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

FORM 10-Q

(Mark One)

☒ Quarterly Report Pursuant to Section 13 or 15(d) of the Securities Exchange Act of 1934
For the quarterly period ended March 31, 2023

☐ Transition Report Pursuant to Section 13 or 15(d) of the Securities Exchange Act of 1934
For the transition period from to

Commission file number 001-11294

Unum Group

(Exact name of registrant as specified in its charter)

Delaware	**62-1598430**
(State or other jurisdiction of incorporation or organization)	(I.R.S. Employer Identification No.)
1 Fountain Square **Chattanooga, Tennessee**	**37402**
(Address of principal executive offices)	(Zip Code)

(423) 294-1011
(Registrant's telephone number, including area code)

Not Applicable
(Former name, former address and former fiscal year, if changed since last report)

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, $0.10 par value	UNM	New York Stock Exchange
6.250% Junior Subordinated Notes due 2058	UNMA	New York Stock Exchange

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 [ ]

Indicate by check mark whether the registrant has submitted electronically every Interactive Data File required to be submitted pursuant to Rule 405 of Regulation S-T (§232.405 of this chapter) during the preceding 12 months (or for such shorter period that the registrant was required to submit such files). Yes [X] No [ ]

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.

(Check one):

Large Accelerated Filer	☒	Accelerated filer	☐
Non-accelerated filer	☐	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 ☒

197,068,690 shares of the registrant's common stock were outstanding as of May 1, 2023.

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Cautionary Statement Regarding Forward-Looking Statements

The Private Securities Litigation Reform Act of 1995 (the Act) provides a "safe harbor" to encourage companies to provide prospective information, as long as those statements are identified as forward-looking and are accompanied by meaningful cautionary statements identifying important factors that could cause actual results to differ materially from those included in the forward-looking statements. Certain information contained in this quarterly report on Form 10-Q (including certain statements in the consolidated financial statements and related notes and Management's Discussion and Analysis), or in any other written or oral statements made by us in communications with the financial community or contained in documents filed with the Securities and Exchange Commission (SEC), may be considered forward-looking statements within the meaning of the Act. Forward-looking statements are those not based on historical information, but rather relate to our outlook, future operations, strategies, financial results, or other developments. Forward-looking statements speak only as of the date made. We undertake no obligation to update these statements, even if made available on our website or otherwise. These statements may be made directly in this document or may be made part of this document by reference to other documents filed by us with the SEC, a practice which is known as "incorporation by reference." You can find many of these statements by looking for words such as "will," "may," "should," "could," "believes," "expects," "anticipates," "estimates," "plans," "assumes," "intends," "projects," "goals," "objectives," or similar expressions in this document or in documents incorporated herein.

Cautionary Statement Regarding Forward-Looking Statements - Continued

These forward-looking statements are subject to numerous assumptions, risks, and uncertainties, many of which are beyond our control. We caution readers that the following factors, in addition to other factors mentioned from time to time, may cause actual results to differ materially from those contemplated by the forward-looking statements:

- Fluctuation in insurance reserve liabilities and claim payments due to changes in claim incidence, recovery rates, mortality and morbidity rates, and policy benefit offsets due to, among other factors, the rate of unemployment and consumer confidence, the emergence of new diseases, epidemics, or pandemics, new trends and developments in medical treatments, the effectiveness of our claims operational processes, and changes in governmental programs.
- Sustained periods of low interest rates.
- Unfavorable economic or business conditions, both domestic and foreign, that may result in decreases in sales, premiums, or persistency, as well as unfavorable claims activity or unfavorable returns on our investment portfolio.
- The impact of pandemics and other public health issues, including COVID-19, on our business, financial position, results of operations, liquidity and capital resources, and overall business operations.
- Changes in, or interpretations or enforcement of, laws and regulations.
- Our ability to hire and retain qualified employees.
- A cyber attack or other security breach could result in the unauthorized acquisition of confidential data.
- The failure of our business recovery and incident management processes to resume our business operations in the event of a natural catastrophe, cyber attack, or other event.
- Investment results, including, but not limited to, changes in interest rates, defaults, changes in credit spreads, impairments, and the lack of appropriate investments in the market which can be acquired to match our liabilities.
- Increased competition from other insurers and financial services companies due to industry consolidation, new entrants to our markets, or other factors.
- Changes in our financial strength and credit ratings.
- Our ability to develop digital capabilities or execute on our technology systems upgrades or replacements.
- Actual experience in the broad array of our products that deviates from our assumptions used in pricing, underwriting, and reserving.
- Ineffectiveness of our derivatives hedging programs due to changes in forecasted cash flows, the economic environment, counterparty risk, ratings downgrades, capital market volatility, changes in interest rates, and/or regulation.
- Availability of reinsurance in the market and the ability of our reinsurers to meet their obligations to us.
- Ability to generate sufficient internal liquidity and/or obtain external financing.
- Damage to our reputation due to, among other factors, regulatory investigations, legal proceedings, external events, and/or inadequate or failed internal controls and procedures.
- The use and reliance on third party vendors, including vendors providing web and cloud based applications, may disrupt our business, and impact our ability to leverage data.
- Recoverability and/or realization of the carrying value of our intangible assets, long-lived assets, and deferred tax assets.
- Effectiveness of our risk management program.
- Contingencies and the level and results of litigation.
- Fluctuation in foreign currency exchange rates.
- Our ability to meet environment, social, and governance standards and expectations of investors, regulators, customers, and other stakeholders.

For further discussion of risks and uncertainties which could cause actual results to differ from those contained in the forward-looking statements, see Part 1, Item 1A of our annual report on Form 10-K for the year ended December 31, 2022.

All subsequent written and oral forward-looking statements attributable to us or any person acting on our behalf are expressly qualified in their entirety by the cautionary statements contained or referred to in this section.

PART I - FINANCIAL INFORMATION

ITEM 1. FINANCIAL STATEMENTS

CONSOLIDATED BALANCE SHEETS (UNAUDITED)

Unum Group and Subsidiaries

	March 31 2023	December 31 2022
	(in millions of dollars)	
		As Adjusted
Assets		
Investments		
Fixed Maturity Securities - at fair value (amortized cost of $38,101.8; $37,825.2; allowance for credit losses of $—; $—)	$ 36,160.2	$ 34,840.8
Mortgage Loans (net of allowance for credit losses of $10.0; $9.3)	2,390.0	2,435.4
Policy Loans	3,552.5	3,601.2
Other Long-term Investments	1,479.4	1,440.1
Short-term Investments	1,322.8	1,394.8
Total Investments	44,904.9	43,712.3
Other Assets		
Cash and Bank Deposits	123.1	119.2
Accounts and Premiums Receivable (net of allowance for credit losses of $31.6; $32.5)	1,557.1	1,482.1
Reinsurance Recoverable (net of allowance for credit losses of $3.9; $1.7)	9,628.7	9,608.0
Accrued Investment Income	636.1	615.0
Deferred Acquisition Costs	2,602.4	2,560.0
Goodwill	348.4	347.6
Property and Equipment	456.1	451.7
Deferred Income Tax	489.8	586.0
Other Assets	1,677.2	1,666.6
Total Assets	$ 62,423.8	$ 61,148.5

See notes to consolidated financial statements.

CONSOLIDATED BALANCE SHEETS (UNAUDITED) - Continued

Unum Group and Subsidiaries

	March 31 2023	December 31 2022
	(in millions of dollars)	
		As Adjusted
Liabilities and Stockholders' Equity		
Liabilities		
Future Policy Benefits	$ 39,351.5	$ 38,577.1
Policyholders' Account Balances	5,709.6	5,740.2
Unearned Premiums	451.6	365.5
Other Policyholders' Funds	1,726.9	1,750.4
Income Tax Payable	240.6	190.9
Deferred Income Tax	23.8	25.2
Short-term Debt	2.0	2.0
Long-term Debt	3,428.5	3,427.8
Other Liabilities	2,241.9	2,334.4
Total Liabilities	53,176.4	52,413.5
Commitments and Contingent Liabilities - Note 12		
Stockholders' Equity		
Common Stock, $0.10 par		
Authorized: 725,000,000 shares		
Issued: 309,222,758 and 308,306,490 shares	30.9	30.8
Additional Paid-in Capital	2,431.8	2,441.0
Accumulated Other Comprehensive Loss	(3,162.3)	(3,448.3)
Retained Earnings	13,430.4	13,141.3
Treasury Stock - at cost: 111,857,500 and 110,551,977 shares	(3,483.4)	(3,429.8)
Total Stockholders' Equity	9,247.4	8,735.0
Total Liabilities and Stockholders' Equity	$ 62,423.8	$ 61,148.5

See notes to consolidated financial statements.

CONSOLIDATED STATEMENTS OF INCOME (UNAUDITED)

Unum Group and Subsidiaries

	Three Months Ended March 31	
	2023	2022
	(in millions of dollars, except share data)	
		As Adjusted
Revenue		
Premium Income	$ 2,459.3	$ 2,401.4
Net Investment Income	508.8	527.2
Net Investment Gain (Loss)	0.1	(13.8)
Other Income	67.9	65.8
Total Revenue	3,036.1	2,980.6
Benefits and Expenses		
Policy Benefits	1,882.1	1,983.0
Policy Benefits - Remeasurement Gain	(145.7)	(68.8)
Commissions	293.9	273.2
Interest and Debt Expense	48.1	46.9
Deferral of Acquisition Costs	(157.7)	(141.8)
Amortization of Deferred Acquisition Costs	115.9	103.6
Compensation Expense	275.0	248.3
Other Expenses	273.2	240.5
Total Benefits and Expenses	2,584.8	2,684.9
Income Before Income Tax	451.3	295.7
Income Tax Expense (Benefit)		
Current	65.6	83.3
Deferred	27.4	(28.0)
Total Income Tax Expense	93.0	55.3
Net Income	$ 358.3	$ 240.4
Net Income Per Common Share		
Basic	$ 1.81	$ 1.19
Assuming Dilution	$ 1.80	$ 1.18

See notes to consolidated financial statements.

