invested asset base and interest rates earned on new investments, partially offset by a decrease in variable investment income associated with joint venture and limited partnership investments:

- The average invested assets at amortized cost, excluding spread related business, totaled $35.8 billion and $34.9 billion in 2023 and 2022, respectively.
- The average yield earned on investments, excluding spread related business, was 4.42% and 4.63% for the three month periods ended June 30, 2023 and 2022, respectively, and 4.56% and 4.96% for the six months ended June 30, 2023 and 2022, respectively. The decrease in yield for the three and six month periods ended June 30, 2023, compared to the prior year is attributable to lower variable investment income associated with joint ventures and limited partnerships.

The average yield will vary from period to period depending on several variables, including the prevailing risk-free interest rate and credit spread environment, prepayment fees and make-whole premiums, changes in the mix of the underlying investments and cash and cash equivalents balances. Variable investment income from joint ventures and limited partnerships will also vary from period to period and is highly dependent on the timing of dividends and distributions on certain investments. Investment income is allocated to the operating segments based upon average assets and related capital levels deemed appropriate to support segment operations.

The decrease in investment related losses, net is primarily attributable to the following:

- Changes in the fair value of embedded derivatives associated with modco/funds withheld treaties increased (decreased) by $(20) million and $17 million for the three and six month periods ended June 30 2023, respectively, compared to decreases of $56 million and $89 million for the three and six month periods ended June 30, 2022, respectively.
- The Company uses various derivative instruments such as interest rate swaps, credit default swaps and foreign exchange forwards for risk management purposes that either do not qualify or have not been elected for hedge accounting treatment. Changes in the fair value of these instruments are included in investment related gains (losses), net. During the three and six month periods ended June 30, 2023, the fair value of these instruments decreased by $93 million and $124 million, respectively, compared to decreases of $114 million and $200 million during the first three and six months of 2022. See Note 12 – "Derivative Instruments" in the Notes to Condensed Consolidated Financial Statements for additional information.

The effective tax rate was 21.7% and 25.2% for the three and six months ended June 30, 2023, respectively, compared to 27.7% and 26.8% for the three and six months ended June 30, 2022. See Note 14 – "Income Tax" for additional information on the Company's consolidated effective tax rate.

Impact of certain derivatives and market risk benefits

The Company recognizes in consolidated income any changes in the fair value of embedded derivatives on modco or funds withheld treaties and equity index annuities (“EIAs”). In addition, the Company recognizes the changes in fair value of market risk benefits associated with guaranteed minimum benefit riders in market risk benefits remeasurement gains (losses). The Company utilizes freestanding derivatives to minimize the income statement volatility due to changes in the fair value of market risk benefits associated with guaranteed minimum benefit riders. The following table presents the effect of embedded derivatives, market risk benefits and related freestanding derivatives on income before income taxes for the periods indicated (dollars in millions):

	Three months ended June 30,			Six months ended June 30,		
	2023	2022	2023 vs. 2022	2023	2022	2023 vs. 2022
Modco/Funds withheld:						
Change in fair value of funds withheld embedded derivatives	$ (20)	$ (56)	$ 36	$ 17	$ (89)	$ 106
EIAs:						
Embedded derivatives – interest credited	(2)	28	(30)	5	44	(39)
Market Risk Benefits:						
Market risk benefits remeasurement gains (losses)	31	(40)	71	17	(6)	23
Related freestanding derivatives	(42)	8	(50)	(42)	(27)	(15)
Net effect	(11)	(32)	21	(25)	(33)	8
Total net effect after freestanding derivatives	$ (33)	$ (60)	$ 27	$ (3)	$ (78)	$ 75

Results of Operations by Segment

U.S. and Latin America Operations

The U.S. and Latin America operations consist of two major segments: Traditional and Financial Solutions. The Traditional segment primarily specializes in the reinsurance of individual mortality-risk, health and long-term care and to a lesser extent, group reinsurance. The Financial Solutions segment consists of Asset-Intensive and Capital Solutions. Asset-Intensive within the Financial Solutions segment includes coinsurance of annuities and corporate-owned life insurance policies and to a lesser extent, fee-based synthetic guaranteed investment contracts, which include investment-only, stable value contracts. Capital Solutions within the Financial Solutions segment primarily involves assisting ceding companies in meeting applicable regulatory requirements by enhancing the ceding companies' financial strength and regulatory surplus position through relatively low risk reinsurance and other transactions. Typically, these transactions do not qualify as reinsurance under GAAP, due to the low-risk nature of the transactions, therefore only the related net fees are reflected in other revenues on the condensed consolidated statements of income.

The following table summarizes income before income taxes for the Company's U.S. and Latin America operations for the periods presented:

	Three months ended June 30,			Six months ended June 30,		
(dollars in millions)	2023	2022	2023 vs 2022	2023	2022	2023 vs 2022
Revenues						
Net premiums	$ 1,767	$ 1,645	$ 122	$ 3,545	$ 3,201	$ 344
Net investment income	458	433	25	932	979	(47)
Investment related gains (losses), net	(69)	(61)	(8)	(50)	(139)	89
Other revenues	54	115	(61)	110	175	(65)
Total revenues	2,210	2,132	78	4,537	4,216	321
Benefits and expenses						
Claims and other policy benefits	1,637	1,567	70	3,283	3,083	200
Future policy benefits remeasurement (gains) losses	23	(12)	35	26	71	(45)
Market risk benefits remeasurement (gains) losses	(31)	40	(71)	(17)	6	(23)
Interest credited	151	118	33	298	242	56
Policy acquisition costs and other insurance expenses	236	227	9	459	450	9
Other operating expenses	64	59	5	123	114	9
Total benefits and expenses	2,080	1,999	81	4,172	3,966	206
Income (loss) before income taxes	$ 130	$ 133	$ (3)	$ 365	$ 250	$ 115

Income before income taxes for the second quarter is slightly lower than prior year due primarily to a recapture fee earned on a terminated Capital Solutions transaction in the second quarter of 2022 and unfavorable claims experience in the U.S. Traditional lines of business. The increase in income before income taxes for the first six months of 2023 was primarily the result of increases in investment related gains due to changes in the fair value of the embedded derivatives associated with modco/funds withheld treaties within Financial Solutions, favorable changes in the fair value of market risk benefits for Asset Intensive business and favorable claims experience in the U.S. Traditional lines of business, partially offset by lower variable investment income and a recapture fee earned on a terminated capital solutions transaction in the second quarter of 2022.

Traditional Reinsurance

For the three months ended June 30,	Three months ended June 30,			Six months ended June 30,		
(dollars in millions)	2023	2022	2023 vs 2022	2023	2022	2023 vs 2022
Revenues						
Net premiums	$ 1,750	$ 1,631	$ 119	$ 3,365	$ 3,172	$ 193
Net investment income	180	186	(6)	373	475	(102)
Investment related gains (losses), net	(1)	19	(20)	(2)	34	(36)
Other revenues	3	10	(7)	8	16	(8)
Total revenues	1,932	1,846	86	3,744	3,697	47
Benefits and expenses						
Claims and other policy benefits	1,592	1,524	68	3,039	2,971	68
Future policy benefits remeasurement (gains) losses	24	(11)	35	31	92	(61)
Market risk benefits remeasurement (gains) losses	—	—	—	—	—	—
Interest credited	18	17	1	36	34	2
Policy acquisition costs and other insurance expenses	187	181	6	362	362	—
Other operating expenses	49	45	4	93	88	5
Total benefits and expenses	1,870	1,756	114	3,561	3,547	14
Income (loss) before income taxes	$ 62	$ 90	$ (28)	$ 183	$ 150	$ 33
Key metrics						
Life reinsurance in force				$1,685.3 billion	$1,650.5 billion	
Future policy benefits remeasurement (gains) losses						
Effect of changes in cash flow assumptions	$ —	$ —		$ —	$ —	
Effect of actual variances from expected experience	$ 24	$ (11)		$ 31	$ 92	
Loss ratio (1)	92.3 %	92.8 %		91.2 %	96.6 %	
Policy acquisition costs and other insurance expenses as a percentage of net premiums	10.7 %	11.1 %		10.8 %	11.4 %	
Other operating expenses as a percentage of net premiums	2.8 %	2.8 %		2.8 %	2.8 %	

(1) Includes Claims and other policy benefits and Future policy benefits remeasurement (gains) losses

The decrease in income before income taxes in the second quarter for the U.S. and Latin America Traditional segment was primarily due to unfavorable claims experience period over period within the U.S. Individual Mortality business, partially offset by favorable claims experience in both Group and Latin American business. The increase in income before income taxes for the first six months was the result of favorable claims experience across all lines, driven in large part by COVID-19 claims in the first quarter of 2022.

Revenues

- The increase in net premiums was primarily due to organic growth as well as new business treaties. The segment added new life business production, measured by face amount of life reinsurance in force, of $35.6 billion and $32.7 billion during the second quarter of 2023 and 2022, respectively, and $69.7 billion and $72.2 billion during the first six months of 2023 and 2022, respectively. Also contributing to the increase in net premiums was the recapture of a retrocession treaty, effective April 1, 2023, which resulted in a reduction in ceded premium in the second quarter of 2023.
- The decrease in net investment income during the six months ended June 30, 2023, was primarily due to a decrease in variable investment income associated with investments in real estate joint ventures and investments in limited partnerships and private equity funds as compared to the same period in 2022.

Benefits and expenses

- The increase in future policy benefits remeasurement losses during the second quarter was attributable to less favorable claims experience relative to the prior-year quarter, primarily in the U.S. Individual Mortality business, as well as the impacts of in-force management actions that improve the long-term value of the business. The decrease in future policy benefits remeasurement losses and the loss ratio for the first six months of 2023 was attributable to favorable claims experience, predominantly related to COVID-19 claims, in the first quarter of 2022.
- The decrease in policy acquisition costs and other insurance expenses as a percentage of net premiums is less than 1% and is primarily due to varying allowance levels within coinsurance type arrangements and the mix of new business between coinsurance versus yearly renewable term.

Financial Solutions

For the three months ended June 30, (dollars in millions)	2023			2022			2023 vs 2022		
	Asset-Intensive	Capital Solutions	Total	Asset-Intensive	Capital Solutions	Total	Asset-Intensive	Capital Solutions	Total
Revenues									
Net premiums	$ 17	$ —	$ 17	$ 14	$ —	$ 14	$ 3	$ —	$ 3
Net investment income	278	—	278	246	1	247	32	(1)	31
Investment related gains (losses), net	(68)	—	(68)	(80)	—	(80)	12	—	12
Other revenues	26	25	51	31	74	105	(5)	(49)	(54)
Total revenues	253	25	278	211	75	286	42	(50)	(8)
Benefits and expenses									
Claims and other policy benefits	45	—	45	43	—	43	2	—	2
Future policy benefits remeasurement (gains) losses	(1)	—	(1)	(1)	—	(1)	—	—	—
Market risk benefits remeasurement (gains) losses	(31)	—	(31)	40	—	40	(71)	—	(71)
Interest credited	133	—	133	101	—	101	32	—	32
Policy acquisition costs and other insurance expenses	47	2	49	45	1	46	2	1	3
Other operating expenses	13	2	15	12	2	14	1	—	1
Total benefits and expenses	206	4	210	240	3	243	(34)	1	(33)
Income before income taxes	$ 47	$ 21	$ 68	$ (29)	$ 72	$ 43	$ 76	$ (51)	$ 25

For the six months ended June 30, (dollars in millions)	2023			2022			2023 vs 2022		
	Asset-Intensive	Capital Solutions	Total	Asset-Intensive	Capital Solutions	Total	Asset-Intensive	Capital Solutions	Total
Revenues									
Net premiums	$ 180	$ —	$ 180	$ 29	$ —	$ 29	$ 151	$ —	$ 151
Net investment income	558	1	559	502	2	504	56	(1)	55
Investment related gains (losses), net	(48)	—	(48)	(173)	—	(173)	125	—	125
Other revenues	51	51	102	57	102	159	(6)	(51)	(57)
Total revenues	741	52	793	415	104	519	326	(52)	274
Benefits and expenses									
Claims and other policy benefits	244	—	244	112	—	112	132	—	132
Future policy benefits remeasurement (gains) losses	(5)	—	(5)	(21)	—	(21)	16	—	16
Market risk benefits remeasurement (gains) losses	(17)	—	(17)	6	—	6	(23)	—	(23)
Interest credited	262	—	262	208	—	208	54	—	54
Policy acquisition costs and other insurance expenses	93	4	97	86	2	88	7	2	9
Other operating expenses	24	6	30	21	5	26	3	1	4
Total benefits and expenses	601	10	611	412	7	419	189	3	192
Income before income taxes	$ 140	$ 42	$ 182	$ 3	$ 97	$ 100	$ 137	$ (55)	$ 82

The increase in income before income taxes for the U.S. and Latin America Financial Solutions segment for the three and six months ended June 30, 2023, was primarily due to the change in the fair value of embedded derivatives on funds withheld at interest associated with treaties written on a modco or funds withheld basis and market risk benefits.

The book value of the invested asset base supporting asset-intensive transactions decreased to $22.7 billion as of June 30, 2023, from $23.8 billion as of June 30, 2022.