CONSOLIDATED STATEMENTS OF COMPREHENSIVE INCOME (UNAUDITED)

Unum Group and Subsidiaries

	Three Months Ended March 31	
	2023	2022
	(in millions of dollars)	
		As Adjusted
Net Income	$ 358.3	$ 240.4
Other Comprehensive Income		
Change in Net Unrealized Gain (Loss) on Securities (net of tax expense (benefit) of $219.6; $(775.1))	823.2	(2,893.8)
Change in the Effect of Discount Rate Assumptions on the Liability for Future Policy Benefits, Net of Reinsurance (net of tax expense (benefit) of $(152.9); $982.8)	(573.9)	3,658.1
Change in Net Gain (Loss) on Hedges (net of tax expense (benefit) of $4.7; $(2.9))	17.4	(10.4)
Change in Foreign Currency Translation Adjustment (net of tax expense (benefit) of $(0.2); $0.9)	24.7	(32.0)
Change in Unrecognized Pension and Postretirement Benefit Costs (net of tax expense (benefit) of $(1.6); $0.9)	(5.4)	4.2
Total Other Comprehensive Income	286.0	726.1
Comprehensive Income	$ 644.3	$ 966.5

See notes to consolidated financial statements.

CONSOLIDATED STATEMENTS OF STOCKHOLDERS' EQUITY (UNAUDITED)

Unum Group and Subsidiaries

	Three Months Ended March 31	
	2023	2022
	(in millions of dollars)	
		As Adjusted
Common Stock		
Balance at Beginning of Year	$ 30.8	$ 30.7
Common Stock Activity	0.1	0.1
Balance at End of Period	30.9	30.8
Additional Paid-in Capital		
Balance at Beginning of Year	2,441.0	2,408.1
Repurchase of Common Stock	—	(12.5)
Other Common Stock Activity	(9.2)	0.2
Balance at End of Period	2,431.8	2,395.8
Accumulated Other Comprehensive Loss		
Balance at Beginning of Year	(3,448.3)	354.1
Cumulative Effect of Adoption of Accounting Standards Update - Note 2	—	(5,518.7)
Balance at Beginning of Period, as Adjusted	(3,448.3)	(5,164.6)
Other Comprehensive Income	286.0	726.1
Balance at End of Period	(3,162.3)	(4,438.5)
Retained Earnings		
Balance at Beginning of Year	13,141.3	11,853.2
Cumulative Effect of Adoption of Accounting Standards Update - Note 2	—	136.2
Balance at Beginning of Year, as Adjusted	13,141.3	11,989.4
Net Income	358.3	240.4
Dividends to Stockholders (per common share: $0.330; $0.300)	(69.2)	(62.9)
Balance at End of Period	13,430.4	12,166.9
Treasury Stock		
Balance at Beginning of Year	(3,429.8)	(3,229.7)
Repurchase of Common Stock	(53.6)	(37.5)
Balance at End of Period	(3,483.4)	(3,267.2)
Total Stockholders' Equity at End of Period	$ 9,247.4	$ 6,887.8

See notes to consolidated financial statements.

CONSOLIDATED STATEMENTS OF CASH FLOWS (UNAUDITED)

Unum Group and Subsidiaries

	Three Months Ended March 31	
	2023	2022
	(in millions of dollars)	
		As Adjusted
Cash Flows from Operating Activities		
Net Income	$ 358.3	$ 240.4
Adjustments to Reconcile Net Income to Net Cash Provided by Operating Activities		
Change in Receivables	89.9	246.2
Change in Deferred Acquisition Costs	(41.8)	(38.2)
Change in Insurance Liabilities	(119.6)	27.5
Change in Income Taxes	76.2	54.4
Change in Other Accrued Liabilities	(175.1)	(127.1)
Non-cash Components of Net Investment Income	(64.4)	(111.3)
Net Investment (Gain) Loss	(0.1)	13.8
Depreciation	26.8	30.0
Amortization of the Cost of Reinsurance	11.0	13.4
Other, Net	(10.6)	(23.3)
Net Cash Provided by Operating Activities	150.6	325.8
Cash Flows from Investing Activities		
Proceeds from Sales of Fixed Maturity Securities	55.1	171.9
Proceeds from Maturities of Fixed Maturity Securities	387.4	427.1
Proceeds from Sales and Maturities of Other Investments	91.6	102.0
Purchases of Fixed Maturity Securities	(589.1)	(931.9)
Purchases of Other Investments	(79.9)	(128.6)
Net Sales and Maturities of Short-term Investments	183.8	190.2
Net Decrease in Payables for Collateral on Investments	(60.3)	(1.3)
Net Purchases of Property and Equipment	(29.1)	(21.8)
Net Cash Used by Investing Activities	(40.5)	(192.4)
Cash Flows from Financing Activities		
Issuance of Common Stock	1.2	0.6
Repurchase of Common Stock	(51.2)	(50.0)
Dividends Paid to Stockholders	(69.2)	(62.0)
Proceeds from Policyholders' Account Deposits	37.7	31.2
Payments for Policyholders' Account Withdrawals	(24.4)	(21.6)
Other, Net	(0.3)	—
Net Cash Used by Financing Activities	(106.2)	(101.8)
Net Increase in Cash and Bank Deposits	3.9	31.6
Cash and Bank Deposits at Beginning of Year	119.2	75.0
Cash and Bank Deposits at End of Period	$ 123.1	$ 106.6

See notes to consolidated financial statements.

Note 1 - Basis of Presentation

The accompanying consolidated financial statements of Unum Group and its subsidiaries (the Company) have been prepared in accordance with U.S. generally accepted accounting principles (GAAP) for interim financial information and with the instructions to Form 10-Q and Article 10 of Regulation S-X. Accordingly, they do not include all of the information and footnotes required by GAAP for complete financial statements. For further information, refer to the consolidated financial statements and footnotes included in our annual report on Form 10-K for the year ended December 31, 2022.

In our opinion, all adjustments (consisting of normal recurring accruals) considered necessary for a fair presentation have been included. Interim results are not necessarily indicative of full year performance.

Note 2 - Accounting Developments

Accounting Standards Updates (ASUs) Adopted in 2023:

ASU 2022-02, Financial Instruments - Credit Losses (Topic 326): Troubled Debt Restructurings and Vintage Disclosures

The amendments in this update eliminated the troubled debt restructuring recognition and measurement guidance and instead required that an entity evaluate whether the modification represents a new loan or the continuation of an existing loan. The amendments also enhanced the disclosure requirements related to certain modifications of receivables made to borrowers experiencing financial difficulty. In addition, the amendments in this update required that an entity disclose current-period gross write-offs by year of origination for financing receivables and net investment in leases. The amendments in this update were applied prospectively in the period of adoption as of January 1, 2023. The adoption of this update modified our disclosures but did not have an impact on our financial position or results of operations.

ASU 2018-12, Financial Services—Insurance (Topic 944): Targeted Improvements to the Accounting for Long-Duration Contracts and related amendments

This update significantly amended the accounting and disclosure requirements for long-duration insurance contracts. These changes included a requirement to review, and if necessary, update cash flow assumptions used to measure the liability for future policy benefits for traditional and limited-payment contracts at least annually, with changes recognized in earnings. In addition, an entity is required to update the discount rate assumption at each reporting date using a yield that is reflective of an upper-medium grade fixed-income instrument, with changes recognized in other comprehensive income (loss) (OCI). These changes resulted in the elimination of the provision for risk of adverse deviation and premium deficiency (or loss recognition) testing for traditional long-duration insurance contracts. The update also required that an entity measure all market risk benefits associated with deposit contracts at fair value, with changes recognized in earnings except for the portion attributable to a change in the instrument-specific credit risk, which is to be recognized in OCI. This update also simplified the amortization of deferred acquisition costs by requiring amortization on a constant level basis over the expected term of the related contracts. Deferred acquisition costs are required to be written off for unexpected contract terminations, but are no longer subject to an impairment test. Significant additional disclosures are required, which include disaggregated rollforwards of certain liability balances and the disclosure of qualitative and quantitative information about expected cash flows, estimates, and assumptions. We do not have products with market risk benefits. The update is effective for periods beginning January 1, 2023.

We adopted this guidance effective January 1, 2023 using the modified retrospective approach with changes applied as of January 1, 2021, also referred to as the transition date. The following tables summarize the impacts of the adoption of ASU 2018-12 on the liability for future policy benefits, deferred acquisition costs, and stockholders' equity as of the transition date as well as impacted historical condensed consolidated financial statement line items for historical comparison.

Note 2 - Accounting Developments - Continued

Impact of the Adoption of ASU 2018-12 as of the Transition Date:

Stockholders' Equity

The following table summarizes the changes in stockholders' equity due to the adoption of ASU 2018-12 and the resulting adjusted balances at January 1, 2021:

	Consolidated		
	Retained Earnings	Accumulated Other Comprehensive Income (Loss)	Total Stockholders' Equity
		(in millions of dollars)	
Balance at December 31, 2020	$ 11,269.6	$ 374.2	$ 10,871.0
Impact of the Adoption of ASU 2018-12	(20.6)	(6,684.4)	(6,705.0)
Balance at January 1, 2021	$ 11,249.0	$ (6,310.2)	$ 4,166.0

Note 2 - Accounting Developments - Continued

Liability for Future Policy Benefits

The following tables summarize the changes in the liability for future policy benefits due to the adoption of ASU 2018-12 and the resulting adjusted balance at January 1, 2021. The removal of shadow adjustments and effect of change in discount rate assumptions are both recorded as transition adjustments to accumulated other comprehensive income (loss) (AOCI) while the adjustments for loss contracts are recorded as a transition adjustment to retained earnings.