- The decrease in the asset base was primarily due to $1.8 billion in net run off of existing in force transactions, partially offset by $0.6 billion from new transactions.
- As of June 30, 2023 and 2022, $3.9 billion and $4.3 billion, respectively, of the invested assets were funds withheld at interest, of which greater than 90% was associated with two clients.

As of June 30, 2023 and 2022, the amount of reinsurance assumed in capital solutions transactions, as measured by pre-tax statutory surplus, risk based capital and other financial structures was $25.6 billion and $24.1 billion, respectively.

Impact of certain derivatives and market risk benefits

The Company recognizes in consolidated income any changes in the fair value of embedded derivatives on modco or funds withheld treaties and equity indexed annuities (“EIAs”). In addition, the Company recognizes the changes in fair value of market risk benefits associated with guaranteed minimum benefit riders. The Company utilizes freestanding derivatives to minimize the income statement volatility due to changes in the fair value of market risk benefits associated with guaranteed minimum benefit riders.

Income from the asset-intensive business tends to be volatile due to changes in the fair value of certain derivatives, including embedded derivatives associated with reinsurance treaties structured on a modco or funds withheld basis, embedded derivatives associated with the Company’s reinsurance of EIAs, and changes in the fair value of market risk benefits associated with guaranteed minimum benefit riders. Fluctuations occur period to period primarily due to changing investment conditions including, but not limited to, interest rate movements (including risk-free rates and credit spreads), implied volatility and equity market performance, all of which are factors in the calculations of the fair value of the assets and liabilities.

The following table summarizes the asset-intensive results and quantifies the impact of these embedded derivatives and market risk benefits for the periods presented. Revenues before certain derivatives, benefits and expenses before certain derivatives, and income before income taxes and certain derivatives should not be viewed as substitutes for GAAP revenues, GAAP benefits and expenses, and GAAP income before income taxes.

(dollars in millions)	Three months ended June 30,		Six months ended June 30,	
	2023	2022	2023	2022
Revenues				
Total revenues	$ 253	$ 211	$ 741	$ 415
Less:				
Embedded derivatives – modco/funds withheld treaties	(19)	(75)	19	(124)
Derivatives hedging market risk benefits	(42)	8	(42)	(27)
Revenues before certain derivatives and market risk benefits	314	278	764	566
Benefits and expenses				
Total benefits and expenses	206	240	601	412
Less:				
Equity-indexed annuities	2	(28)	(5)	(44)
Market risk benefits remeasurement (gains) losses	(31)	40	(17)	6
Benefits and expenses before certain derivatives and market risk benefits	235	228	623	450
Income before income taxes:				
Income (loss) before income taxes	47	(29)	140	3
Less:				
Embedded derivatives – modco/funds withheld treaties	(19)	(75)	19	(124)
Market risk benefits remeasurement (gains) losses and related free standing derivatives	(11)	(32)	(25)	(33)
Equity-indexed annuities	(2)	28	5	44
Income before income taxes and certain derivatives	$ 79	$ 50	$ 141	$ 116

Embedded Derivatives – Modco/Funds Withheld Treaties – Represents the change in the fair value of embedded derivatives on funds withheld at interest associated with treaties written on a modco or funds withheld basis. The Company’s utilization of a credit valuation adjustment did not have a material effect on the change in fair value of these embedded derivatives for the three and six months ended June 30, 2023 and 2022.

The change in fair value of the embedded derivatives related to modco/funds withheld treaties, increased (decreased) income before income taxes by $(19) million and $(75) million for the second quarter and $19 million and $(124) million for the six months ended June 30, 2023 and 2022, respectively. The decrease in income for the three months ended June 30, 2023, as compared to the same period in 2022, was due to wider credit spreads. The increase in income for the six months ended June 30, 2023, was due to tightening credit spreads and the decrease in income for the six months ended June 30, 2022, was due to wider credit spreads.

Market Risk Benefits – Represents the impact related to market risk benefits, which consist of guaranteed minimum benefits associated with the Company's reinsurance of variable and equity-indexed annuities, including the associated free standing derivatives (interest rate swaps, financial futures and equity options), purchased by the Company to substantially hedge the market risk benefit. The change in fair value of the market risk benefits, net of the changes in the associated free standing derivatives, decreased income before income taxes by $11 million and $25 million for the three and six months ended June 30, 2023, respectively, due to increasing interest rates and equity markets. The decrease in income of $32 million and $33 million for the three and six months ended June 30, 2022, respectively, was due to increasing interest rates.

Equity-Indexed Annuities – Represents changes in the liability for equity-indexed annuities in excess of changes in account value. The change in fair value of embedded derivative liabilities associated with equity-indexed annuities increased (decreased) income before income taxes by $(2) million and $28 million for the three months ended June 30, 2023 and 2022. The increase in 2022 was due to increasing interest rates which has the impact of lowering the fair value of the liability. The increase in income before income taxes was $5 million and $44 million for the six months ended June 30, 2023 and 2022, respectively, due to an increase in risk free interest rates which has the impact of lowering the fair value of the liability.

Discussion and analysis before certain derivatives and market risk benefits

The changes in derivatives and market risk benefits discussed above are considered unrealized by management and do not affect current cash flows, crediting rates or spread performance on the underlying treaties. Fluctuations occur period to period primarily due to changing investment conditions including, but not limited to, interest rate movements (including benchmark rates and credit spreads), implied volatility and equity market performance, all of which are factors in the calculations of fair value. Therefore, management believes it is helpful to distinguish between the effects of changes in these derivatives and market risk benefits as the primary factors that drive profitability of the underlying treaties are investment income, fee income (included in other revenues) and interest credited.

- Income before income taxes and certain derivatives and market risk benefits increased by $29 million and $25 million for the three and six months ended June 30, 2023, as compared to the same periods in 2022, primarily due to higher investment income, net in coinsurance and funds withheld portfolios due to increases in interest rates.
- Revenue before certain derivatives and market risk benefits increased by $36 million and $198 million for the three and six months ended June 30, 2023, as compared to the same periods in 2022. The increase in the second quarter of 2023 was primarily due to higher investment income, net in coinsurance and funds withheld portfolios, due to an increase in interest rates. The increase in the first six months of 2023 was primarily due to net premiums from a single premium PRT transaction, which is offset by a corresponding increase in reserves.
- Benefits and expenses before certain derivatives and market risk benefits increased by $7 million and $173 million for the three and six months ended June 30, 2023, as compared to the same periods in 2022. The increase in the six months ended June 30, 2023 was primarily due to the establishment of liabilities for future policy benefits associated with a single premium transaction.

Canada Operations

The Canada operations are primarily engaged in traditional reinsurance, which consists mainly of traditional individual life reinsurance, and to a lesser extent creditor, group life and health, critical illness and disability reinsurance. Creditor insurance covers the outstanding balance on personal, mortgage or commercial loans in the event of death, disability or critical illness and is generally shorter in duration than traditional individual life insurance. The Canada Financial Solutions segment consists of longevity and capital solutions.

(dollars in millions)	Three months ended June 30, 2023	2022	2023 vs 2022	Six months ended June 30, 2023	2022	2023 vs 2022
Revenues						
Net premiums	$ 330	$ 339	$ (9)	$ 648	$ 666	$ (18)
Net investment income	62	64	$ (2)	124	123	1
Investment related gains (losses), net	4	(6)	10	6	(5)	11
Other revenues	3	3	—	7	7	—
Total revenues	399	400	(1)	785	791	(6)
Benefits and expenses						
Claims and other policy benefits	302	308	(6)	593	616	(23)
Future policy benefits remeasurement (gains) losses	(3)	(4)	1	(5)	(8)	3
Market risk benefits remeasurement (gains) losses	—	—	—	—	—	—
Interest credited	—	—	—	—	—	—
Policy acquisition costs and other insurance expenses	47	51	(4)	93	104	(11)
Other operating expenses	12	11	1	24	21	3
Total benefits and expenses	358	366	(8)	705	733	(28)
Income (loss) before income taxes	$ 41	$ 34	$ 7	$ 80	$ 58	$ 22

- The increase in income before income taxes for the three and six months ended June 30, 2023, was primarily due to favorable claims experience in the individual mortality line of business as compared to the same period in 2022, and lower policy acquisition costs and other insurance expenses.
- Foreign currency fluctuations can result in variances in the financial statement line items. Foreign currency fluctuations resulted in decreases in income before income taxes of $2 million and $5 million for the three and six months ended June 30, 2023. Unless otherwise stated, all amounts discussed below are net of foreign currency fluctuations.

Traditional Reinsurance

(dollars in millions)	Three months ended June 30, 2023	Three months ended June 30, 2022	Three months ended June 30, 2023 vs 2022	Six months ended June 30, 2023	Six months ended June 30, 2022	Six months ended June 30, 2023 vs 2022
Revenues						
Net premiums	$ 307	$ 314	$ (7)	$ 602	$ 618	$ (16)
Net investment income	61	62	(1)	122	120	2
Investment related gains (losses), net	4	(6)	10	6	(5)	11
Other revenues	1	1	—	2	3	(1)
Total revenues	373	371	2	732	736	(4)
Benefits and expenses						
Claims and other policy benefits	282	285	(3)	552	572	(20)
Future policy benefits remeasurement (gains) losses	(1)	(2)	1	2	(1)	3
Market risk benefits remeasurement (gains) losses	—	—	—	—	—	—
Interest credited	—	—	—	—	—	—
Policy acquisition costs and other insurance expenses	47	51	(4)	92	103	(11)
Other operating expenses	10	10	—	22	20	2
Total benefits and expenses	338	344	(6)	668	694	(26)
Income (loss) before income taxes	$ 35	$ 27	$ 8	$ 64	$ 42	$ 22
Key metrics						
Life reinsurance in force				$484.6 billion	$477.2 billion	
Future policy benefits remeasurement (gains) losses						
Effect of changes in cash flow assumptions	$ —	$ —		$ —	$ —	
Effect of actual variances from expected experience	$ (1)	$ (2)		$ 2	$ (1)	
Loss ratio [(1)]	91.5 %	90.1 %		92.0 %	92.4 %	
Policy acquisition costs and other insurance expenses as a percentage of net premiums	15.3 %	16.2 %		15.3 %	16.7 %	
Other operating expenses as a percentage of net premiums	3.3 %	3.2 %		3.7 %	3.2 %	

(1) Includes Claims and other policy benefits and Future policy benefits remeasurement (gains) losses

The increase in income before income taxes for the three months ended June 30, 2023, was primarily due to higher investment related gains (losses). The increase in income before income taxes for the six months ended June 30, 2023, was primarily due to more favorable claims experience in the individual mortality line of business as compared to the same period in 2022, higher investment related gains (losses), net and lower policy acquisition costs and other insurance expenses.

Revenues

- The decrease in net premiums is due to foreign currency fluctuations. Excluding the impact of foreign currency fluctuations, premiums increased for the three and six months ended June 30, 2023, primarily due to organic growth.
- The segment added new life business production, measured by face amount of life reinsurance in force, of $11.2 billion and $12.8 billion for the second quarter of 2023 and 2022, respectively, and $22.0 and $25.5 billion during the first six months of 2023 and 2022, respectively.

Benefits and expenses

- Loss ratios for the three and six months ended June 30, 2023, are consistent with the ratios of the same period in 2022.

Financial Solutions

(dollars in millions)	Three months ended June 30, 2023	2022	2023 vs 2022	Six months ended June 30, 2023	2022	2023 vs 2022
Revenues						
Net premiums	$ 23	$ 25	$ (2)	$ 46	$ 48	$ (2)
Net investment income	1	2	(1)	2	3	(1)
Investment related gains (losses), net	—	—	—	—	—	—
Other revenues	2	2	—	5	4	1
Total revenues	26	29	(3)	53	55	(2)
Benefits and expenses						
Claims and other policy benefits	20	23	(3)	41	44	(3)
Future policy benefits remeasurement (gains) losses	(2)	(2)	—	(7)	(7)	—
Market risk benefits remeasurement (gains) losses	—	—	—	—	—	—
Interest credited	—	—	—	—	—	—
Policy acquisition costs and other insurance expenses	—	—	—	1	1	—
Other operating expenses	2	1	1	2	1	1
Total benefits and expenses	20	22	(2)	37	39	(2)
Income (loss) before income taxes	$ 6	$ 7	$ (1)	$ 16	$ 16	$ —
Key metrics						
Future policy benefits remeasurement (gains) losses						
Effect of changes in cash flow assumptions	$ —	$ —		$ —	$ —	
Effect of actual variances from expected experience	$ (2)	$ (2)		$ (7)	$ (7)	

Income before income taxes for the three and six months ended June 30, 2023, was comparable to the same periods in 2022.

Europe, Middle East and Africa Operations

The Europe, Middle East and Africa ("EMEA") operations include business primarily generated by offices in France, Germany, Ireland, Italy, the Middle East, the Netherlands, Poland, South Africa, Spain and the United Kingdom ("UK"). EMEA consists of two major segments: Traditional and Financial Solutions. The Traditional segment primarily provides reinsurance through yearly renewable term and coinsurance agreements on a variety of life, health and critical illness products. Reinsurance agreements may be facultative or automatic agreements covering primarily individual risks and, in some markets, group risks. The Financial Solutions segment consists of reinsurance and other transactions associated with longevity closed blocks, payout annuities, capital management solutions and financial reinsurance.

(dollars in millions)	Three months ended June 30, 2023	2022	2023 vs 2022	Six months ended June 30, 2023	2022	2023 vs 2022
Revenues						
Net premiums	$ 519	$ 546	$ (27)	$ 1,082	$ 1,125	$ (43)
Net investment income	68	52	16	137	107	30
Investment related gains (losses), net	(9)	(22)	13	(15)	(6)	(9)
Other revenues	3	2	1	6	8	(2)
Total revenues	581	578	3	1,210	1,234	(24)
Benefits and expenses						
Claims and other policy benefits	451	484	(33)	945	998	(53)
Future policy benefits remeasurement (gains) losses	7	9	(2)	(10)	(10)	—
Market risk benefits remeasurement (gains) losses	—	—	—	—	—	—
Interest credited	(2)	(8)	6	(2)	(17)	15
Policy acquisition costs and other insurance expenses	23	21	2	43	45	(2)
Other operating expenses	46	43	3	92	88	4
Total benefits and expenses	525	549	(24)	1,068	1,104	(36)
Income (loss) before income taxes	$ 56	$ 29	$ 27	$ 142	$ 130	$ 12

- The increases in income before income taxes for the three and six months ended June 30, 2023, as compared to the same periods in 2022, were primarily due to increased net investment income and favorable claims experience, partially offset by decreased net premiums.
- Foreign currency fluctuations can result in variances in the financial statement line items. Foreign currency fluctuations resulted in a $1 million increase and $6 million decrease in income before income taxes for the three and six months ended June 30, 2023. Unless otherwise stated, all amounts discussed below are net of foreign currency fluctuations.

Traditional Reinsurance

(dollars in millions)	Three months ended June 30, 2023	Three months ended June 30, 2022	2023 vs 2022	Six months ended June 30, 2023	Six months ended June 30, 2022	2023 vs 2022
Revenues						
Net premiums	$ 429	$ 427	$ 2	$ 867	$ 878	$ (11)
Net investment income	23	18	5	46	37	9
Investment related gains (losses), net	—	—	—	—	—	—
Other revenues	(1)	(2)	1	(2)	1	(3)
Total revenues	451	443	8	911	916	(5)
Benefits and expenses						
Claims and other policy benefits	383	377	6	773	773	—
Future policy benefits remeasurement (gains) losses	12	13	(1)	4	2	2
Market risk benefits remeasurement (gains) losses	—	—	—	—	—	—
Interest credited	—	—	—	—	—	—
Policy acquisition costs and other insurance expenses	21	20	1	39	42	(3)
Other operating expenses	31	29	2	64	61	3
Total benefits and expenses	447	439	8	880	878	2
Income (loss) before income taxes	$ 4	$ 4	$ —	$ 31	$ 38	$ (7)
Key metrics						
Life reinsurance in force				$802.3 billion	$756.4 billion	
Future policy benefits remeasurement (gains) losses						
Effect of changes in cash flow assumptions	$ —	$ —		$ —	$ —	
Effect of actual variances from expected experience	$ 12	$ 13		$ 4	$ 2	
Loss ratio [(1)]	92.1 %	91.3 %		89.6 %	88.3 %	
Policy acquisition costs and other insurance expenses as a percentage of net premiums	4.9 %	4.7 %		4.5 %	4.8 %	
Other operating expenses as a percentage of net premiums	7.2 %	6.8 %		7.4 %	6.9 %	

(1) Includes Claims and other policy benefits and Future policy benefits remeasurement (gains) losses

The decrease in income before income taxes for the six months ended June 30, 2023, as compared to the same period in 2022, was primarily due to decreased net premiums.

Revenues

- The decrease in net premiums for the first six months of 2023 was due to foreign currency fluctuations. Excluding the impact of foreign currency fluctuations, business volume on new and existing treaties increased in the first six months of 2023.
- The segment added new life business production, measured by face amount of life reinsurance in force, of $36.6 billion and $45.1 billion during the second quarter of 2023 and 2022, respectively, and $66.7 billion and $95.6 billion during the six months ended June 30, 2023 and 2022, respectively.

Benefits and expenses

- The increases in the loss ratios for the second quarter and first six months of 2023 were primarily due to a decrease in premiums and claims provisions related to the earthquake in Turkey. In addition, the increase in the loss ratio for the three months ended June 30, 2023 was due to worsening mortality experience primarily in the UK and South Africa.

Financial Solutions

(dollars in millions)	Three months ended June 30, 2023	2022	2023 vs 2022	Six months ended June 30, 2023	2022	2023 vs 2022
Revenues						
Net premiums	$ 90	$ 119	$ (29)	$ 215	$ 247	$ (32)
Net investment income	45	34	11	91	70	21
Investment related gains (losses), net	(9)	(22)	13	(15)	(6)	(9)
Other revenues	4	4	—	8	7	1
Total revenues	130	135	(5)	299	318	(19)
Benefits and expenses						
Claims and other policy benefits	68	107	(39)	172	225	(53)
Future policy benefits remeasurement (gains) losses	(5)	(4)	(1)	(14)	(12)	(2)
Market risk benefits remeasurement (gains) losses	—	—	—	—	—	—
Interest credited	(2)	(8)	6	(2)	(17)	15
Policy acquisition costs and other insurance expenses	2	1	1	4	3	1
Other operating expenses	15	14	1	28	27	1
Total benefits and expenses	78	110	(32)	188	226	(38)
Income (loss) before income taxes	$ 52	$ 25	$ 27	$ 111	$ 92	$ 19
Key metrics						
Future policy benefits remeasurement (gains) losses						
Effect of changes in cash flow assumptions	$ —	$ —		$ —	$ —	
Effect of actual variances from expected experience	$ (5)	$ (4)		$ (14)	$ (12)	

The increases in income before income taxes for the first three and six months of 2023 were primarily due favorable claims experience related to closed longevity blocks, partially offset by decreased net premiums.

Revenues

- The decrease in net premiums was primarily due to an increase in the ceded premium on a closed block longevity transactions.
- The increase in net investment income was primarily related to higher yield and higher income associated with unit-linked policies which fluctuate with market performance and are offset by an increase in interest credited related to the unit-linked liabilities.
- The decrease in investment related losses for the second quarter was attributable to fluctuations in the fair market value of CPI swap derivatives due to changes in future inflation expectations. The increase in investment related losses for the six months ended June 30, 2023, was attributable to higher investment related losses on fixed-income securities.

Benefits and expenses

- The decrease in claims and other policy benefits is the result of favorable longevity experience and an increased level of external retrocession coverage on closed block longevity transactions.

Asia Pacific Operations

The Asia Pacific operations include business generated by its offices principally in Australia, China, Hong Kong, India, Japan, Malaysia, New Zealand, Singapore, South Korea and Taiwan. The Traditional segment's principal types of reinsurance include individual and group life and health, critical illness, disability and superannuation. Reinsurance agreements may be facultative or automatic agreements covering primarily individual risks, and in some markets, group risks. Superannuation is the Australian government mandated compulsory retirement savings program. Superannuation funds accumulate retirement funds for employees, and, in addition, typically offer life and disability insurance coverage. The Financial Solutions segment includes financial reinsurance, asset-intensive and certain disability and life blocks.

	Three months ended June 30,			Six months ended June 30,		
(dollars in millions)	2023	2022	2023 vs 2022	2023	2022	2023 vs 2022
Revenues						
Net premiums	$ 721	$ 700	$ 21	$ 1,447	$ 1,393	$ 54
Net investment income	187	101	86	356	192	164
Investment related gains (losses), net	(49)	(108)	59	(97)	(189)	92
Other revenues	29	51	(22)	42	71	(29)
Total revenues	888	744	144	1,748	1,467	281
Benefits and expenses						
Claims and other policy benefits	623	579	44	1,255	1,112	143
Future policy benefits remeasurement (gains) losses	(14)	25	(39)	(24)	23	(47)
Market risk benefits remeasurement (gains) losses	—	—	—	—	—	—
Interest credited	46	22	24	100	42	58
Policy acquisition costs and other insurance expenses	63	60	3	125	126	(1)
Other operating expenses	61	53	8	117	107	10
Total benefits and expenses	779	739	40	1,573	1,410	163
Income (loss) before income taxes	$ 109	$ 5	$ 104	$ 175	$ 57	$ 118

- The increases in income before taxes for the three and six months ended June 30, 2023, as compared to the same periods in 2022 were primarily due to increased net investment income related to an increase in the asset base from new asset-intensive transactions, increased net premiums and lower investment related losses, partially offset by lower underwriting results.
- Foreign currency fluctuations can result in variances in the financial statement line items. Foreign currency fluctuations resulted in decreases of $2 million and $5 million in income before income taxes during the three and six months ended June 30, 2023. Unless otherwise stated, all amounts discussed below are net of foreign currency fluctuations.

Traditional Reinsurance

(dollars in millions)	Three months ended June 30, 2023	Three months ended June 30, 2022	Three months ended June 30, 2023 vs 2022	Six months ended June 30, 2023	Six months ended June 30, 2022	Six months ended June 30, 2023 vs 2022
Revenues						
Net premiums	$ 677	$ 640	$ 37	$ 1,339	$ 1,290	$ 49
Net investment income	62	46	16	123	93	30
Investment related gains (losses), net	2	5	(3)	5	5	—
Other revenues	11	10	1	14	16	(2)
Total revenues	752	701	51	1,481	1,404	77
Benefits and expenses						
Claims and other policy benefits	579	523	56	1,142	1,017	125
Future policy benefits remeasurement (gains) losses	(14)	25	(39)	(23)	23	(46)
Market risk benefits remeasurement (gains) losses	—	—	—	—	—	—
Interest credited	—	—	—	—	—	—
Policy acquisition costs and other insurance expenses	44	45	(1)	90	99	(9)
Other operating expenses	54	49	5	104	98	6
Total benefits and expenses	663	642	21	1,313	1,237	76
Income (loss) before income taxes	$ 89	$ 59	$ 30	$ 168	$ 167	$ 1
Key metrics						
Life reinsurance in force				$495.4 billion	$486.1 billion	
Future policy benefits remeasurement (gains) losses						
Effect of changes in cash flow assumptions	$ —	$ (23)		$ —	$ (23)	
Effect of actual variances from expected experience	$ (14)	$ 48		$ (23)	$ 46	
Loss ratio [(1)]	83.5 %	85.6 %		83.6 %	80.6 %	
Policy acquisition costs and other insurance expenses as a percentage of net premiums	6.5 %	7.0 %		6.7 %	7.7 %	
Other operating expenses as a percentage of net premiums	8.0 %	7.7 %		7.8 %	7.6 %	

(1) Includes Claims and other policy benefits and Future policy benefits remeasurement (gains) losses

The increases in income before income taxes for the three and six months ended June 30, 2023, were primarily the result of higher net investment income and, increased net premiums partially offset by an increase in the volume of claims and other policy benefits.

Revenues

- The increases in net premiums were primarily due to continued business growth in the segment.
- The segment added new life business production, measured by face amount of life reinsurance in force, of $4.7 billion and $5.7 billion during the second quarter of 2023 and 2022, respectively, and $8.6 billion and $22.3 billion during the six months ended June 30, 2023 and 2022, respectively, due to new business production.
- The increases in net investment income are attributable to increase in investment yield due to an increase in interest rates.

Benefits and expenses

- The decrease in the loss ratio for the second quarter of 2023 and compared to the same period in 2022 was primarily due to favorable claims experience. The increase in the loss ratio for the six months ended June 30, 2023, as compared to the same period in 2022, was primarily due to a one time favorable underwriting experience as result of a recapture which occurred in 2022.

Financial Solutions

	Three months ended June 30,			Six months ended June 30,		
(dollars in millions)	2023	2022	2023 vs 2022	2023	2022	2023 vs 2022
Revenues						
Net premiums	$ 44	$ 60	$ (16)	$ 108	$ 103	$ 5
Net investment income	125	55	70	233	99	134
Investment related gains (losses), net	(51)	(113)	62	(102)	(194)	92
Other revenues	18	41	(23)	28	55	(27)
Total revenues	136	43	93	267	63	204
Benefits and expenses						
Claims and other policy benefits	44	56	(12)	113	95	18
Future policy benefits remeasurement (gains) losses	—	—	—	(1)	—	(1)
Market risk benefits remeasurement (gains) losses	—	—	—	—	—	—
Interest credited	46	22	24	100	42	58
Policy acquisition costs and other insurance expenses	19	15	4	35	27	8
Other operating expenses	7	4	3	13	9	4
Total benefits and expenses	116	97	19	260	173	87
Income (loss) before income taxes	$ 20	$ (54)	$ 74	$ 7	$ (110)	$ 117
Key metrics						
Future policy benefits remeasurement (gains) losses						
Effect of changes in cash flow assumptions	$ —	$ —		$ —	$ —	
Effect of actual variances from expected experience	$ —	$ —		$ (1)	$ —	

The increase in income before income taxes is primarily due to higher net investment income and a decrease in investment related losses. The invested asset base supporting asset-intensive transactions increased to $15.1 billion as of June 30, 2023, from $10.7 billion as of June 30, 2022. The increase in the asset base compared to June 30, 2022, was primarily due to approximately $2.8 billion in additional assets from recently executed transactions and net organic growth of $1.6 billion from existing in-force blocks. The amount of reinsurance assumed from client companies, as measured by pre-tax statutory surplus, risk based capital and other financial reinsurance structures was $1.1 billion and $0.9 billion for the six months ended June 30, 2023 and 2022, respectively. Fees earned from this business can vary significantly depending on the size, complexity and timing of the transactions and, therefore, can fluctuate from period to period.