	Unum US	Unum International	Colonial Life	Closed Block	Consolidated
	(in millions of dollars)				
Balance at December 31, 2020[1]	$ 12,184.6	$ 2,969.8	$ 1,977.2	$ 28,572.8	$ 45,704.4
Removal of Shadow Adjustments[2]	(1,569.7)	(545.8)	(44.5)	(4,065.6)	(6,225.6)
Adjustments for Loss Contracts[3]	—	—	34.9	—	34.9
Effect of Change in Discount Rate Assumptions	2,251.8	779.4	568.6	12,484.8	16,084.6
Other[4]	(5.3)	—	(7.6)	—	(12.9)
Balance at January 1, 2021	12,861.4	3,203.4	2,528.6	36,992.0	55,585.4
Reinsurance Recoverable[5]	357.7	132.5	4.4	10,001.4	10,496.0
Balance, Net of Reinsurance, at January 1, 2021	$ 12,503.7	$ 3,070.9	$ 2,524.2	$ 26,990.6	$ 45,089.4

[1]We previously reported policy and contract benefits and reserves for future policy and contract benefits liabilities in our consolidated balance sheet as of December 31, 2020 of $1,855.4 million and $49,653.0 million, respectively, resulting in total policyholder liabilities of $51,508.4 million. These balances were reclassified into new line items, future policy benefits and policyholders' account balances, which would have reported balances of $45,704.4 million and $5,804.0 million as of December 31, 2020, respectively, resulting in total policyholder liabilities of $51,508.4 million under the historical accounting method. These balances were reclassified to more closely align with the new disclosure requirements of ASU 2018-12.

[2]Shadow adjustments represent the adjustments related to unrealized investment gains and losses previously included in the reserves balance prior to the adoption of ASU 2018-12.

[3]Adjustment for loss contracts represents the adjustment for those cohorts whose net premium ratio exceeded 100 percent as of the transition date. For those cohorts, the net premiums were set equal to the gross premiums and the difference was recorded as a transition adjustment to the liability for future policy benefits.

[4]This amount reflects the effect of the reclassification of certain unearned premium. This amount was reclassified to more closely align with the presentation of liabilities under ASU 2018-12 and had no impact to stockholders' equity.

[5]These amounts represent the portion of reinsurance recoverable related to the liability for future policy benefits. These amounts include the adjustments for the removal of shadow adjustments and for the effect of change in discount rate assumptions for the liability for future policy benefits ceded to third party reinsurers.

Note 2 - Accounting Developments - Continued

	Unum US Segment					
	Group Disability	Group Life and AD&D	Individual Disability	Voluntary Benefits	Dental and Vision	Total
	(in millions of dollars)					
Balance at December 31, 2020	$ 7,409.0	$ 1,123.9	$ 2,485.3	$ 1,154.9	$ 11.5	$ 12,184.6
Removal of Shadow Adjustments	(1,025.2)	(88.5)	(446.1)	(9.9)	—	(1,569.7)
Effect of Change in Discount Rate Assumptions	911.9	91.9	728.5	519.5	—	2,251.8
Other	—	—	—	(5.3)	—	(5.3)
Balance at January 1, 2021	7,295.7	1,127.3	2,767.7	1,659.2	11.5	12,861.4
Reinsurance Recoverable	58.3	3.0	260.6	35.7	0.1	357.7
Balance, Net of Reinsurance, at January 1, 2021	$ 7,237.4	$ 1,124.3	$ 2,507.1	$ 1,623.5	$ 11.4	$ 12,503.7

	Closed Block Segment		
	Long-term Care	All Other	Total
	(in millions of dollars)		
Balance at December 31, 2020	$ 16,283.4	$ 12,289.4	$ 28,572.8
Removal of Shadow Adjustments	(3,465.4)	(600.2)	(4,065.6)
Effect of Change in Discount Rate Assumptions	9,922.9	2,561.9	12,484.8
Balance at January 1, 2021	22,740.9	14,251.1	36,992.0
Reinsurance Recoverable	44.4	9,957.0	10,001.4
Balance, Net of Reinsurance, at January 1, 2021	$ 22,696.5	$ 4,294.1	$ 26,990.6

Deferred Acquisition Costs (DAC)

The following tables summarize the changes in DAC due to the adoption of ASU 2018-12 and the resulting adjusted balance at January 1, 2021. The removal of shadow adjustments is recorded as a transition adjustment to AOCI.

	Consolidated			
	Unum US[1]	Unum International	Colonial Life	Total
	(in millions of dollars)			
Balance at December 31, 2020	$ 1,168.7	$ 32.0	$ 1,071.9	$ 2,272.6
Removal of Shadow Adjustments	12.3	—	72.8	85.1
Balance at January 1, 2021	$ 1,181.0	$ 32.0	$ 1,144.7	$ 2,357.7

[1]The $12.3 million removal of shadow adjustments is related to the Unum US voluntary benefits product line.

Note 2 - Accounting Developments - Continued

Impact of the Adoption of ASU 2018-12 on Historical Financial Statements:

The following tables present the effect of the adoption of ASU 2018-12 on our historical consolidated financial statements:

	March 31, 2022		
	Historical Accounting Method	As Adjusted	Effect of Change
	(in millions of dollars)		
Consolidated Balance Sheets			
Assets			
Reinsurance Recoverable	$ 10,640.3	$ 10,939.5	$ 299.2
Deferred Acquisition Costs	2,229.2	2,464.3	235.1
Deferred Income Tax	—	889.8	889.8
Other Assets[1]	1,834.9	1,704.9	(130.0)
Total Assets	66,471.7	67,765.8	1,294.1
Liabilities			
Policy and Contract Benefits[2]	$ 1,874.2	$ —	$ (1,874.2)
Reserves for Future Policy and Contract Benefits[2]	45,258.0	—	(45,258.0)
Future Policy Benefits[2]	—	46,474.7	46,474.7
Policyholders' Account Balances[2]	—	5,772.3	5,772.3
Unearned Premiums	431.9	444.8	12.9
Deferred Income Tax	202.8	104.5	(98.3)
Total Liabilities	55,848.6	60,878.0	5,029.4
Stockholders' Equity			
Accumulated Other Comprehensive Loss	$ (580.1)	$ (4,438.5)	$ (3,858.4)
Retained Earnings	12,043.8	12,166.9	123.1
Total Stockholders' Equity	10,623.1	6,887.8	(3,735.3)

[1]The change in other assets is driven by the cost of reinsurance associated with the second phase of our Closed Block individual disability reinsurance transaction which was completed in the first quarter of 2021. In accordance with the provisions of the ASU related to non-contemporaneous reinsurance, we were then required to establish the ceded reserves using an upper-medium grade fixed-income instrument as of the reinsurance transaction date in March 2021 which resulted in higher ceded reserves compared to that which was reported historically.

[2]We previously reported policy and contract benefits and reserves for future policy and contract benefits liabilities in our consolidated balance sheet as of March 31, 2022 of $1,874.2 million and $45,258.0 million, respectively, resulting in total policyholder liabilities of $47,132.2 million. These balances were reclassified into new line items, future policy benefits and policyholders' account balances, which would have reported balances of $41,368.2 million and $5,764.0 million, respectively, as of March 31, 2022, resulting in total policyholder liabilities of $47,132.2 million under the historical accounting method.

Note 2 - Accounting Developments - Continued

	December 31, 2022		
	Historical Accounting Method	As Adjusted	Effect of Change
	(in millions of dollars)		
Consolidated Balance Sheets			
Assets			
Reinsurance Recoverable	$ 10,218.6	$ 9,608.0	$ (610.6)
Deferred Acquisition Costs	2,252.3	2,560.0	307.7
Deferred Income Tax	449.8	586.0	136.2
Other Assets	1,786.3	1,666.6	(119.7)
Total Assets	61,434.9	61,148.5	(286.4)
Liabilities			
Policy and Contract Benefits[1]	$ 1,839.8	$ —	$ (1,839.8)
Reserves for Future Policy and Contract Benefits[1]	42,330.2	—	(42,330.2)
Future Policy Benefits[1]	—	38,577.1	38,577.1
Policyholders' Account Balances[1]	—	5,740.2	5,740.2
Unearned Premiums	352.7	365.5	12.8
Deferred Income Tax	9.2	25.2	16.0
Total Liabilities	52,237.4	52,413.5	176.1
Stockholders' Equity			
Accumulated Other Comprehensive Loss	$ (2,756.6)	$ (3,448.3)	$ (691.7)
Retained Earnings	12,912.1	13,141.3	229.2
Total Stockholders' Equity	9,197.5	8,735.0	(462.5)

[1]We previously reported policy and contract benefits and reserves for future policy and contract benefits liabilities in our consolidated balance sheet as of December 31, 2022 of $1,839.8 million and $42,330.2 million, respectively, resulting in total policyholder liabilities of $44,170.0 million. These balances were reclassified into new line items, future policy benefits and policyholders' account balances, which would have reported balances of $38,443.2 million and $5,726.8 million, respectively, as of December 31, 2022, resulting in total policyholder liabilities of $44,170.0 million under the historical accounting method.

The decrease in AOCI in our recast of 2022 as shown in the preceding chart is driven primarily by the difference between the discount rate applied under the historical accounting method, which was based on an expected investment yield from our current investment strategy, and the single-A discount rate that is required as a part of the adoption of ASU 2018-12. The most significant impact is related to our longest duration products. Our investment strategy reflects the illiquid nature of the majority of our liability cash flows and, as a result, the yields in our investment portfolios supporting the cash outflows required for these products are generally higher than a single-A yield. In addition, the discount rates applied under the historical accounting method to the reserves for our longest duration products, such as long-term care, included an assumption for long-term yields rising to more historical levels.