Revenues

- The decrease in net premiums during the second quarter of 2023 as compared to the same period in 2022 is the result of lower contributions from single premium asset-intensive transactions. The increase in net premiums for the six months ended June 30, 2023, as compared to the same period in 2022 is attributable to new asset-intensive business, partially offset by lower contributions from single premium asset-intensive transactions.
- The increase in net investment income is due to a growing asset base and increased yields due to an increase in interest rates.
- The decrease in investment related gains (losses), net during the quarter ended June 30, 2023, as compared to the same period in 2022 is the result of favorable fluctuations in the fair value of credit derivatives of $35 million from tightening credit spreads and gains due to investment activity of $29 million. The decrease in investment related gains (losses), net for the first six months of 2023, as compared to the same period in 2022, is attributable to favorable fluctuations in the fair value of credit derivatives of $103 million from tightening credit spreads.

Expenses

- The decrease in claims and other policy benefits during the second quarter of 2023 as compared to the same period in 2022 is the result of lower contributions from single premium asset-intensive transactions. The increase in claims and other policy benefits and interest credited in the first six months of 2023 as compared to 2022 is attributable to new asset-intensive business, partially offset by lower contributions from single premium asset-intensive transactions.

Corporate and Other

Corporate and Other revenues primarily include investment income from unallocated invested assets, investment related gains and losses and service fees. Corporate and Other expenses consist of the offset to capital charges allocated to the operating segments within the policy acquisition costs and other insurance income line item, unallocated overhead and executive costs, interest expense related to debt, and the investment income and expense associated with the Company’s collateral finance and securitization transactions and service business expenses. Additionally, Corporate and Other includes results from certain wholly-owned subsidiaries that, among other activities, develop and market technology, and provide consulting and outsourcing solutions for the insurance and reinsurance industries. The Company continues to invest in this area in an effort to both support its clients and accelerate the development of innovative solutions and services to increase consumer engagement within the life insurance industry and hence generate new future revenue streams.

(dollars in millions)	Three months ended June 30, 2023	Three months ended June 30, 2022	Three months ended June 30, 2023 vs 2022	Six months ended June 30, 2023	Six months ended June 30, 2022	Six months ended June 30, 2023 vs 2022
Revenues						
Net premiums	$ —	$ —	$ —	$ —	$ —	$ —
Net investment income	82	104	(22)	164	163	1
Investment related gains (losses), net	—	(43)	43	(44)	(40)	(4)
Other revenues	(4)	(12)	8	7	(11)	18
Total revenues	78	49	29	127	112	15
Benefits and expenses						
Claims and other policy benefits	—	—	—	—	—	—
Future policy benefits remeasurement (gains) losses	—	—	—	—	—	—
Market risk benefits remeasurement (gains) losses	—	—	—	—	—	—
Interest credited	14	6	8	28	12	16
Policy acquisition costs and other insurance expenses	(20)	(23)	3	(40)	(45)	5
Other operating expenses	92	76	16	169	139	30
Interest expense	63	44	19	116	87	29
Total benefits and expenses	149	103	46	273	193	80
Loss before income taxes	$ (71)	$ (54)	$ (17)	$ (146)	$ (81)	$ (65)

The increase in loss before income taxes for the three months ended June 30, 2023, is primarily due to a decrease in net investment income, increase in investment related gains (losses), net and an increase in other operating expenses and interest expense. The increase in loss before income taxes for the six months ended June 30, 2023, is attributable to an increase in other operating expenses and interest expense.

Revenues

- The decrease in net investment income for the three month period ended June 30, 2023, was attributable to lower yields, primarily due to limited partnerships partially offset by a higher unallocated invested asset base.
- The increase in investment related gains (losses), net for the three month period ended June 30, 2023, was primarily attributable to net losses on sales of fixed maturity securities in the second quarter of 2022.

Expenses

- The increases in other operating expenses for the three and six month periods ended June 30, 2023, were primarily attributable to an increase in incentive compensation expense.
- The increases in interest expense for the three and six month periods ended June 30, 2023, were primarily attributable to an increase in outstanding debt compared to prior periods.

Liquidity and Capital Resources

Overview

The Company believes that cash flows from the source of funds available to it will provide sufficient cash flows for the next twelve months to satisfy the current liquidity requirements of the Company under various scenarios that include the potential risk of early recapture of reinsurance treaties, market events and higher than expected claims. The Company performs periodic liquidity stress testing to ensure its asset portfolio includes sufficient high quality liquid assets that could be utilized to bolster its liquidity position under stress scenarios. These assets could be utilized as collateral for secured borrowing transactions with various third parties or by selling the securities in the open market if needed. The Company's liquidity requirements have been and will continue to be funded through net cash flows from operations. However, in the event of significant unanticipated cash requirements beyond normal liquidity needs, the Company has multiple liquidity alternatives available based on market conditions and the amount and timing of the liquidity need. These alternatives include the sale of invested assets subject to market conditions, borrowings under committed credit facilities, secured borrowings, and if necessary, issuing long-term debt, preferred securities or common equity.

Current Market Environment

The Company's average investment yield, excluding spread related business, for the three months ended June 30, 2023, was 4.42%, 21 basis points below the same period in 2022 primarily due to decreased variable investment income from real estate joint ventures and limited partnerships, partially offset by increased yield from the increased interest rates. The average yield will vary from year to year depending on several variables, including the prevailing risk-fee interest rate and credit spread environment, prepayment fees and make-whole premiums, changes in the mix of the underlying investments and cash and cash equivalents balances. Variable investment income from joint ventures and limited partnerships will also vary from year to year and is highly dependent on the timing of dividends and distributions on certain investments. Gross unrealized gains on fixed maturity securities available-for-sale increased from $0.6 billion at December 31, 2022, to $0.7 billion at June 30, 2023. Additionally, gross unrealized losses decreased from $7.3 billion at December 31, 2022, to $6.6 billion at June 30, 2023.

The Company continues to be in a position to hold any investment security showing an unrealized loss until recovery, provided it remains comfortable with the credit of the issuer. The Company does not rely on short-term funding or commercial paper and to date it has experienced no liquidity pressure, nor does it anticipate such pressure in the foreseeable future.

The Company projects its reserves to be sufficient, and it would not expect to write down deferred acquisition costs or be required to take any actions to augment capital, even if interest rates remain at current levels for the next five years, assuming all other factors remain constant. While the Company has felt the pressures of sustained low interest rates and volatile equity markets and may continue to do so, its business and results of operations are not overly sensitive to these risks. Mortality and morbidity risks continue to be the most significant risk for the Company. Although management believes the Company's current capital base is adequate to support its business at current operating levels, it continues to monitor new business opportunities and any associated new capital needs that could arise from the changing financial landscape.

The Holding Company

RGA is an insurance holding company whose primary uses of liquidity include, but are not limited to, the immediate capital needs of its operating companies, dividends paid to its shareholders, repurchase of common stock and interest payments on its indebtedness. The primary sources of RGA's liquidity include proceeds from its capital-raising efforts, interest income on undeployed corporate investments, interest income received on surplus notes with RGA Reinsurance Company ("RGA Reinsurance"), RGA Life and Annuity Insurance Company ("RGA Life and Annuity") and Rockwood Reinsurance Company ("Rockwood Re") and dividends from operating subsidiaries. As the Company continues its growth efforts, RGA will continue to be dependent upon these sources of liquidity. The following tables provide comparative information for RGA (dollars in millions):

	Three months ended June 30,		Six months ended June 30,	
	2023	2022	2023	2022
Interest expense	$ 51	$ 42	$ 100	$ 83
Capital contributions to subsidiaries	4	5	12	12
Issuance of unaffiliated debt	400	—	400	—
Dividends to shareholders	54	49	107	98
Purchase of treasury stock	50	—	100	25
Interest and dividend income	34	44	71	152

	June 30, 2023	December 31, 2022
Cash and invested assets	$ 903	$ 903

See Item 15, Schedule II – "Condensed Financial Information of the Registrant" in the 2022 Annual Report for additional financial information related to RGA.

The undistributed earnings of substantially all of the Company's foreign subsidiaries have been reinvested indefinitely in those non-U.S. operations, as described in Note 9 – "Income Tax" in the Notes to Consolidated Financial Statements in the 2022 Annual Report. As U.S. Tax Reform generally eliminated U.S. federal income taxes on dividends from foreign subsidiaries, the Company does not expect to incur material income taxes if these funds are repatriated.

RGA endeavors to maintain a capital structure that provides financial and operational flexibility to its subsidiaries, credit ratings that support its competitive position in the financial services marketplace, and shareholder returns. As part of the Company's capital deployment strategy, it has in recent years repurchased shares of RGA common stock and paid dividends to RGA shareholders, as authorized by the board of directors.

On February 25, 2022, RGA's board of directors authorized a share repurchase program for up to $400 million of RGA's outstanding common stock. The authorization was effective immediately and does not have an expiration date. In connection with this authorization, the board of directors terminated the stock repurchase authority granted in 2019. During the six months ended June 30, 2023, RGA repurchased 722,774 shares of common stock under this program for $100 million.

The pace of repurchase activity depends on various factors such as the level of available cash, an evaluation of the costs and benefits associated with alternative uses of excess capital, such as acquisitions and in force reinsurance transactions, and RGA's stock price.

Details underlying dividend and share repurchase program activity were as follows (in millions, except share data):

	Six months ended June 30,	
	2023	2022
Dividends to shareholders	$ 107	$ 98
Purchase of common stock [1]	100	25
Total amount paid to shareholders	$ 207	$ 123
Number of common shares purchased [1]	722,774	219,116
Average price per share	$ 138.35	$ 114.09

(1) Excludes shares utilized to execute and settle certain stock incentive awards.

In August 2023, RGA's board of directors declared a quarterly dividend of $0.85 per share. All future payments of dividends are at the discretion of RGA's board of directors and will depend on the Company's earnings, capital requirements, insurance regulatory conditions, operating conditions, and other such factors as the board of directors may deem relevant. The amount of dividends that RGA can pay will depend in part on the operations of its reinsurance subsidiaries. See Note 4 – "Equity" in the Notes to Condensed Consolidated Financial Statements for information on the Company's share repurchase program.

Debt

Certain of the Company's debt agreements contain financial covenant restrictions related to, among others, liens, the issuance and disposition of stock of restricted subsidiaries, minimum requirements of consolidated net worth, maximum ratios of debt to capitalization and change of control provisions. The Company renewed its syndicated credit facility in the first quarter of 2023. Under the terms of the new facility the Company is required to maintain a minimum consolidated net worth, as defined in the debt agreements, $5.8 billion effective with the June 30, 2023, covenant calculations. Also, consolidated indebtedness, calculated as of the last day of each fiscal quarter, cannot exceed 35% of the sum of the Company's consolidated indebtedness plus adjusted RGA Inc's shareholders' equity. A material ongoing covenant default could require immediate payment of the amount due, including principal, under the various agreements. Additionally, the Company's debt agreements contain cross-acceleration covenants, which would make outstanding borrowings immediately payable in the event of a material uncured covenant default under any of the agreements, including, but not limited to, non-payment of indebtedness when due for an amount in excess of the amounts set forth in those agreements, bankruptcy proceedings, or any other event that results in the acceleration of the maturity of indebtedness.

As of June 30, 2023 and December 31, 2022, the Company had $4.9 billion and $4.0 billion, respectively, in outstanding borrowings under its debt agreements and was in compliance with all covenants under those agreements. As of June 30, 2023 and December 31, 2022, the average interest rate on long-term debt outstanding was 5.06% and 4.71%, respectively. The ability of the Company to make debt principal and interest payments depends on the earnings and surplus of subsidiaries, investment earnings on undeployed capital proceeds, available liquidity at the holding company, and the Company's ability to raise additional funds.

The Company enters into derivative agreements with counterparties that reference either the Company's debt rating or its financial strength rating. If either rating is downgraded in the future, it could trigger certain terms in the Company's derivative agreements, which could negatively affect overall liquidity. For the majority of the Company's derivative agreements, there is a termination event should the long-term senior debt ratings drop below either BBB+ (S&P) or Baa1 (Moody's) or the financial strength ratings drop below either A- (S&P) or A3 (Moody's).

The Company may borrow up to $850 million in cash and obtain letters of credit in multiple currencies on its revolving credit facility that matures in March 2028. As of June 30, 2023, the Company had no cash borrowings outstanding and no issued, but undrawn, letters of credit under this facility.

On June 8, 2023, the Company issued 6.0% fixed rate senior notes due 2033 with a face amount of $400 million and will be used to repay upon maturity the $400 million 4.70% Senior Notes that mature on September 15, 2023. Capitalized issuance costs were $4 million.

On March 23, 2023, Chesterfield Reinsurance Company, a subsidiary of RGA, issued 7.125% Surplus Notes due 2043, with a face amount of $500 million. Capitalized issue costs were approximately $6 million.

Based on the historic cash flows and the current financial results of the Company, management believes RGA's cash flows will be sufficient to enable RGA to meet its obligations for at least the next 12 months.