Note 2 - Accounting Developments - Continued

The net unfavorable impact of the adoption of ASU 2018-12 to net income for the three months ended March 31, 2022 shown below is due primarily to the following changes:

- Updating the lifetime cohort net premium ratios, or lifetime loss ratio, for actual experience each reporting period will generally cause earnings patterns to be more consistent from period to period, with variances in experience reflected in earnings over the cohort lifetime. This resulted in an unfavorable impact to income for the three months ended March 31, 2022.

- Alignment of amortization of deferred acquisition costs to a constant level basis and modification of amortization periods to reflect the expected term of the related contracts could result in either higher or lower income for the affected product lines. This resulted in a net favorable impact to income for the three months ended March 31, 2022.

- Accelerated recognition of the provision for adverse deviation or other differences from current best estimate values for policies issued prior to the transition date and due to not establishing the provision for policies issued on or after the transition date will generally result in higher income most notably in the initial years after the transition date. This resulted in a favorable impact to income for the three months ended March 31, 2022.

- Establishing reserves for claims incurred on or after the transition date at interest rates prescribed by the update could result in either higher or lower income for the affected product lines depending on the policy issue date and the interest rate environment at that time. This resulted in a favorable impact to income for the three months ended March 31, 2022.

- Accounting for non-contemporaneous reinsurance related to the second phase of our Closed Block individual disability reinsurance transaction which was completed in the first quarter of 2021. As a result of the execution of the second phase of the reinsurance transaction occurring after January 1, 2021, the transition date of ASU 2018-12, in accordance with the provisions of the ASU related to non-contemporaneous reinsurance, we were required to establish the ceded reserves using an upper-medium grade fixed-income instrument as of the reinsurance transaction date in March 2021 which resulted in higher ceded reserves compared to that which was reported historically. However, the direct reserves for the block reinsured in the second phase were calculated using the original discount rate utilized as of the transition date. Both the direct and ceded reserves are then remeasured at each reporting period using a current discount rate reflective of an upper-medium grade fixed-income instrument, with the changes recognized in OCI. While the total equity impact is neutral, the different original discount rates utilized for direct and ceded reserves result in disproportionate earnings impacts. The differential in the original discount rate applied to the direct and ceded cohorts of business resulted in an unfavorable impact to income for the three months ended March 31, 2022, partially offset by a decrease in the amortization of the cost of reinsurance as a result of a lower cost of reinsurance.

Note 2 - Accounting Developments - Continued

	Three Months Ended March 31, 2022		
	Historical Accounting Method	As Adjusted	Effect of Change
	(in millions of dollars, except share data and where noted)		
Consolidated Statements of Income			
Premium Income	$ 2,403.3	$ 2,401.4	$ (1.9)
Policy Benefits[1]	1,843.9	1,983.0	139.1
Policy Benefits - Remeasurement Gain	—	(68.8)	(68.8)
Amortization of Deferred Acquisition Costs	156.1	103.6	(52.5)
Other Expenses	243.8	240.5	(3.3)
Income Tax - Deferred	(24.7)	(28.0)	(3.3)
Net Income	253.5	240.4	(13.1)
Net Income Per Common Share			
Basic	$ 1.25	$ 1.19	$ (0.06)
Assuming Dilution	$ 1.25	$ 1.18	$ (0.07)
Consolidated Statements of Comprehensive Income (Loss)			
Net Income	$ 253.5	$ 240.4	$ (13.1)
Change in Adjustment to Deferred Acquisition Costs and Reserves for Future Policy and Contract Benefits, Net of Reinsurance[1]	1,997.7	—	(1,997.7)
Change in the Effect of Discount Rate Assumptions on the Liability for Future Policy Benefits, Net of Reinsurance[1]	—	3,658.1	3,658.1
Change in Foreign Currency Translation Adjustment	(31.9)	(32.0)	(0.1)
Comprehensive Income (Loss)	(680.7)	966.5	1,647.2
Consolidated Statements of Stockholders' Equity			
Accumulated Other Comprehensive Income (Loss)			
Balance at Beginning of Year	$ 354.1	$ (5,164.6)	$ (5,518.7)
Other Comprehensive Income (Loss)	(934.2)	726.1	1,660.3
Retained Earnings			
Balance at Beginning of Year	$ 11,853.2	$ 11,989.4	$ 136.2
Net Income	253.5	240.4	(13.1)
Consolidated Statements of Cash Flows			
Net Income	$ 253.5	$ 240.4	$ (13.1)
Change in Receivables	239.2	246.2	7.0
Change in Deferred Acquisition Costs	14.3	(38.2)	(52.5)
Change in Insurance Liabilities	(38.3)	27.5	65.8
Change in Income Taxes	58.3	54.4	(3.9)
Amortization of the Cost of Reinsurance	16.7	13.4	(3.3)

[1] Previously disclosed as Benefits and Change in Reserves for Future Benefits

Note 2 - Accounting Developments - Continued

All historically reported information included throughout these financial statements has been adjusted for the impacts of our modified retrospective adoption of ASU 2018-12.

Accounting Updates Outstanding:

ASU 2020-04, Reference Rate Reform (Topic 848): Facilitation of the Effects of Reference Rate Reform on Financial Reporting and related amendments

The amendments in this update provide optional guidance, for a limited period of time, to ease the potential burden in accounting for and recognizing the effects of reference rate reform on financial reporting. The guidance allows for various practical expedients and exceptions when applying GAAP to contracts, hedging relationships, and other transactions affected either by discontinued rates as a direct result of reference rate reform or a market-wide change in interest rates used for discounting, margining or contract price alignment, if certain criteria are met. Specifically, the guidance provides certain practical expedients for contract modifications, fair value hedges, and cash flow hedges, and also provides certain exceptions related to changes in the critical terms of a hedging relationship. The guidance also allows for a one-time election to sell or transfer debt securities that were both classified as held-to-maturity prior to January 1, 2020 and reference a rate affected by the reform.

The adoption of this update is permitted as of the beginning of the interim period that includes March 12, 2020 (the issuance date of the update), or any date thereafter, through December 31, 2024, at which point the guidance will sunset. We do not anticipate needing to adopt this guidance, but we will continue to monitor our contracts and hedging relationships throughout the adoption period.

Note 3 - Fair Value of Financial Instruments

Fair Value Measurements for Financial Instruments Carried at Fair Value

We report fixed maturity securities, which are classified as available-for-sale securities, derivative financial instruments, and unrestricted equity securities at fair value in our consolidated balance sheets. We report our investments in private equity partnerships at our share of the partnerships' net asset value per share or its equivalent (NAV) as a practical expedient for fair value.

The degree of judgment utilized in measuring the fair value of financial instruments generally correlates to the level of pricing observability. Financial instruments with readily available active quoted prices or for which fair value can be measured from actively quoted prices in active markets generally have more pricing observability and less judgment utilized in measuring fair value. An active market for a financial instrument is a market in which transactions for an asset or a similar asset occur with sufficient frequency and volume to provide pricing information on an ongoing basis. A quoted price in an active market provides the most reliable evidence of fair value and should be used to measure fair value whenever available. Conversely, financial instruments rarely traded or not quoted have less observability and are measured at fair value using valuation techniques that require more judgment. Pricing observability is generally impacted by a number of factors, including the type of financial instrument, whether the financial instrument is new to the market and not yet established, the characteristics specific to the transaction, and overall market conditions.

We classify financial instruments in accordance with a fair value hierarchy consisting of three levels based on the observability of valuation inputs:

- Level 1 - the highest category of the fair value hierarchy classification wherein inputs are unadjusted and represent quoted prices in active markets for identical assets or liabilities at the measurement date.

- Level 2 - valued using inputs (other than prices included in Level 1) that are either directly or indirectly observable for the asset or liability through correlation with market data at the measurement date and for the duration of the instrument's anticipated life.

- Level 3 - the lowest category of the fair value hierarchy and reflects the judgment of management regarding what market participants would use in pricing assets or liabilities at the measurement date. Financial assets and liabilities categorized as Level 3 are generally those that are valued using unobservable inputs to extrapolate an estimated fair value.

Valuation Methodologies of Financial Instruments Measured at Fair Value

Valuation techniques used for assets and liabilities accounted for at fair value are generally categorized into three types. The market approach uses prices and other relevant information from market transactions involving identical or comparable assets or liabilities. The income approach converts future amounts, such as cash flows or earnings, to a single present amount, or a discounted amount. The cost approach is based upon the amount that currently would be required to replace the service capacity of an asset, or the current replacement cost.

We use valuation techniques that are appropriate in the circumstances and for which sufficient data are available that can be obtained without undue cost and effort. In some cases, a single valuation technique will be appropriate (for example, when valuing an asset or liability using quoted prices in an active market for identical assets or liabilities). In other cases, multiple valuation techniques will be appropriate. If we use multiple valuation techniques to measure fair value, we evaluate and weigh the results, as appropriate, considering the reasonableness of the range indicated by those results. A fair value measurement is the point within that range that is most representative of fair value in the circumstances.

The selection of the valuation method(s) to apply considers the definition of an exit price and depends on the nature of the asset or liability being valued. For assets and liabilities accounted for at fair value, we generally use valuation techniques consistent with the market approach, and to a lesser extent, the income approach. We believe the market approach provides more observable data than the income approach, considering the type of investments we hold. Our fair value measurements could differ significantly based on the valuation technique and available inputs. When using a pricing service, we obtain the vendor's pricing documentation to ensure we understand their methodologies. We periodically review and approve the selection of our

Note 3 - Fair Value of Financial Instruments - Continued

pricing vendors to ensure we are in agreement with their current methodologies. When markets are less active, brokers may rely more on models with inputs based on the information available only to the broker. Our internal investment management professionals, which include portfolio managers and analysts, monitor securities priced by brokers and evaluate their prices for reasonableness based on benchmarking to available primary and secondary market information. In weighing a broker quote as an input to fair value, we place less reliance on quotes that do not reflect the result of market transactions. We also consider the nature of the quote, particularly whether it is a bid or market quote. If prices in an inactive market do not reflect current prices for the same or similar assets, adjustments may be necessary to arrive at fair value. When relevant market data is unavailable, which may be the case during periods of market uncertainty, the income approach can, in suitable circumstances, provide a more appropriate fair value. During 2023, we have applied valuation approaches and techniques on a consistent basis to similar assets and liabilities and consistent with those approaches and techniques used at year end 2022.

Fixed Maturity and Equity Securities

We use observable and unobservable inputs in measuring the fair value of our fixed maturity and equity securities. For securities categorized as Level 1, fair values equal active Trade Reporting and Compliance Engine (TRACE) pricing or unadjusted market maker prices. For securities categorized as Level 2 or Level 3, inputs that may be used in valuing each class of securities at any given time period are disclosed below. Actual inputs used to determine fair values will vary for each reporting period depending on the availability of inputs which may, at times, be affected by the lack of market liquidity.

Instrument	Level 2 Observable Inputs	Level 3 Unobservable Inputs
United States Government and Government Agencies and Authorities		
Valuation Method	Principally the market approach	Not applicable
Valuation Techniques / Inputs	Prices obtained from external pricing services	
States, Municipalities, and Political Subdivisions		
Valuation Method	Principally the market approach	Principally the market approach
Valuation Techniques / Inputs	Prices obtained from external pricing services	Analysis of similar bonds, adjusted for comparability
	Relevant reports issued by analysts and rating agencies	
	Audited financial statements	
Foreign Governments		
Valuation Method	Principally the market approach	Principally the market approach
Valuation Techniques / Inputs	Prices obtained from external pricing services	Analysis of similar bonds, adjusted for comparability
	Non-binding broker quotes	
	Call provisions	
Public Utilities		
Valuation Method	Principally the market and income approaches	Principally the market and income approaches
Valuation Techniques / Inputs	Prices obtained from external pricing services	Change in benchmark reference

Note 3 - Fair Value of Financial Instruments - Continued

Instrument	Level 2 Observable Inputs	Level 3 Unobservable Inputs
Public Utilities - Continued		
	Non-binding broker quotes	Analysis of similar bonds, adjusted for comparability
	Benchmark yields	Discount for size - illiquidity
	Transactional data for new issuances and secondary trades	Volatility of credit
	Security cash flows and structures	Lack of marketability
	Recent issuance / supply	
	Audited financial statements	
	Security and issuer level spreads	
	Security creditor ratings/maturity/capital structure/optionality	
	Public covenants	
	Comparative bond analysis	
	Relevant reports issued by analysts and rating agencies	
Mortgage/Asset-Backed Securities		
Valuation Method	Principally the market and income approaches	Principally the market approach
Valuation Techniques / Inputs	Prices obtained from external pricing services	Analysis of similar bonds, adjusted for comparability
	Non-binding broker quotes	Prices obtained from external pricing services
	Security cash flows and structures	
	Underlying collateral	
	Prepayment speeds/loan performance/ delinquencies	
	Relevant reports issued by analysts and rating agencies	
	Audited financial statements	
All Other Corporate Bonds		
Valuation Method	Principally the market and income approaches	Principally the market and income approaches
Valuation Techniques / Inputs	Prices obtained from external pricing services	Change in benchmark reference
	Non-binding broker quotes	Discount for size - illiquidity
	Benchmark yields	Volatility of credit
	Transactional data for new issuances and secondary trades	Lack of marketability
	Security cash flows and structures	Prices obtained from external pricing services
	Recent issuance / supply	
	Security and issuer level spreads	

Note 3 - Fair Value of Financial Instruments - Continued

Instrument	Level 2 Observable Inputs	Level 3 Unobservable Inputs
All Other Corporate Bonds - Continued		
	Security creditor ratings/maturity/capital structure/optionality	
	Public covenants	
	Comparative bond analysis	
	Relevant reports issued by analysts and rating agencies	
	Audited financial statements	
Redeemable Preferred Stocks		
Valuation Method	Principally the market approach	Principally the market approach
Valuation Techniques / Inputs	Non-binding broker quotes	Financial statement analysis
	Benchmark yields	
	Comparative bond analysis	
	Call provisions	
	Relevant reports issued by analysts and rating agencies	
	Audited financial statements	
Perpetual Preferred and Equity Securities		
Valuation Method	Principally the market approach	Principally the market and income approaches
Valuation Techniques / Inputs	Prices obtained from external pricing services	Financial statement analysis
	Non-binding broker quotes	

The management of our investment portfolio includes establishing pricing policy and reviewing the reasonableness of sources and inputs used in developing pricing. We review all prices that vary between multiple pricing vendors by a threshold that is outside a normal market range for the asset type. In the event we receive a vendor's market price that does not appear reasonable based on our market analysis, we may challenge the price and request further information about the assumptions and methodologies used by the vendor to price the security. We may change the vendor price based on a better data source such as an actual trade. We also review all prices that did not change from the prior month to ensure that these prices are within our expectations. The overall valuation process for determining fair values may include adjustments to valuations obtained from our pricing sources when they do not represent a valid exit price. These adjustments may be made when, in our judgment and considering our knowledge of the financial conditions and industry in which the issuer operates, certain features of the financial instrument require that an adjustment be made to the value originally obtained from our pricing sources. These features may include the complexity of the financial instrument, the market in which the financial instrument is traded, counterparty credit risk, credit structure, concentration, or liquidity. Additionally, an adjustment to the price derived from a model typically reflects our judgment of the inputs that other participants in the market for the financial instrument being measured at fair value would consider in pricing that same financial instrument. In the event an asset is sold, we test the validity of the fair value determined by our valuation techniques by comparing the selling price to the fair value determined for the asset in the immediately preceding month end reporting period.

Note 3 - Fair Value of Financial Instruments - Continued

Certain of our investments do not have readily determinable market prices and/or observable inputs or may at times be affected by the lack of market liquidity. For these securities, we use internally prepared valuations, including valuations based on estimates of future profitability, to estimate the fair value. Additionally, we may obtain prices from independent third-party brokers to aid in establishing valuations for certain of these securities. Key assumptions used by us to determine fair value for these securities include risk free interest rates, risk premiums, performance of underlying collateral (if any), and other factors involving significant assumptions which may or may not reflect those of an active market.

The parameters and inputs used to validate a price on a security may be adjusted for assumptions about risk and current market conditions on a quarter to quarter basis, as certain features may be more significant drivers of valuation at the time of pricing. Changes to inputs in valuations are not changes to valuation methodologies; rather, the inputs are modified to reflect direct or indirect impacts on asset classes from changes in market conditions.

At March 31, 2023, approximately 26.7 percent of our fixed maturity securities were valued using active trades from TRACE pricing or broker market maker prices for which there was current market activity in that specific security (comparable to receiving one binding quote). The prices obtained were not adjusted, and the assets were classified as Level 1.

The remaining 73.3 percent of our fixed maturity securities were valued based on non-binding quotes or other observable and unobservable inputs, as discussed below:

- 57.3 percent of our fixed maturity securities were valued based on prices from pricing services that generally use observable inputs such as prices for securities or comparable securities in active markets in their valuation techniques. These assets were classified as Level 2.

- 14.9 percent of our fixed maturity securities were valued based on one or more non-binding broker quotes, if validated by observable market data. When only one price is available, it is used if observable inputs and analysis confirms that it is appropriate. These assets, for which we were able to validate the price using other observable market data, were classified as Level 2.

- 1.1 percent of our fixed maturity securities were valued based on prices of comparable securities, internal models, or pricing services or other non-binding quotes with no other observable market data. These assets were classified as either Level 2 or Level 3, with the categorization dependent on whether there was other observable market data.

Derivatives

Fair values for derivatives other than embedded derivatives in modified coinsurance arrangements are based on market quotes or pricing models and represent the net amount of cash we would have paid or received if the contracts had been settled or closed as of the last day of the period. Credit risk related to the counterparty and the Company is considered in determining the fair values of these derivatives. However, since we have collateralization agreements in place with each counterparty which limits our exposure, any credit risk is immaterial. Therefore, we determined that no adjustments for credit risk were required as of March 31, 2023 or December 31, 2022.

Fair values for our embedded derivative in a modified coinsurance arrangement are estimated using internal pricing models and represent the hypothetical value of the duration mismatch of assets and liabilities, interest rate risk, and third party credit risk embedded in the modified coinsurance arrangement.

We consider transactions in inactive markets to be less representative of fair value. We use all available observable inputs when measuring fair value, but when significant unobservable inputs are used, we classify these assets or liabilities as Level 3.

Private Equity Partnerships

Our private equity partnerships represent funds that are primarily invested in private credit, private equity, and real assets, as described below. Distributions received from the funds arise from income generated by the underlying investments as well as the liquidation of the underlying investments. There is generally not a public market for these investments.