Credit and Committed Facilities

On March 13, 2023, The Company entered into a new syndicated revolving credit facility with a five year term and an overall capacity of $850 million. The new facility replaced the existing $850 million syndicated revolving credit facility, which was scheduled to mature in August 2023. See Note 13 – “Debt” in the Notes to Consolidated Financial Statements in the 2022 Annual Report for further information about these facilities.

The Company has obtained bank letters of credit in favor of various affiliated and unaffiliated insurance companies from which the Company assumes business. These letters of credit represent guarantees of performance under the reinsurance agreements and allow ceding companies to take statutory reserve credits. Certain of these letters of credit contain financial covenant restrictions similar to those described in the “Debt” discussion above. At June 30, 2023, there were approximately $57 million of outstanding bank letters of credit in favor of third parties. Additionally, in accordance with applicable regulations, the Company utilizes letters of credit to secure statutory reserve credits when it retrocedes business to its affiliated subsidiaries. The Company cedes business to its affiliates to help reduce the amount of regulatory capital required in certain jurisdictions, such as the U.S. and UK. The Company believes the capital required to support the business in the affiliates reflects more realistic expectations than the original jurisdiction of the business, where capital requirements are often considered to be quite conservative. As of June 30, 2023, $791 million in letters of credit from various banks were outstanding, but undrawn, backing reinsurance between the various subsidiaries of the Company.

Cash Flows

The Company’s principal cash inflows from its reinsurance operations include premiums and deposit funds received from ceding companies. The primary liquidity concerns with respect to these cash flows are early recapture of the reinsurance contract by the ceding company and lapses of annuity products reinsured by the Company. The Company’s principal cash inflows from its invested assets result from investment income and the maturity and sales of invested assets. The primary liquidity concerns with respect to these cash inflows relates to the risk of default by debtors and interest rate volatility. The Company manages these risks very closely. See “Investments” below.

Additional sources of liquidity to meet unexpected cash outflows in excess of operating cash inflows and current cash and equivalents on hand also includes drawing funds under a revolving credit facility, under which the Company had availability of $850 million as of June 30, 2023. The Company also has $745 million of funds available through collateralized borrowings from the FHLB as of June 30, 2023. As of June 30, 2023, the Company could have borrowed these additional amounts without violating any of its existing debt covenants.

The Company’s principal cash outflows relate to the payment of claims liabilities, interest credited, operating expenses, income taxes, dividends to shareholders, purchases of treasury stock, and principal and interest under debt and other financing obligations. The Company seeks to limit its exposure to loss on any single insured and to recover a portion of benefits paid by ceding reinsurance to other insurance enterprises or reinsurers under excess coverage and coinsurance contracts (See Note 2 – “Significant Accounting Policies and Pronouncements” in the Notes to Consolidated Financial Statements in the 2022 Annual Report). The Company performs annual financial reviews of its retrocessionaires to evaluate financial stability and performance. The Company has never experienced a material default in connection with retrocession arrangements, nor has it experienced any difficulty in collecting claims recoverable from retrocessionaires; however, no assurance can be given as to the future performance of such retrocessionaires nor to the recoverability of future claims. The Company’s management believes its cash and cash equivalents along with its current sources of liquidity are adequate to meet its cash requirements for the next 12 months.

Summary of Primary Sources and Uses of Liquidity and Capital

The Company's primary sources and uses of liquidity and capital are summarized as follows (dollars in millions):

	For the six months ended June 30,	
	2023	2022
Sources:		
Net cash provided by operating activities	$ 1,818	$ 242
Proceeds from long-term debt issuance	900	—
Change in cash collateral for derivative positions and other arrangements	—	143
Change in deposit asset on reinsurance	24	—
Net deposits to investment-type policies and contracts	—	2,641
Net change in noncontrolling interest	—	89
Total sources	2,742	3,115
Uses:		
Net cash used in investing activities	2,488	3,211
Dividends to shareholders	107	98
Repayment of collateral finance and securitization notes	—	29
Debt issuance costs	10	—
Principal payments of long-term debt	2	2
Purchases of treasury stock	119	27
Change in cash collateral for derivative positions and other arrangements	24	—
Change in deposit asset on reinsurance	—	32
Net withdrawals from investment-type policies and contracts	294	—
Effect of exchange rate changes on cash	27	108
Total uses	3,071	3,507
Net change in cash and cash equivalents	$ (329)	$ (392)

Cash Flows from Operations – The principal cash inflows from the Company's reinsurance activities come from premiums, investment and fee income, annuity considerations and deposit funds. The principal cash outflows relate to the liabilities associated with various life and health insurance, annuity and disability products, operating expenses, income tax payments and interest on outstanding debt obligations. The primary liquidity concern with respect to these cash flows is the risk of shortfalls in premiums and investment income, particularly in periods with abnormally high claims levels.

Cash Flows from Investments – The principal cash inflows from the Company's investment activities come from repayments of principal on invested assets, proceeds from maturities of invested assets, sales of invested assets and settlements of freestanding derivatives. The principal cash outflows relate to purchases of investments, issuances of policy loans and settlements of freestanding derivatives. The Company typically has a net cash outflow from investing activities because cash inflows from insurance operations are reinvested in accordance with its asset/liability management discipline to fund insurance liabilities. The Company closely monitors and manages these risks through its credit risk management process. The primary liquidity concerns with respect to these cash flows are the risk of default by debtors and market disruption, which could make it difficult for the Company to sell investments.

Financing Cash Flows – The principal cash inflows from the Company's financing activities come from issuances of RGA debt and equity securities, and deposit funds associated with universal life and other investment type policies and contracts. The principal cash outflows come from repayments of debt, payments of dividends to shareholders, purchases of treasury stock, and withdrawals associated with universal life and other investment type policies and contracts. A primary liquidity concern with respect to these cash flows is the risk of early contractholder and policyholder withdrawal.

Contractual Obligations

There were no material changes in the Company's contractual obligations from those reported in the 2022 Annual Report.

Asset / Liability Management

The Company actively manages its cash and invested assets using an approach that is intended to balance quality, diversification, asset/liability matching, liquidity and investment return. The goals of the investment process are to optimize after-tax, risk-adjusted investment income and after-tax, risk-adjusted total return while managing the assets and liabilities on a cash flow and duration basis.

The Company has established target asset portfolios for its operating segments, which represent the investment strategies intended to profitably fund its liabilities within acceptable risk parameters. These strategies include objectives and limits for effective duration, yield curve sensitivity and convexity, liquidity, asset sector concentration and credit quality.

The Company's asset-intensive products are primarily supported by investments in fixed maturity securities reflected on the Company's balance sheet and under funds withheld arrangements with the ceding company. Investment guidelines are established to structure the investment portfolio based upon the type, duration and behavior of products in the liability portfolio so as to achieve targeted levels of profitability. The Company manages the asset-intensive business to provide a targeted spread between the interest rate earned on investments and the interest rate credited to the underlying interest-sensitive contract liabilities. The Company periodically reviews models projecting different interest rate scenarios and their effect on profitability. Certain of these asset-intensive agreements, primarily in the U.S. and Latin America Financial Solutions operating segment, are generally funded by fixed maturity securities that are withheld by the ceding company.

The Company's liquidity position (cash and cash equivalents and short term investments) was $2.8 billion and $3.1 billion at June 30, 2023 and December 31, 2022, respectively. Liquidity needs are determined from valuation analyses conducted by operational units and are driven by product portfolios. Periodic evaluations of demand liabilities and short-term liquid assets are designed to adjust specific portfolios, as well as their durations and maturities, in response to anticipated liquidity needs.

See "Securities Borrowing, Lending and Repurchase/Reverse Repurchase Agreements" in Note 11 – "Investments" in the Notes to Condensed Consolidated Financial Statements for information related to the Company's securities borrowing, lending and repurchase/reverse repurchase programs. In addition to its security agreements with third parties, certain RGA's subsidiaries have entered into intercompany securities lending agreements to more efficiently source securities for lending to third parties and to provide for more efficient regulatory capital management.

The Company is a member of the FHLB and holds $65 million of FHLB common stock, which is included in other invested assets on the Company's condensed consolidated balance sheets. The Company has entered into funding agreements with the FHLB under guaranteed investment contracts whereby the Company has issued the funding agreements in exchange for cash and for which the FHLB has been granted a blanket lien on the Company's commercial and residential mortgage-backed securities and commercial mortgage loans used to collateralize the Company's obligations under the funding agreements. The Company maintains control over these pledged assets, and may use, commingle, encumber or dispose of any portion of the collateral as long as there is no event of default and the remaining qualified collateral is sufficient to satisfy the collateral maintenance level. The funding agreements and the related security agreements represented by this blanket lien provide that upon any event of default by the Company, the FHLB's recovery is limited to the amount of the Company's liability under the outstanding funding agreements. The amount of the Company's liability for the funding agreements with the FHLB was $1.3 billion at June 30, 2023 and December 31, 2022, which is included in interest-sensitive contract liabilities on the Company's condensed consolidated balance sheets. The advances on these agreements are collateralized primarily by commercial and residential mortgage-backed securities, commercial mortgage loans, and U.S. Treasury and government agency securities. The amount of collateral exceeds the liability and is dependent on the type of assets collateralizing the guaranteed investment contracts.

Investments

Management of Investments

The Company's investment and derivative strategies involve matching the characteristics of its reinsurance products and other obligations. The Company seeks to closely approximate the interest rate sensitivity of the assets with estimated interest rate sensitivity of the reinsurance liabilities. The Company achieves its income objectives through strategic and tactical asset allocations, applying security and derivative strategies within asset/liability and disciplined risk management frameworks. Derivative strategies are employed within the Company's risk management framework to help manage duration, currency, and other risks in assets and/or liabilities and to replicate the credit characteristics of certain assets.

The Company's portfolio management groups work with the Enterprise Risk Management function to develop the investment policies for the assets of the Company's domestic and international investment portfolios. All investments held by the Company, directly or in a funds withheld at interest reinsurance arrangement, are monitored for conformance with the Company's stated investment policy limits as well as any limits prescribed by the applicable jurisdiction's insurance laws and regulations. See Note 11 – "Investments" in the Notes to Condensed Consolidated Financial Statements for additional information regarding the Company's investments.

Portfolio Composition

The Company had total cash and invested assets of $76.9 billion and $73.4 billion as of June 30, 2023 and December 31, 2022, respectively, as illustrated below (dollars in millions):

	June 30, 2023	% of Total	December 31, 2022	% of Total
Fixed maturity securities available-for-sale	$ 56,236	73.0 %	$ 52,901	72.0 %
Equity securities	136	0.2	134	0.2
Mortgage loans	7,038	9.2	6,590	9.0
Policy loans	1,202	1.6	1,231	1.7
Funds withheld at interest	5,862	7.6	6,003	8.2
Limited partnerships and real estate joint ventures	2,473	3.2	2,327	3.2
Short-term investments	224	0.3	154	0.2
Other invested assets	1,119	1.5	1,140	1.5
Cash and cash equivalents	2,598	3.4	2,927	4.0
Total cash and invested assets	$ 76,888	100.0 %	$ 73,407	100.0 %

Investment Yield

The following table presents consolidated average invested assets at amortized cost, net investment income, investment yield, variable investment income ("VII"), and investment yield excluding VII, which can vary significantly from period to period (dollars in millions). The table excludes spread related business. Spread related business is primarily associated with contracts on which the Company earns an interest rate spread between assets and liabilities. To varying degrees, fluctuations in the yield on other spread related business is generally subject to corresponding adjustments to the interest credited on the liabilities.

	Three months ended June 30,			Six months ended June 30,		
	2023	2022	Increase/ (Decrease)	2023	2022	Increase/ (Decrease)
Average invested assets at amortized cost	$ 36,124	$ 34,859	$ 1,265	$ 35,792	$ 34,852	$ 940
Net investment income	$ 393	$ 397	$ (4)	$ 808	$ 854	$ (46)
Annualized investment yield (ratio of net investment income to average invested assets at amortized cost)	4.42 %	4.63 %	(21) bps	4.56 %	4.96 %	(40) bps
VII (included in net investment income)	$ 17	$ 70	$ (53)	$ 56	$ 211	$ (155)
Annualized investment yield excluding VII (ratio of net investment income, excluding VII, to average invested assets, excluding assets with only VII, at amortized cost)	4.43 %	3.96 %	47 bps	4.44 %	3.88 %	56 bps

Investment yield decreased for the three and six months ended June 30, 2023, in comparison to the same periods in the prior year, primarily due to decreased variable income from limited partnerships and real estate joint ventures, partially offset by increased yield from the recent increase in interest rates.

Fixed Maturity Securities Available-for-Sale

See "Fixed Maturity Securities Available-for-Sale" in Note 11 – "Investments" in the Notes to Condensed Consolidated Financial Statements for tables that provide the amortized cost, allowance for credit losses, unrealized gains and losses and estimated fair value of these securities by type as of June 30, 2023 and December 31, 2022.

Important factors in the selection of investments include diversification, quality, yield, call protection and total rate of return potential. The relative importance of these factors is determined by market conditions and the underlying reinsurance liability and existing portfolio characteristics. As of both June 30, 2023 and December 31, 2022, approximately 94.3% of the Company's consolidated investment portfolio of fixed maturity securities were investment grade.