Note 3 - Fair Value of Financial Instruments - Continued

The following tables present additional information about our private equity partnerships, including commitments for additional investments which may or may not be funded:

		March 31, 2023		
Investment Category		Fair Value	Redemption Term / Redemption Notice	Unfunded Commitments
		(in millions of dollars)		(in millions of dollars)
Private Credit	(a)	$ 244.3	Not redeemable	$ 97.9
		39.2	Quarterly / 90 days notice	11.3
Total Private Credit		283.5		109.2
Private Equity	(b)	477.5	Not redeemable	401.6
		22.2	Initial 5.5 year lock on each new investment / Quarterly after 5.5 year lock with 90 days notice	19.4
Total Private Equity		499.7		421.0
Real Assets	(c)	384.7	Not redeemable	242.0
		60.9	Quarterly / 90 days notice	—
Total Real Assets		445.6		242.0
Total Partnerships		$ 1,228.8		$ 772.2

		December 31, 2022		
Investment Category		Fair Value	Redemption Term / Redemption Notice	Unfunded Commitments
		(in millions of dollars)		(in millions of dollars)
Private Credit	(a)	$ 239.3	Not redeemable	$ 90.9
		35.7	Initial 2 year lock on each new investment / Quarterly after 2 year lock with 90 days notice	13.4
Total Private Credit		275.0		104.3
Private Equity	(b)	453.6	Not redeemable	377.2
		31.7	Initial 5.5 year lock on each new investment / Quarterly after 5.5 year lock with 90 days notice	39.1
Total Private Equity		485.3		416.3
Real Assets	(c)	373.9	Not redeemable	256.3
		60.1	Quarterly / 90 days notice	—
Total Real Assets		434.0		256.3
Total Partnerships		$ 1,194.3		$ 776.9

Note 3 - Fair Value of Financial Instruments - Continued

(a) **Private Credit** - The limited partnerships described in this category employ various investment strategies, generally providing direct lending or other forms of debt financing including first-lien, second-lien, mezzanine, and subordinated loans. The limited partnerships have credit exposure to corporates, physical assets, and/or financial assets within a variety of industries (including manufacturing, healthcare, energy, business services, technology, materials, and retail) in North America and, to a lesser extent, outside of North America. As of March 31, 2023, the estimated remaining life of the investments that do not allow for redemptions is approximately 66 percent in the next 3 years, 21 percent during the period from 3 to 5 years, 11 percent during the period from 5 to 10 years, and 2 percent during the period from 10 to 15 years.

(b) **Private Equity** - The limited partnerships described in this category employ various strategies generally investing in controlling or minority control equity positions directly in companies and/or assets across various industries (including manufacturing, healthcare, energy, business services, technology, materials, and retail), primarily in private markets within North America and, to a lesser extent, outside of North America. As of March 31, 2023, the estimated remaining life of the investments that do not allow for redemptions is approximately 36 percent in the next 3 years, 17 percent during the period from 3 to 5 years, 40 percent during the period from 5 to 10 years, and 7 percent during the period from 10 to 15 years.

(c) **Real Assets** - The limited partnerships described in this category employ various strategies, which include investing in the equity and/or debt financing of physical assets, including infrastructure (energy, power, water/wastewater, communications), transportation (including airports, ports, toll roads, aircraft, railcars) and real estate in North America, Europe, South America, and Asia. As of March 31, 2023, the estimated remaining life of the investments that do not allow for redemptions is approximately 22 percent in the next 3 years, 36 percent during period from 3 to 5 years, and 42 percent during the period from 5 to 10 years.

We record changes in our share of net asset value of the partnerships in net investment income. We receive financial information related to our investments in partnerships and generally record investment income on a one-quarter lag in accordance with our accounting policy.

Note 3 - Fair Value of Financial Instruments - Continued

The following tables present information about financial instruments measured at fair value on a recurring basis by fair value level, based on the observability of the inputs used:

	March 31, 2023				
	Level 1	Level 2	Level 3	NAV	Total
	(in millions of dollars)				
Assets					
Fixed Maturity Securities					
United States Government and Government Agencies and Authorities	$ 83.5	$ 457.8	$ —	$ —	$ 541.3
States, Municipalities, and Political Subdivisions	9.2	3,631.9	0.1	—	3,641.2
Foreign Governments	—	876.0	—	—	876.0
Public Utilities	944.1	4,300.3	—	—	5,244.4
Mortgage/Asset-Backed Securities	—	547.5	28.8	—	576.3
All Other Corporate Bonds	8,636.7	16,501.6	139.1	—	25,277.4
Redeemable Preferred Stocks	—	3.6	—	—	3.6
Total Fixed Maturity Securities	9,673.5	26,318.7	168.0	—	36,160.2
Other Long-term Investments					
Derivatives					
Forwards	—	12.7	—	—	12.7
Foreign Exchange Contracts	—	82.4	—	—	82.4
Total Derivatives	—	95.1	—	—	95.1
Perpetual Preferred and Equity Securities	—	10.3	16.2	—	26.5
Private Equity Partnerships	—	—	—	1,228.8	1,228.8
Total Other Long-term Investments	—	105.4	16.2	1,228.8	1,350.4
Total Financial Instrument Assets Carried at Fair Value	$ 9,673.5	$ 26,424.1	$ 184.2	$ 1,228.8	$ 37,510.6
Liabilities					
Other Liabilities					
Derivatives					
Forwards	$ —	$ 23.8	$ —	$ —	$ 23.8
Foreign Exchange Contracts	—	25.5	—	—	25.5
Embedded Derivative in Modified Coinsurance Arrangement	—	—	13.6	—	13.6
Total Derivatives	—	49.3	13.6	—	62.9
Total Financial Instrument Liabilities Carried at Fair Value	$ —	$ 49.3	$ 13.6	$ —	$ 62.9

Note 3 - Fair Value of Financial Instruments - Continued

	December 31, 2022				
	Level 1	Level 2	Level 3	NAV	Total
	(in millions of dollars)				
Assets					
Fixed Maturity Securities					
United States Government and Government Agencies and Authorities	$ 81.7	$ 416.5	$ —	$ —	$ 498.2
States, Municipalities, and Political Subdivisions	8.7	3,448.3	0.2	—	3,457.2
Foreign Governments	—	827.1	—	—	827.1
Public Utilities	160.1	4,796.8	—	—	4,956.9
Mortgage/Asset-Backed Securities	—	551.3	22.0	—	573.3
All Other Corporate Bonds	4,268.6	20,097.3	158.7	—	24,524.6
Redeemable Preferred Stocks	—	3.5	—	—	3.5
Total Fixed Maturity Securities	4,519.1	30,140.8	180.9	—	34,840.8
Other Long-term Investments					
Derivatives					
Forwards	—	5.6	—	—	5.6
Foreign Exchange Contracts	—	83.5	—	—	83.5
Total Derivatives	—	89.1	—	—	89.1
Perpetual Preferred and Equity Securities	—	9.6	16.2	—	25.8
Private Equity Partnerships	—	—	—	1,194.3	1,194.3
Total Other Long-term Investments	—	98.7	16.2	1,194.3	1,309.2
Total Financial Instrument Assets Carried at Fair Value	$ 4,519.1	$ 30,239.5	$ 197.1	$ 1,194.3	$ 36,150.0
Liabilities					
Other Liabilities					
Derivatives					
Forwards	$ —	$ 48.5	$ —	$ —	$ 48.5
Foreign Exchange Contracts	—	25.5	—	—	25.5
Embedded Derivative in Modified Coinsurance Arrangement	—	—	13.9	—	13.9
Total Derivatives	—	74.0	13.9	—	87.9
Total Financial Instrument Liabilities Carried at Fair Value	$ —	$ 74.0	$ 13.9	$ —	$ 87.9

Note 3 - Fair Value of Financial Instruments - Continued

Changes in assets and liabilities measured at fair value on a recurring basis using significant unobservable inputs (Level 3) are as follows:

	Three Months Ended March 31, 2023									
	Fair Value Beginning of Year	Total Realized and Unrealized Investment Gains (Losses) in		Purchases	Sales/ Maturities	Level 3 Transfers		Fair Value End of Period	Change in Unrealized Gain (Loss) on Securities Held at the End of Period included in	
		Earnings	OCI			Into	Out of		OCI	Earnings
	(in millions of dollars)									
Fixed Maturity Securities										
States, Municipalities, and Political Subdivisions	$ 0.2	$ —	$ (0.1)	$ —	$ —	$ —	$ —	$ 0.1	$ (0.1)	$ —
Mortgage/Asset-Backed Securities	22.0	—	(0.6)	7.2	(0.2)	0.4	—	28.8	(0.6)	—
All Other Corporate Bonds	158.7	—	8.6	1.5	(59.3)	84.4	(54.8)	139.1	8.6	—
Total Fixed Maturity Securities	180.9	—	7.9	8.7	(59.5)	84.8	(54.8)	168.0	7.9	—
Perpetual Preferred and Equity Securities	16.2	—	—	—	—	—	—	16.2	—	—
Embedded Derivative in Modified Coinsurance Arrangement	(13.9)	0.3	—	—	—	—	—	(13.6)	—	0.3

Note 3 - Fair Value of Financial Instruments - Continued

	Three Months Ended March 31, 2022									
	Fair Value Beginning of Year	Total Realized and Unrealized Investment Gains (Losses) in		Purchases	Sales/ Maturities	Level 3 Transfers		Fair Value End of Period	Change in Unrealized Gain (Loss) on Securities Held at the End of Period included in	
		Earnings	OCI			Into	Out of		OCI	Earnings
	(in millions of dollars)									
Fixed Maturity Securities										
States, Municipalities, and Political Subdivisions	$ 13.4	$ —	$ —	$ —	$ —	$ —	$ (13.4)	$ —	$ —	$ —
Foreign Governments	20.8	—	(0.4)	—	—	—	—	20.4	(0.4)	—
Public Utilities	44.5	(4.1)	2.2	—	—	15.6	(44.5)	13.7	2.2	—
Mortgage/Asset-Backed Securities	187.2	—	(9.2)	7.3	—	—	(135.5)	49.8	(9.2)	—
All Other Corporate Bonds	861.5	—	(5.7)	2.6	—	13.2	(790.9)	80.7	(5.7)	—
Total Fixed Maturity Securities	1,127.4	(4.1)	(13.1)	9.9	—	28.8	(984.3)	164.6	(13.1)	—
Perpetual Preferred and Equity Securities	5.8	2.8	—	1.9	—	—	—	10.5	—	2.8
Embedded Derivative in Modified Coinsurance Arrangement	(30.1)	(3.4)	—	—	—	—	—	(33.5)	—	(3.4)

Realized and unrealized investment gains and losses presented in the preceding tables represent gains and losses only for the time during which the applicable financial instruments were classified as Level 3. The transfers between levels resulted primarily from a change in observability of three inputs used to determine fair values of the securities transferred: (1) transactional data for new issuance and secondary trades, (2) broker/dealer quotes and pricing, primarily related to changes in the level of activity in the market and whether the market was considered orderly, and (3) comparable bond metrics from which to perform an analysis. For fair value measurements of financial instruments that were transferred either into or out of Level 3, we reflect the transfers using the fair value at the beginning of the period. We believe this allows for greater transparency, as all changes in fair value that arise during the reporting period of the transfer are disclosed as a component of our Level 3 reconciliation.