The Company owns floating rate securities that represent approximately 7.6% and 7.4% of the total fixed maturity securities as of June 30, 2023 and December 31, 2022, respectively. These investments have a higher degree of income variability than the other fixed income holdings in the portfolio due to fluctuations in interest payments. The Company holds floating rate investments to match specific floating rate liabilities primarily reflected in the condensed consolidated balance sheets as collateral finance notes, as well as to enhance asset management strategies.

The largest asset class in which fixed maturity securities were invested was corporate securities, which represented approximately 64.3% and 64.2% of total fixed maturity securities as of June 30, 2023 and December 31, 2022, respectively. See "Corporate Fixed Maturity Securities" in Note 11 – "Investments" in the Notes to Condensed Consolidated Financial Statements for tables showing the major sector types, which comprise the corporate fixed maturity holdings as of June 30, 2023 and December 31, 2022.

As of June 30, 2023 and December 31, 2022, the Company's investments in Canadian government securities represented 6.7% and 6.9%, respectively, of the fair value of total fixed maturity securities. These assets are primarily high quality, long duration provincial strip bonds, the valuation of which is closely linked to the interest rate curve. These assets are longer in duration and held primarily for asset/liability management to meet Canadian regulatory requirements.

As of June 30, 2023 and December 31, 2022, the Company's investments in Japanese government securities represented 5.4% and 4.8%, respectively, of the fair value of total fixed maturity securities. These assets are primarily long duration government bonds matching the liability profile of the Company's Japanese business.

The Company references rating agency designations in some of its investments disclosures. These designations are based on the ratings from nationally recognized statistical rating organizations, primarily Moody's, S&P and Fitch. Structured securities held by the Company's insurance subsidiaries that maintain the NAIC statutory basis of accounting utilize the NAIC rating methodology. The NAIC assigns designations to publicly traded as well as privately placed securities. The designations assigned by the NAIC range from class 1 to class 6, with designations in classes 1 and 2 generally considered investment grade (BBB or higher rating agency designation). NAIC designations in classes 3 through 6 are generally considered below investment grade (BB or lower rating agency designation). If no rating is available from a rating agency or the NAIC, then an internally developed rating is used.

The quality of the Company's available-for-sale fixed maturity securities portfolio, as measured at fair value and by the percentage of fixed maturity securities invested in various ratings categories, relative to the entire available-for-sale fixed maturity securities portfolio, as of June 30, 2023 and December 31, 2022 was as follows (dollars in millions):

		June 30, 2023			December 31, 2022		
NAIC Designation	Rating Agency Designation	Amortized Cost	Estimated Fair Value	% of Total	Amortized Cost	Estimated Fair Value	% of Total
1	AAA/AA/A	$ 38,928	$ 35,512	63.1 %	$ 36,217	$ 32,295	61.1 %
2	BBB	19,840	17,517	31.2	20,188	17,580	33.2
3	BB	2,919	2,801	5.0	2,734	2,607	5.0
4	B	347	328	0.6	397	331	0.6
5	CCC and lower	99	69	0.1	103	71	0.1
6	In or near default	52	9	—	24	17	—
	Total	$ 62,185	$ 56,236	100.0 %	$ 59,663	$ 52,901	100.0 %

The Company's fixed maturity portfolio includes structured securities. The following table shows the types of structured securities the Company held as of June 30, 2023 and December 31, 2022 (dollars in millions):

	June 30, 2023			December 31, 2022		
	Amortized Cost	Estimated Fair Value	% of Total	Amortized Cost	Estimated Fair Value	% of Total
ABS:						
Collateralized loan obligations ("CLOs")	$ 1,936	$ 1,857	26.9 %	$ 1,825	$ 1,702	26.4 %
ABS, excluding CLOs	2,574	2,308	33.5	2,499	2,176	33.8
Total ABS	4,510	4,165	60.4	4,324	3,878	60.2
CMBS	1,932	1,699	24.6	1,835	1,623	25.2
RMBS:						
Agency	464	413	6.0	476	427	6.6
Non-agency	681	624	9.0	578	514	8.0
Total RMBS	1,145	1,037	15.0	1,054	941	14.6
Total	$ 7,587	$ 6,901	100.0 %	$ 7,213	$ 6,442	100.0 %

The Company's ABS portfolio primarily consists of CLOs, aircraft and single-family rentals. The principal risks in holding ABS are structural, credit, capital market and interest rate risks. Structural risks include the securities' cash flow priority in the capital structure and the inherent prepayment sensitivity of the underlying collateral. Credit risks include the adequacy and ability to realize proceeds from the collateral. Credit risks are mitigated by credit enhancements that include excess spread, over-collateralization and subordination. Capital market risks include general level of interest rates and the liquidity for these securities in the marketplace.

The Company's CMBS portfolio primarily consists of large pool securitizations that are diverse by property type, borrower and geographic dispersion. The principal risks in holding CMBS are structural and credit risks. Structural risks include the securities' cash flow priority in the capital structure and the inherent prepayment sensitivity of the underlying collateral. Credit risks include the adequacy and ability to realize proceeds from the collateral. The Company focuses on investment grade rated tranches that provide additional credit support beyond the equity protection in the underlying loans. These assets are viewed as an attractive alternative to other fixed income asset classes.

The Company's RMBS portfolio includes agency-issued pass-through securities and collateralized mortgage obligations. Agency-issued pass-through securities are guaranteed or otherwise supported by the Federal Home Loan Mortgage Corporation, Federal National Mortgage Association, or the Government National Mortgage Association. The principal risks inherent in holding RMBS are prepayment and extension risks, which will affect the timing of when cash will be received and are dependent on the level of mortgage interest rates. Prepayment risk is the unexpected increase in principal payments from the expected, primarily as a result of owner refinancing. Extension risk relates to the unexpected slowdown in principal payments from the expected. In addition, non-agency RMBS face credit risk should the borrower be unable to pay the contractual interest or principal on their obligation. The Company monitors its mortgage-backed securities to mitigate exposure to the cash flow uncertainties associated with these risks.

As of June 30, 2023 and December 31, 2022, the Company had $6,602 million and $7,319 million, respectively, of gross unrealized losses related to its fixed maturity securities. The Company monitors its fixed maturity securities to determine impairments in value and evaluates factors such as financial condition of the issuer, payment performance, compliance with covenants, general market and industry sector conditions, current intent and ability to hold securities, and various other subjective factors. Based on management's judgment, an allowance for credit losses in the amount that fair value is less than the amortized cost is recorded for securities determined to have expected credit losses.

Mortgage Loans

The Company's mortgage loan portfolio consists of U.S., Canada and UK based investments primarily in commercial offices, light industrial properties and retail locations. The mortgage loan portfolio is diversified by geographic region and property type as discussed further under "Mortgage Loans" in Note 11 – "Investments" in the Notes to Condensed Consolidated Financial Statements. Most of the mortgage loans in the Company's portfolio range in size up to $30 million, with the average mortgage loan investment as of June 30, 2023, totaling approximately $10 million.

As of June 30, 2023 and December 31, 2022, the Company's recorded investment in mortgage loans, gross of unamortized deferred loan origination fees and expenses and allowance for credit losses, were distributed geographically as follows (dollars in millions):

	June 30, 2023		December 31, 2022	
	Recorded Investment	% of Total	Recorded Investment	% of Total
U.S. Region:				
West	$ 2,674	37.6 %	$ 2,420	36.4 %
South	2,337	32.9	2,215	33.3
Midwest	1,162	16.3	1,147	17.2
Northeast	488	6.9	474	7.1
Subtotal - U.S.	6,661	93.7	6,256	94.0
Canada	282	4.0	239	3.6
United Kingdom	166	2.3	158	2.4
Total	$ 7,109	100.0 %	$ 6,653	100.0 %

See "Allowance for Credit Losses and Impairments" in Note 2 – "Significant Accounting Policies and Pronouncements" of the Company's 2022 Annual Report and "Mortgage Loans" in Note 11 – "Investments" in the Notes to Condensed Consolidated Financial Statements for information regarding the Company's policy for allowance for credit losses on mortgage loans.

Allowance for Credit Losses and Impairments

The Company's determination of whether a decline in value necessitates the recording of an allowance for credit losses includes an analysis of whether the issuer is current on its contractual payments, evaluating whether it is probable that the Company will be able to collect all amounts due according to the contractual terms of the security and analyzing the overall ability of the Company to recover the amortized cost of the investment. See "Allowance for Credit Losses and Impairments" in Note 2 – "Significant Accounting Policies and Pronouncements" of the Company's 2022 Annual Report for additional information. The table below summarizes investment related gains (losses), net related to allowances for credit losses and impairments for the three and six months ended June 30, 2023 and 2022 (dollars in millions).

	Three months ended June 30,		Six months ended June 30,	
	2023	2022	2023	2022
Change in allowance for credit losses on fixed maturity securities	$ 4	$ (13)	$ (38)	$ (24)
Impairments on fixed maturity securities	—	(2)	(1)	(3)
Change in mortgage loan allowance for credit losses	(9)	(1)	(6)	(3)
Investment related gains (losses) related to credit losses and impairments	$ (5)	$ (16)	$ (45)	$ (30)

The change in allowance for credit losses on fixed maturity securities for the three months ended June 30, 2023, was primarily related to reversals on securities that were disposed of. The change in allowance for credit losses on fixed maturity securities for the six months ended June 30, 2023, was primarily related to the March 2023 banking crisis. The change in allowance for credit losses on fixed maturity securities for the three and six months ended June 30, 2022, was primarily related to high-yield securities. The increase in mortgage loan allowance for credit losses for the three and six months ended June 30, 2023, was primarily due to growth in the asset base and updated model assumptions that take into account economic factors.

See “Unrealized Losses for Fixed Maturity Securities Available-for-Sale” in Note 11 – “Investments” in the Notes to Condensed Consolidated Financial Statements for tables that present the estimated fair value and gross unrealized losses for securities that have estimated fair values below amortized cost by class and grade, as well as the length of time the related estimated fair value has remained below amortized cost as of June 30, 2023 and December 31, 2022.

As of June 30, 2023 and December 31, 2022, the Company classified approximately 10.9% and 10.8%, respectively, of its fixed maturity securities in the Level 3 category (refer to Note 13 – “Fair Value of Assets and Liabilities” in the Notes to Condensed Consolidated Financial Statements for additional information). These securities primarily consist of private placement corporate and asset-backed securities.

See “Securities Borrowing, Lending and Repurchase/Reverse Repurchase Agreements” in Note 11 – “Investments” in the Notes to Condensed Consolidated Financial Statements for information related to the Company’s securities borrowing, lending and repurchase/reverse repurchase agreements.

Funds Withheld at Interest

For reinsurance agreements written on a modified coinsurance basis and certain agreements written on a coinsurance basis, assets equal to the net statutory reserves are withheld and legally owned and managed by the ceding company and are reflected as funds withheld at interest on the Company’s condensed consolidated balance sheets. In the event of a ceding company’s insolvency, the Company would need to assert a claim on the assets supporting its reserve liabilities. However, the risk of loss to the Company is mitigated by its ability to offset amounts it owes the ceding company for claims or allowances against amounts owed by the ceding company. Interest accrues to the total funds withheld at interest assets at rates defined by the treaty terms. The Company is subject to the investment performance on the withheld assets, although it does not directly control them. These assets are primarily fixed maturity investment securities and pose risks similar to the fixed maturity securities the Company owns. To mitigate this risk, the Company helps set the investment guidelines followed by the ceding company and monitors compliance. Ceding companies with funds withheld at interest had an average financial strength rating of “A” as of June 30, 2023 and December 31, 2022. Certain ceding companies maintain segregated portfolios for the benefit of the Company.

Other Invested Assets

Other invested assets include lifetime mortgages, derivative contracts, FHLB common stock, unit-linked investments, and real estate held for investment. See “Other Invested Assets” in Note 11 – “Investments” in the Notes to Condensed Consolidated Financial Statements for a table that presents the carrying value of the Company’s other invested assets by type as of June 30, 2023 and December 31, 2022.

The Company utilizes derivative financial instruments to protect the Company against possible changes in the fair value of its investment portfolio as a result of interest rate changes, to hedge against risk of changes in the purchase price of securities, to hedge liabilities associated with the reinsurance of variable annuities with guaranteed living benefits and to manage the portfolio’s effective yield, maturity and duration. In addition, the Company utilizes derivative financial instruments to reduce the risk associated with fluctuations in foreign currency exchange rates. The Company uses exchange-traded, centrally cleared, and customized over-the-counter derivative financial instruments.

See Note 12 – “Derivative Instruments” in the Notes to Condensed Consolidated Financial Statements for a table that presents the notional amounts and fair value of investment related derivative instruments held as of June 30, 2023 and December 31, 2022.

The Company may be exposed to credit-related losses in the event of non-performance by counterparties to derivative financial instruments. Generally, the credit exposure of the Company’s derivative contracts is limited to the fair value and accrued interest of non-collateralized derivative contracts in an asset position at the reporting date. As of June 30, 2023, the Company had credit exposure of $14 million.

The Company manages its credit risk related to over-the-counter derivatives by entering into transactions with creditworthy counterparties, maintaining collateral arrangements and through the use of master agreements that provide for a single net payment to be made by one counterparty to another at each due date and upon termination. As exchange-traded futures are affected through regulated exchanges, and positions are marked to market on a daily basis, the Company has minimal exposure to credit-related losses in the event of nonperformance by counterparties. See Note 12 – “Derivative Instruments” in the Notes to Condensed Consolidated Financial Statements for more information regarding the Company’s derivative instruments.

The Company holds $930 million and $868 million of beneficial interest in lifetime mortgages in the UK, net of allowance for credit losses, as of June 30, 2023 and December 31, 2022, respectively. Investment income includes $8 million and $9 million in interest income earned on lifetime mortgages for the three months ended June 30, 2023 and 2022, respectively, and $18 million and $19 million in interest income earned on lifetime mortgages for the six months ended June 30, 2023 and 2022, respectively. Lifetime mortgages represent loans provided to individuals 55 years of age and older secured by the borrower’s residence. Lifetime mortgages are comparable to a home equity loan by allowing the borrower to utilize the equity in their home as collateral. The amount of the loan is dependent on the appraised value of the home at the time of origination, the borrower's age and interest rate. Unlike a home equity loan, no payment of principal or interest is required until the death of the borrower or sale of the home. Lifetime mortgages may also be either fully funded at origination, or the borrower can request periodic funding similar to a line of credit. Lifetime mortgages are subject to risks, including market, credit, interest rate, liquidity, operational, reputational and legal risks.

New Accounting Standards

Changes to the general accounting principles are established by the Financial Accounting Standards Board (“FASB”) in the form of accounting standards updates to the FASB Accounting Standards Codification™.

See Note 2 – “Impact of Adoption of New Accounting Standard” in the Notes to Condensed Consolidated Financial Statements for information on the Company’s adoption of ASU 2018-12 on January 1, 2023. See Note 19 – “New Accounting Standards Not Yet Adopted” in the Notes to Condensed Consolidated Financial Statements for information on new accounting pronouncements and their impact, if any, on the Company’s results of operations and financial position.

ITEM 3. Quantitative and Qualitative Disclosures About Market Risk

Market risk is the risk of fluctuations in the value of financial instruments as a result of absolute or relative changes in interest rates, foreign currency exchange rates, equity prices or commodity prices. To varying degrees, the Company products and services, and the investment activities supporting them, generate exposure to market risk. The market risk incurred, and the Company’s strategies for managing this risk, vary by product. As of June 30, 2023, there have been no material changes in the Company’s economic exposure to market risk or the Company’s Enterprise Risk Management function from December 31, 2022, a description of which may be found in its Annual Report on Form 10-K, for the year ended December 31, 2022, Item 7A, “Quantitative and Qualitative Disclosures about Market Risk,” filed with the Securities and Exchange Commission.

ITEM 4. Controls and Procedures

The Chief Executive Officer and the Chief Financial Officer have evaluated the effectiveness of the design and operation of the Company’s disclosure controls and procedures as defined in Exchange Act Rule 13a-15(e) as of the end of the period covered by this report. Based on that evaluation, the Chief Executive Officer and the Chief Financial Officer concluded that these disclosure controls and procedures were effective.

There was no change in the Company’s internal control over financial reporting as defined in Exchange Act Rule 13a-15(f) during the quarter ended June 30, 2023, that has materially affected, or is reasonably likely to materially affect, the Company’s internal control over financial reporting.

PART II - OTHER INFORMATION

ITEM 1. Legal Proceedings

The Company is subject to litigation and regulatory investigations or actions from time to time. Based on current knowledge, management does not believe that loss contingencies arising from pending legal, regulatory and governmental matters will have a material adverse effect on the financial condition, results of operations or cash flows of the Company. However, in light of the inherent uncertainties involved in future or pending legal, regulatory and governmental matters, some of which are beyond the Company's control, and indeterminate or potentially substantial amount of damages sought in any such matters, an adverse outcome could be material to the Company's financial condition, results of operations or cash flows for any particular reporting period. A legal reserve is established when the Company is notified of an arbitration demand, litigation or regulatory action or is notified that an arbitration demand, litigation or regulatory action is imminent, it is probable that the Company will incur a loss as a result and the amount of the probable loss is reasonably capable of being estimated.

ITEM 1A. Risk Factors

There have been no material changes from the risk factors previously disclosed in the Company's 2022 Annual Report.

ITEM 2. Unregistered Sales of Equity Securities and Use of Proceeds

Issuer Purchases of Equity Securities

The following table summarizes RGA's repurchase activity of its common stock during the quarter ended June 30, 2023:

	Total Number of Shares Purchased [(1)]	Average Price Paid per Share	Total Number of Shares Purchased as Part of Publicly Announced Plans or Programs [(1)]	Maximum Number (or Approximate Dollar Value) of Shares that May Yet Be Purchased Under the Plan or Program
April 1, 2023 – April 30, 2023	752	$ 138.27	—	$ 300,003,480
May 1, 2023 – May 31, 2023	12,106	$ 148.73	—	$ 300,003,480
June 1, 2023 – June 30, 2023	352,064	$ 142.28	351,431	$ 250,003,610

(1) RGA repurchased 351,431 shares of common stock under its share repurchase program in June 2023. The Company net settled – issuing 2,455, 25,141 and 2,227 shares from treasury and repurchasing from recipients 752, 12,106 and 633 shares in April, May and June 2023, respectively, in settlement of income tax withholding requirements incurred by the recipients of equity incentive awards.

On February 25, 2022, RGA's board of directors authorized a share repurchase program for up to $400 million of RGA's outstanding common stock. The authorization was effective immediately and does not have an expiration date. In connection with this authorization, the board of directors terminated the stock repurchase authority granted in 2019. During the six months ended June 30, 2023, RGA repurchased 722,774 shares of common stock under this program for $100 million.

The pace of repurchase activity depends on various factors such as the level of available cash, an evaluation of the costs and benefits associated with alternative uses of excess capital, such as acquisitions and in force reinsurance transactions, and RGA's stock price.

ITEM 5. Other Information

During the three months ended June 30, 2023, (i) none of our directors or executive officers adopted or terminated any contract, instruction or written plan for the purchase or sale of Company securities intended to satisfy the affirmative defense conditions of Rule 10b5-1(c) (a "Rule 10b-5 Trading Arrangement") or any "non-Rule 10b5-1 trading arrangement" and (ii) the Company did not adopt or terminate any Rule 10b-5 Trading Arrangement.

ITEM 6. Exhibits

See index to exhibits.

INDEX TO EXHIBITS

Exhibit Number	Description
3.1	Amended and Restated Articles of Incorporation, effective May 21, 2020, incorporated by reference to Exhibit 3.1(i) to Current Report on Form 8-K filed May 22, 2020
3.2	Amended and Restated Bylaws, effective December 20, 2022, incorporated by reference to Exhibit 3.1 to Current Report on Form 8-K filed December 20, 2022
10.1	Letter Agreement, dated June 23, 2023, between RGA Enterprise Services Company and Tony Cheng, incorporated by reference to Exhibit 10.1 to Current Report on Form 8-K filed June 23, 2023*
31.1	Certification of Chief Executive Officer pursuant to 18 U.S.C. Section 1350, as adopted pursuant to section 302 of the Sarbanes-Oxley Act of 2002
31.2	Certification of Chief Financial Officer pursuant to 18 U.S.C. Section 1350, as adopted pursuant to section 302 of the Sarbanes-Oxley Act of 2002
32.1	Certification of Chief Executive Officer pursuant to 18 U.S.C. Section 1350, as adopted pursuant to section 906 of the Sarbanes-Oxley Act of 2002
32.2	Certification of Chief Financial Officer pursuant to 18 U.S.C. Section 1350, as adopted pursuant to section 906 of the Sarbanes-Oxley Act of 2002
101.INS	XBRL Instance Document - the instance document does not appear in the Interactive Data File because its XBRL tags are embedded within the Inline XBRL document
101.SCH	XBRL Taxonomy Extension Schema Document
101.CAL	XBRL Taxonomy Extension Calculation Linkbase Document
101.LAB	XBRL Taxonomy Extension Label Linkbase Document
101.PRE	XBRL Taxonomy Extension Presentation Linkbase Document
101.DEF	XBRL Taxonomy Extension Definition Linkbase Document
104	Cover Page Interactive Data File (formatted as Inline XBRL and contained in Exhibits 101).

* Represents a management contract or compensatory plan or arrangement

GLOSSARY OF SELECTED TERMS

Throughout this quarterly report on Form 10-Q, the Company may use certain abbreviations, acronyms and terms which are defined below.

Entities

Term or Acronym	Definition
RGA Reinsurance	RGA Reinsurance Company
Parkway Re	Parkway Reinsurance Company
Rockwood Re	Rockwood Reinsurance Company
Castlewood Re	Castlewood Reinsurance Company
Chesterfield Re	Chesterfield Reinsurance Company
Chesterfield Financial	Chesterfield Financial Holdings LLC
RGA Life and Annuity	RGA Life and Annuity Insurance Company
Timberlake Re	Timberlake Reinsurance Company II
Timberlake Financial	Timberlake Financial L.L.C.
RGA Canada	RGA Life Reinsurance Company of Canada
RGA Barbados	RGA Reinsurance Company (Barbados) Ltd.
RGA Americas	RGA Americas Reinsurance Company, Ltd.
Manor Re	Manor Reinsurance, Ltd.
RGA Atlantic	RGA Atlantic Reinsurance Company Ltd.
RGA Worldwide	RGA Worldwide Reinsurance Company, Ltd.
RGA Global	RGA Global Reinsurance Company, Ltd.
RGA Australia	RGA Reinsurance Company of Australia Limited
RGA International	RGA International Reinsurance Company dac
RGA South Africa	RGA Reinsurance Company of South Africa, Limited
Aurora National	Aurora National Life Assurance Company
Omnilife	Omnilife Insurance Company, Limited
Papara	Papara Financing LLC

Certain Terms and Acronyms

Term or Acronym	Definition
A.M. Best	A.M. Best Company
ABS	Asset-backed securities
Actuary	A specialist in the mathematics of risk, especially as it relates to insurance calculations such as premiums, reserves, dividends, insurance rates and annuity rates.
Allowance	An amount paid by the reinsurer to the ceding company to help cover the ceding company's acquisition and other costs, especially commissions. Allowances are usually calculated as a large percentage (often 100%) of first-year premiums reinsured and smaller percentages of renewal premiums reinsured.
AOCI	Accumulated other comprehensive income (loss)
Asset-Intensive Reinsurance	A transaction (usually coinsurance or funds withheld and often involving reinsurance of annuities) where performance of the underlying assets, more so than any mortality risk, is a key element.
Assumed reinsurance	Insurance risk that a reinsurer accepts (assumes) from a ceding company.
ASU	Accounting Standards Update
ASU 2018-12	Accounting Standards Update *Financial Services – Insurance (Topic 944): Targeted Improvements to the Accounting for Long-Duration Contracts*
Automatic Reinsurance	Reinsurance arrangement whereby the ceding company and reinsurer agree that all business of a certain description will be ceded to the reinsurer. Under this arrangement, the ceding company performs underwriting decision-making within agreed-upon parameters for all business reinsured.
Bermuda Insurance Act	Bermuda's Insurance Act 1978 which distinguishes between insurers carrying on long-term business, insurers carrying on special purpose business and insurers carrying on general business.
BMA	Bermuda Monetary Authority
BSCR	Bermuda Solvency Capital Requirement
CCPA	California Consumer Privacy Act of 2018
Capital-motivated reinsurance	Reinsurance, including financial reinsurance, whose primary purpose is to enhance the cedant's capital position.
Captive insurer	An insurance or reinsurance entity designed to provide insurance or reinsurance coverage for risks of the entity or entities by which it is owned or to which it is affiliated.
CECL	Accounting for current expected credit losses using the model based on expected losses rather than incurred losses.
Ceding company (also known as cedant)	An insurer that transfers, or cedes, risk to a reinsurer