Note 3 - Fair Value of Financial Instruments - Continued

The table below provides quantitative information regarding the significant unobservable inputs used in Level 3 fair value measurements derived from internal models. Unobservable inputs for fixed maturity securities are weighted by the fair value of the securities. Certain securities classified as Level 3 are excluded from the table below due to limitations in our ability to obtain the underlying inputs used by external pricing sources.

	March 31, 2023			
	Fair Value	Valuation Method	Unobservable Input	Range/Weighted Average
	(in millions of dollars)			
Fixed Maturity Securities				
All Other Corporate Bonds - Private	$ 16.8	Market Approach	Volatility of Credit Market Convention	(a) 4.62% - 4.62% / 4.62% (b) Priced at Par Value
Perpetual Preferred and Equity Securities	16.2	Market Approach	Market Convention	(b) Priced at Cost, Owner's Equity, or Most Recent Round
Embedded Derivative in Modified Coinsurance Arrangement	(13.6)	Discounted Cash Flows	Projected Liability Cash Flows Weighted Spread of Swap Curve	(c) Actuarial Assumptions 0.6%

	December 31, 2022			
	Fair Value	Valuation Method	Unobservable Input	Range/Weighted Average
	(in millions of dollars)			
Fixed Maturity Securities				
All Other Corporate Bonds - Private	$ 15.3	Market Approach	Volatility of Credit Market Convention	(a) 5.41% - 5.41% / 5.41% (b) Priced at Par Value
Perpetual Preferred and Equity Securities	16.2	Market Approach	Market Convention	(b) Priced at Cost, Owner's Equity, or Most Recent Round
Embedded Derivative in Modified Coinsurance Arrangement	(13.9)	Discounted Cash Flows	Projected Liability Cash Flows Weighted Spread of Swap Curve	(c) Actuarial Assumptions 0.6%

(a) Represents basis point adjustments for credit-specific factors

(b) Represents a decision to price based on par value, cost, owner's equity, or the price of the most recent capital funding round when limited data is available

(c) Represents various actuarial assumptions required to derive the liability cash flows. Fair value of embedded derivative is most often driven by the change in the weighted average credit spread to the swap curve for the assets backing the hypothetical loan

Other than market convention, the impact of isolated decreases in unobservable inputs will result in a higher estimated fair value, whereas isolated increases in unobservable inputs will result in a lower estimated fair value. The unobservable input for market convention is not sensitive to input movements. The projected liability cash flows used in the fair value measurement of our Level 3 embedded derivative are based on expected claim payments. If claim payments increase, the projected liability cash flows will increase, resulting in a decrease in the fair value of the embedded derivative. Decreases in projected liability cash flows will result in an increase in the fair value of the embedded derivative.

Note 3 - Fair Value of Financial Instruments - Continued

Fair Value Measurements for Financial Instruments Not Carried at Fair Value

The methods and assumptions used to estimate fair values of financial instruments not carried at fair value are discussed as follows:

Mortgage Loans: Fair value of newly originated, seasoned performing, or sub-performing but likely to continue cash flowing loans are calculated using a discounted cash flow analysis. Loans' cash flows are modeled and appropriately discounted by a rate based on current yields and credit spreads. For sub and non-performing loans where there is some probability the loan will not continue to pay, a price based approach would be used to estimate the loan's value in the open market utilizing current transaction information from similar loans.

Policy Loans: Fair values for policy loans, net of reinsurance ceded, are estimated using discounted cash flow analyses and interest rates currently being offered to policyholders with similar policies. Carrying amounts for ceded policy loans, which equal $3,259.5 million and $3,312.5 million as of March 31, 2023 and December 31, 2022, respectively, approximate fair value and are reported on a gross basis in our consolidated balance sheets. A change in interest rates for ceded policy loans will not impact our financial position because the benefits and risks are fully ceded to reinsuring counterparties.

Miscellaneous Long-term Investments: Carrying amounts for tax credit partnerships equal the unamortized balance of our contractual commitments and approximate fair value. Our shares of Federal Home Loan Bank (FHLB) common stock are carried at cost, which approximates fair value.

Long-term Debt: Fair values for long-term debt are obtained from independent pricing services or discounted cash flow analyses based on current incremental borrowing rates for similar types of borrowing arrangements.

FHLB Funding Agreements: Funding agreements with the FHLB represent cash advances used for the purpose of investing in fixed maturity securities. Carrying amounts approximate fair value.

Unfunded Commitments to Investment Partnerships: Unfunded equity commitments represent amounts that we have committed to fund certain investment partnerships. These commitments are legally binding, subject to the partnerships meeting specified conditions. Carrying amounts of these financial instruments approximate fair value.

Note 3 - Fair Value of Financial Instruments - Continued

The following table presents the carrying amounts and estimated fair values of our financial instruments not measured at fair value and indicates the level in the fair value hierarchy of the estimated fair value measurement based on the observability of the inputs used:

	March 31, 2023				
	Estimated Fair Value				
	Level 1	Level 2	Level 3	Total	Carrying Value
	(in millions of dollars)				
Assets					
Mortgage Loans	$ —	$ 2,157.5	$ —	$ 2,157.5	$ 2,390.0
Policy Loans	—	—	3,633.3	3,633.3	3,552.5
Other Long-term Investments					
Miscellaneous Long-term Investments	—	15.7	1.1	16.8	16.8
Total Financial Instrument Assets Not Carried at Fair Value	$ —	$ 2,173.2	$ 3,634.4	$ 5,807.6	$ 5,959.3
Liabilities					
Long-term Debt	$ 2,630.7	$ 517.2	$ —	$ 3,147.9	$ 3,428.5
Other Liabilities					
Unfunded Commitments	—	0.7	—	0.7	0.7
Payable for Collateral on FHLB Funding Agreements	—	68.0	—	68.0	68.0
Total Financial Instrument Liabilities Not Carried at Fair Value	$ 2,630.7	$ 585.9	$ —	$ 3,216.6	$ 3,497.2

Note 3 - Fair Value of Financial Instruments - Continued

	December 31, 2022				
	Estimated Fair Value				
	Level 1	Level 2	Level 3	Total	Carrying Value
	(in millions of dollars)				
Assets					
Mortgage Loans	$ —	$ 2,159.5	$ —	$ 2,159.5	$ 2,435.4
Policy Loans	—	—	3,677.0	3,677.0	3,601.2
Other Long-term Investments					
Miscellaneous Long-term Investments	—	17.1	1.3	18.4	18.4
Total Financial Instrument Assets Not Carried at Fair Value	$ —	$ 2,176.6	$ 3,678.3	$ 5,854.9	$ 6,055.0
Liabilities					
Long-term Debt	$ 2,288.9	$ 783.1	$ —	$ 3,072.0	$ 3,427.8
Other Liabilities					
Unfunded Commitments	—	0.7	—	0.7	0.7
Payable for Collateral on FHLB Funding Agreements	—	99.1	—	99.1	99.1
Total Financial Instrument Liabilities Not Carried at Fair Value	$ 2,288.9	$ 882.9	$ —	$ 3,171.8	$ 3,527.6

The carrying values of financial instruments such as short-term investments, cash and bank deposits, accounts and premiums receivable, accrued investment income, securities lending agreements, and short-term debt approximate fair value due to the short-term nature of the instruments. As such, these financial instruments are not included in the above chart.

Fair values for insurance contracts other than investment contracts are not required to be disclosed. However, the fair values of liabilities under all insurance contracts are taken into consideration in our overall management of interest rate risk, which seeks to minimize exposure to changing interest rates through the matching of investment maturities with amounts due under insurance contracts.

Note 4 - Investments

Fixed Maturity Securities

At March 31, 2023 and December 31, 2022, all fixed maturity securities were classified as available-for-sale. The amortized cost and fair values of securities by security type are shown as follows:

	March 31, 2023				
	Amortized Cost, Gross of ACL[1]	ACL[1]	Gross Unrealized Gain	Gross Unrealized Loss	Fair Value
	(in millions of dollars)				
United States Government and Government Agencies and Authorities	$ 529.9	$ —	$ 28.8	$ 17.4	$ 541.3
States, Municipalities, and Political Subdivisions	4,012.1	—	132.1	503.0	3,641.2
Foreign Governments	935.1	—	46.4	105.5	876.0
Public Utilities	5,301.5	—	227.9	285.0	5,244.4
Mortgage/Asset-Backed Securities	586.7	—	9.9	20.3	576.3
All Other Corporate Bonds	26,732.5	—	639.9	2,095.0	25,277.4
Redeemable Preferred Stocks	4.0	—	—	0.4	3.6
Total Fixed Maturity Securities	$ 38,101.8	$ —	$ 1,085.0	$ 3,026.6	$ 36,160.2

	December 31, 2022				
	Amortized Cost, Gross of ACL[1]	ACL[1]	Gross Unrealized Gain	Gross Unrealized Loss	Fair Value
	(in millions of dollars)				
United States Government and Government Agencies and Authorities	$ 503.8	$ —	$ 20.3	$ 25.9	$ 498.2
States, Municipalities, and Political Subdivisions	4,006.0	—	87.1	635.9	3,457.2
Foreign Governments	908.1	—	34.9	115.9	827.1
Public Utilities	5,170.9	—	141.0	355.0	4,956.9
Mortgage/Asset-Backed Securities	592.1	—	8.2	27.0	573.3
All Other Corporate Bonds	26,640.3	—	452.1	2,567.8	24,524.6
Redeemable Preferred Stocks	4.0	—	—	0.5	3.5
Total Fixed Maturity Securities	$ 37,825.2	$ —	$ 743.6	$ 3,728.0	$ 34,840.8

[1]Allowance for Credit Losses

Note 4 - Investments - Continued

The following charts indicate the length of time our fixed maturity securities have been in a gross unrealized loss position.