CEO	RGA's Chief Executive Officer
Cession	The insurance risk associated with a policy that is reinsured from an insurer to a reinsurer.
CFO	RGA's Chief Financial Officer
CLOs	Collateralized loan obligations
CMBS	Commercial mortgage-backed securities, a part of our investment portfolio that consists of securities made up of commercial mortgages. Stated on our balance sheet at fair value.
Coinsurance (also known as original terms reinsurance)	A form of reinsurance under which the ceding company shares its premiums, death claims, surrender benefits, dividends and policy loans with the reinsurer, and the reinsurer pays expense allowances to reimburse the ceding company for a share of its expenses.
Coinsurance funds-withheld	A variant on coinsurance, in which the ceding company withholds assets equal to reserves and shares investment income on those assets with the reinsurer.
Counterparty	A party to a contract requiring or offering the exchange of risk.
Counterparty risk	The risk that a party to an agreement will be unable to fulfill its contractual obligations
CPI	Consumer price index
Critical illness (CI) insurance (also known as dread disease insurance)	Insurance that provides a guaranteed fixed sum upon diagnosis of a specified illness or condition such as cancer, heart disease, or permanent total disability. The coverage can be offered on a stand-alone basis or as an add-on to a life insurance policy.
CRO	RGA's Chief Risk Officer
CVA	Credit valuation adjustment
DAC	Deferred policy acquisition costs: Costs of acquiring new business, which vary with and are directly related to the production of new business, have been deferred to the extent that such costs are deemed recoverable from future premiums or gross profits.
"Directors Plan"	Flexible Stock Plan for Directors
EBITDA	Earnings before interest, taxes, depreciation and amortization
EBS	Economic balance sheet framework as part of the Bermuda Solvency Capital Requirement that forms the basis for an insurer's enhanced capital requirements.
ECR	Enhanced capital requirement in accordance with the provisions of the Bermuda Insurance Act.
EEA	European Economic Area
EGP	Estimated gross profits.
EIAs	Equity-Indexed Annuities
EMEA	Europe, Middle East and Africa geographic segment
Enterprise Risk Management (ERM)	An enterprise-wide framework used by a firm to assess all risks facing the organization, manage mitigation strategies, monitor ongoing risks and report to interested audiences.
ESG	Environmental, social, and governance
ESTER	Euro Short-term Rate, an alternative to LIBOR being recommended by the European Central Bank
EU	European Union
Expected mortality	Number of deaths predicted to occur in a defined group of people.
FABN	Funding Agreement Backed Notes
Face amount	Amount payable at the death of the insured or at the maturity of the policy.
Facultative reinsurance	A type of reinsurance in which the reinsurer underwrites an individual risk submitted by the ceding company for a risk that is unusual, large, highly substandard or not covered by an automatic reinsurance treaty. Such risks are typically submitted to multiple reinsurers for competitive offers.
FASB	Financial Accounting Standards Board
FCA	Financial Conduct Authority
FHLB	Federal Home Loan Bank
FIA	Fixed indexed annuities
Financial reinsurance (also known as financially-motivated reinsurance)	A form of capital-motivated reinsurance that satisfies all regulatory requirements for risk transfer and is often designed to produce very predictable reinsurer profits as a percentage of the capital provided.
FSB	Financial Stability Board which consists of representatives of national financial authorities of the G20 nations.
FVO	Fair value option
GAAP	U.S. generally accepted accounting principles
GDPR	General Data Protection Regulation which establishes uniform data privacy laws across the European Union.
GICs	Guaranteed investment contracts
GILTI	Global intangible low-taxed income; a provision of U.S. Tax Reform that generally eliminates U.S. Federal income tax deferral on earnings of foreign subsidiaries.
GMAB	Guaranteed minimum accumulation benefits; a feature of some variable annuities that the Company reinsures
GMDB	Guaranteed minimum death benefits; a feature of some variable annuities that the Company reinsures
GMIB	Guaranteed minimum income benefits; a feature of some variable annuities that the Company reinsures
GMWB	Guaranteed minimum withdrawal benefits; a feature of some variable annuities that the Company reinsures
Group life insurance	Insurance policy under which the lives of a group of people, most commonly employees of a single company, are insured in accordance with the terms of one master contract.
Guaranteed issue life insurance	Insurance products that are guaranteed upon application, regardless of past health conditions.
IAIG	Internationally Active Insurance Group

IAIS	International Association of Insurance Supervisors
IBNR	Incurred but not reported; a liability on claims that are based on historical reporting patterns, but have not yet been reported.
IFRS (International Financial Reporting Standards)	Standards and interpretations adopted by the International Accounting Standards Board (IASB).
Individual life insurance	An insurance policy that insures the life of usually one and sometimes two or more related individuals, rather than a group of people.
In-force sum insured	A measure of insurance in effect at a specific date.
Initial public offering (IPO)	The first sale to the public of shares of common stock issued by a private company. IPOs often are issued by smaller companies seeking the capital to expand, but they also can be used by large mutual or privately owned companies seeking to become publicly traded.
LIBOR	London Interbank Offered Rate
Liquidity position	Combination of the company's cash, cash equivalents, and short-term investments
Longevity product	An insurance product that mitigates longevity risk by providing a stream of income for the duration of the policyholder's life.
Loss ratio	Claims and other policy benefits and Future policy benefits remeasurement (gains) losses as a percentage of net premiums
Market risk benefits	Contracts or contract features that provide protection to the policyholder from capital market risk and expose the Company to other-than-nominal capital market risk and are measured at fair value.
MDCI	Missouri Department of Commerce and Insurance
MMS	Minimum margin of solvency required to be maintained by the Company's Bermuda subsidiaries.
Modco	Modified coinsurance
Modified coinsurance	A variant on coinsurance in which the ceding company retains all the reserves, as well as assets backing reserves, and pays the reinsurer interest on the reinsurer's share of the reserves.
Moody’s	Moody’s Investors Service
Morbidity	A measure of the incidence of sickness or disease within a specific population group.
Mortality experience	Actual number of deaths occurring in a defined group of people.
Mortality risk reinsurance	Reinsurance that focuses primarily on transfer of mortality risk through coinsurance of term products or YRT.
NAIC	National Association of Insurance Commissioners
NAIC SAP	NAIC statutory accounting practices
NAV	Net asset value
NIFO	Net investments in foreign operations
NOL	Net operating loss
Non-traditional reinsurance	Usually synonymous with capital-motivated reinsurance, but includes any reinsurance of non-biometrical risks
Novation	The act of replacing one participating member of a contract with another, with all rights, duties and terms being transferred to the new party upon consent of all parties affected.
NYSE	New York Stock Exchange: the exchange where RGA is traded under the symbol “RGA”
OCI	Other comprehensive income (loss)
OTC	Derivatives that are privately negotiated contracts, which are known as over-the-counter derivatives
OTC Cleared	OTC derivatives that are cleared and settled through central clearing counterparties.
PBR	Principles-based reserves
PCAOB	Public Company Accounting Oversight Board (United States)
PCS	Performance Contingent Shares
Pension Plans	The Company's sponsored or administrated qualified and non-qualified defined benefit pension plans
PRT	Pension Risk Transfer
Portfolio	The totality of risks assumed by an insurer or reinsurer.
Preferred risk coverage	Coverage designed for applicants who represent a better-than-average risk to an insurer.
Premium	Amount paid to insure a risk.
Primary insurance (also known as direct insurance)	Insurance business relating to contracts directly between insurers and policyholders. The insurance company is directly responsible to the policyholder.
Production	New business produced during a specified period.
PSU	Performance Share Units
Quota share (also known as 'first dollar' quota share)	A reinsurance arrangement in which the reinsurer receives a certain percentage of each risk reinsured.
RBC	Risk-Based Capital, which are guidelines promulgated by the NAIC and identify minimum capital requirements based upon business levels and asset mix.
Recapture	The right of the ceding company to cancel reinsurance under certain conditions.
Regulation XXX/Regulation A-XXX	U.S. Valuation of Life Policies Model Regulation implemented beginning in 2002 for various types of life insurance business, significantly increased the level of reserves that U.S. life insurance and life reinsurance companies must hold on their statutory financial statements for various types of life insurance business, primarily certain level premium term life products.

Reinsurance	The transfer of insurance risk from an insurer, referred to as the ceding company, to a reinsurer, in conjunction with the payment of a reinsurance premium. Through reinsurance, a reinsurer 'insures' an insurer.
Reserves	The amount required to be carried as a liability in the financial statement of an insurer or reinsurer to provide for future commitments under outstanding policies and contracts.
Retakaful	A form of reinsurance that is acceptable within Islamic law. See Takaful.
Retention limit	The maximum amount of risk a company will insure on one life.
Retrocession	A transfer of reinsurance risk from a reinsurer to another reinsurer, referred to as the retrocessionaire, in conjunction with the payment of a retrocession premium. Through retrocession, a retrocessionaire reinsures a reinsurer.
Retrocessionaire	A reinsurer that reinsures another reinsurer; see Retrocession.
RMBS	Residential mortgage-backed securities, a part of our investment portfolio that consists of securities made up of residential mortgages. Stated on our balance sheet at fair value.
RMSC	The Company's Risk Management Steering Committee
RSUs	Restricted Stock Units
S&P	Standard & Poor's
SARs	Stock Appreciation Rights
SEC	Securities and Exchange Commission
Securitization	The structuring of financial assets as collateral against which securities can be issued to investors.
Simplified issue life insurance	Insurance products with limited face amounts that require no or minimal underwriting.
SOFR	Secured Overnight Financing Rate, an alternative to LIBOR proposed by the Federal Reserve Board
SPLRC	Special Purpose Life Reinsurance Captives
Statutory capital	The excess of statutory assets over statutory reserves, both of which are calculated in accordance with standards established by insurance regulators.
“Stock Plans”	The RGA flexible stock plan and the Flexible Stock Plan for Directors, collectively
Takaful	A form of insurance that is acceptable within Islamic law, and that is devised upon the principles of mutual advantage and group security.
TDR	Troubled Debt Restructuring
Tele-underwriting	A telephone interview process, during which an applicant's qualifications to be insured are assessed.
The “County”	The County of St. Louis, Missouri
The “Plan”	RGA Flexible Stock Plan
The Board	RGA's board of directors
The CARES Act	The Coronavirus Aid, Relief, and Economic Security Act
The Companies Act	The Bermuda's Companies Act of 1981
The Company	Reinsurance Group of America, Incorporated and its subsidiaries, all of which are wholly owned, collectively
Treaty (also known as a contract)	A reinsurance agreement between a reinsurer and a ceding company. The three most common types of reinsurance treaties are YRT (yearly renewable term), coinsurance and modified coinsurance. The three most common methods of accepting reinsurance are automatic, facultative and facultative-obligatory.
TVaR	Tail Value-at-Risk used for calculated capital requirement for Bermuda subsidiaries.
U.S. Tax Reform	The U.S. Tax Cuts and Jobs Act of 2017
UAE	United Arab Emirates
UK	United Kingdom
UL	Universal life insurance
Underwriting	The process that assesses the risk inherent in an application for insurance prior to acceptance of the policy.
Valuation	The periodic calculation of reserves, the funds that insurance companies are required to hold in order satisfy all future insurance obligations.
Variable life insurance	A form of whole life insurance under which the death benefit and the cash value of the policy fluctuate according to the performance of an investment fund. Most variable life insurance policies guarantee that the death benefit will not fall below a specified minimum.
VII	Variable investment income
VOCRA	Value of customer relationships acquired which represents the present value of the expected future profits associated with the expected future business acquired through existing customers of the acquired company or business.
VODA	Value of distribution agreements which represents the present value of future profits associated with the expected future business derived from distribution agreements.
Webcasts	Presentation of information broadcast over the Internet.
WorkWise	The Company's hybrid approach to flexible work arrangements.
Yearly Renewable Term (YRT)	A type of reinsurance which covers only mortality risk, with each year's premium based on the current amount of risk.

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.

Reinsurance Group of America, Incorporated

Date: August 4, 2023	By:	/s/ Anna Manning Anna Manning Chief Executive Officer (Principal Executive Officer)
Date: August 4, 2023	By:	/s/ Todd C. Larson Todd C. Larson Senior Executive Vice President and Chief Financial Officer (Principal Financial and Accounting Officer)

Exhibit 31.1

CEO CERTIFICATION

I, Anna Manning, certify that:

1. I have reviewed this quarterly report on Form 10-Q of Reinsurance Group of America, Incorporated;

2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;

3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;

4. The registrant's other certifying officer(s) and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:

(a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;

(b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;

(c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and

(d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and

5. The registrant's other certifying officer(s) and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):

(a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and

(b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: August 4, 2023

/s/ Anna Manning
Anna Manning
Chief Executive Officer

Exhibit 31.2

CFO CERTIFICATION

I, Todd C. Larson, certify that:

1. I have reviewed this quarterly report on Form 10-Q of Reinsurance Group of America, Incorporated;

2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;

3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;

4. The registrant's other certifying officer(s) and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:

(a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;

(b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;

(c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and

(d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and

5. The registrant's other certifying officer(s) and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):

(a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and

(b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: August 4, 2023

/s/ Todd C. Larson
Todd C. Larson
Senior Executive Vice President
& Chief Financial Officer

Exhibit 32.1

CERTIFICATION PURSUANT TO 18 U.S.C. SECTION 1350, AS ADOPTED PURSUANT TO SECTION 906 OF THE SARBANES-OXLEY ACT OF 2002

In connection with the Quarterly Report on Form 10-Q of Reinsurance Group of America, Incorporated and subsidiaries, (the “Company”), for the quarterly period ended June 30, 2023, as filed with the Securities and Exchange Commission on the date hereof (the “Report”), Anna Manning, Chief Executive Officer of the Company, certifies, to her best knowledge and belief, pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that:

1. The Report fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934; and
2. The information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

Date: August 4, 2023

/s/ Anna Manning
Anna Manning
Chief Executive Officer

Exhibit 32.2

CERTIFICATION PURSUANT TO 18 U.S.C. SECTION 1350, AS ADOPTED PURSUANT TO SECTION 906 OF THE SARBANES-OXLEY ACT OF 2002

In connection with the Quarterly Report on Form 10-Q of Reinsurance Group of America, Incorporated and subsidiaries, (the "Company"), for the quarterly period ended June 30, 2023, as filed with the Securities and Exchange Commission on the date hereof (the "Report"), Todd C. Larson, Chief Financial Officer of the Company, certifies, to his best knowledge and belief, pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that:

1. The Report fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934; and

2. The information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

Date: August 4, 2023

/s/ Todd C. Larson
Todd C. Larson
Chief Financial Officer
& Senior Executive Vice President