	March 31, 2023			
	Less Than 12 Months		12 Months or Greater	
	Fair Value	Gross Unrealized Loss	Fair Value	Gross Unrealized Loss
	(in millions of dollars)			
United States Government and Government Agencies and Authorities	$ 132.2	$ 6.6	$ 101.1	$ 10.8
States, Municipalities, and Political Subdivisions	574.0	31.7	1,657.5	471.3
Foreign Governments	130.2	34.9	207.4	70.6
Public Utilities	1,341.2	92.5	808.0	192.5
Mortgage/Asset-Backed Securities	320.0	13.4	73.3	6.9
All Other Corporate Bonds	10,031.0	573.6	7,168.4	1,521.4
Redeemable Preferred Stocks	—	—	3.6	0.4
Total Fixed Maturity Securities	$ 12,528.6	$ 752.7	$ 10,019.3	$ 2,273.9

	December 31, 2022			
	Less Than 12 Months		12 Months or Greater	
	Fair Value	Gross Unrealized Loss	Fair Value	Gross Unrealized Loss
	(in millions of dollars)			
United States Government and Government Agencies and Authorities	$ 246.6	$ 22.6	$ 12.2	$ 3.3
States, Municipalities, and Political Subdivisions	1,920.1	476.1	346.6	159.8
Foreign Governments	160.1	47.9	176.9	68.0
Public Utilities	2,242.2	252.0	255.2	103.0
Mortgage/Asset-Backed Securities	386.6	27.0	0.1	—
All Other Corporate Bonds	15,865.6	1,799.7	2,194.1	768.1
Redeemable Preferred Stocks	3.5	0.5	—	—
Total Fixed Maturity Securities	$ 20,824.7	$ 2,625.8	$ 2,985.1	$ 1,102.2

Note 4 - Investments - Continued

The following is a distribution of the maturity dates for fixed maturity securities. The maturity dates have not been adjusted for possible calls or prepayments.

	March 31, 2023				
	Amortized Cost, Net of ACL[1]	Unrealized Gain Position		Unrealized Loss Position	
		Gross Gain	Fair Value	Gross Loss	Fair Value
	(in millions of dollars)				
1 year or less	$ 1,211.7	$ 3.0	$ 315.2	$ 5.3	$ 894.2
Over 1 year through 5 years	7,335.7	107.8	2,235.8	209.6	4,998.1
Over 5 years through 10 years	9,835.9	385.0	4,069.5	697.3	5,454.1
Over 10 years	19,131.8	579.3	6,808.8	2,094.1	10,808.2
	37,515.1	1,075.1	13,429.3	3,006.3	22,154.6
Mortgage/Asset-Backed Securities	586.7	9.9	183.0	20.3	393.3
Total Fixed Maturity Securities	$ 38,101.8	$ 1,085.0	$ 13,612.3	$ 3,026.6	$ 22,547.9

	December 31, 2022				
	Amortized Cost, Net of ACL[1]	Unrealized Gain Position		Unrealized Loss Position	
		Gross Gain	Fair Value	Gross Loss	Fair Value
	(in millions of dollars)				
1 year or less	$ 1,133.5	$ 2.9	$ 339.1	$ 5.7	$ 791.6
Over 1 year through 5 years	7,090.8	86.7	1,953.2	238.4	4,985.9
Over 5 years through 10 years	10,096.7	294.8	3,538.9	863.8	5,988.8
Over 10 years	18,912.1	351.0	5,013.2	2,593.1	11,656.8
	37,233.1	735.4	10,844.4	3,701.0	23,423.1
Mortgage/Asset-Backed Securities	592.1	8.2	186.6	27.0	386.7
Total Fixed Maturity Securities	$ 37,825.2	$ 743.6	$ 11,031.0	$ 3,728.0	$ 23,809.8

[1]Allowance for Credit Losses

The following chart depicts an analysis of our fixed maturity security portfolio between investment-grade and below-investment-grade categories as of March 31, 2023:

			Gross Unrealized Loss	
	Fair Value	Gross Unrealized Gain	Amount	Percent of Total Gross Unrealized Loss
	(in millions of dollars)			
Investment-Grade	$ 34,194.2	$ 1,070.5	$ 2,876.7	95.0 %
Below-Investment-Grade	1,966.0	14.5	149.9	5.0
Total Fixed Maturity Securities	$ 36,160.2	$ 1,085.0	$ 3,026.6	100.0 %

The unrealized losses on investment-grade fixed maturity securities principally relate to changes in interest rates or changes in market or sector credit spreads which occurred subsequent to the acquisition of the securities. Below-investment-grade fixed maturity securities are generally more likely to develop credit concerns than investment-grade securities. At March 31, 2023, the unrealized losses in our below-investment-grade fixed maturity securities were generally due to credit spreads in certain industries or sectors and, to a lesser extent, credit concerns related to specific securities. For each specific security in an unrealized loss position, we believe that there are positive factors which mitigate credit concerns and that the securities for

Note 4 - Investments - Continued

which we have not recorded a credit loss will recover in value. We have the ability and intent to continue to hold these securities to recovery of amortized cost and believe that no credit losses have occurred.

As of March 31, 2023, we held 857 individual investment-grade fixed maturity securities and 105 individual below-investment-grade fixed maturity securities that were in an unrealized loss position, of which 593 investment-grade fixed maturity securities and 71 below-investment-grade fixed maturity securities had been in an unrealized loss position continuously for over one year.

In determining when a decline in fair value below amortized cost of a fixed maturity security represents a credit loss, we evaluate the following factors:

- Whether we expect to recover the entire amortized cost basis of the security
- Whether we intend to sell the security or will be required to sell the security before the recovery of its amortized cost basis
- Whether the security is current as to principal and interest payments
- The significance of the decline in value
- Current and future business prospects and trends of earnings
- The valuation of the security's underlying collateral
- Relevant industry conditions and trends relative to their historical cycles
- Market conditions
- Rating agency and governmental actions
- Bid and offering prices and the level of trading activity
- Adverse changes in estimated cash flows for securitized investments
- Changes in fair value subsequent to the balance sheet date
- Any other key measures for the related security

While determining whether a credit loss exists is a judgmental area, we utilize a formal, well-defined, and disciplined process to monitor and evaluate our fixed income investment portfolio, supported by issuer specific research and documentation as of the end of each period. The process results in a thorough evaluation of investments and the recording of credit losses on a timely basis for investments determined to have a credit loss. We calculate the allowance for credit losses of fixed maturity securities based on the present value of our best estimate of cash flows expected to be collected, discounted using the effective interest rate implicit in the security at the date of acquisition. When estimating future cash flows, we analyze the strength of the issuer’s balance sheet, its debt obligations and near-term funding arrangements, cash flow and liquidity, the profitability of its core businesses, the availability of marketable assets which could be sold to increase liquidity, its industry fundamentals and regulatory environment, and its access to capital markets.

The following table presents a rollforward of the allowance for credit losses on available-for-sale fixed maturity securities at March 31, 2022:

	Three Months Ended March 31	
	2023	2022
	(in millions of dollars)	
Balance, beginning of period	$ —	$ —
Credit losses on securities for which credit losses were not previously recorded	—	4.1
Balance, end of period	$ —	$ 4.1

At March 31, 2023, we had commitments of $47.1 million to fund private placement fixed maturity securities, the amount of which may or may not be funded.

Variable Interest Entities

We invest in variable interests issued by variable interest entities. These investments, which are passive in nature, include minority ownership interests in private equity partnerships, tax credit partnerships, and special purpose entities. For those

Note 4 - Investments - Continued

variable interests that are not consolidated in our financial statements, we are not the primary beneficiary because we have neither the power to direct the activities that are most significant to economic performance nor the responsibility to absorb a majority of the expected losses. The determination of whether we are the primary beneficiary is performed at the time of our initial investment and at the date of each subsequent reporting period.

As of March 31, 2023, the carrying amount of our variable interest entity investments that are not consolidated in our financial statements was $1,229.7 million, comprised of $0.9 million of tax credit partnerships and $1,228.8 million of private equity partnerships. At December 31, 2022, the carrying amount of our variable interest entity investments that are not consolidated in our financial statements was $1,195.3 million, comprised of $1.0 million of tax credit partnerships and $1,194.3 million of private equity partnerships. These variable interest entity investments are reported as other long-term investments in our consolidated balance sheets.

Mortgage Loans

Our mortgage loan portfolio is well diversified by both geographic region and property type to reduce risk of concentration. All of our mortgage loans are collateralized by commercial real estate. When issuing a new loan, our general policy is not to exceed a loan-to-value ratio, or the ratio of the loan balance to the estimated fair value of the underlying collateral, of 75 percent. We update the loan-to-value ratios based on an internal valuation of the collateral at least every three years for each loan, and properties undergo a general inspection at least every two years. Our general policy for newly issued loans is to have a debt service coverage ratio greater than 1.25 times on a normalized 25 year amortization period. We update our debt service coverage ratios annually.

We carry our mortgage loans at amortized cost less an allowance for expected credit losses. The amortized cost of our mortgage loans was $2,400.0 million and $2,444.7 million at March 31, 2023 and December 31, 2022, respectively. The allowance for expected credit losses was $10.0 million and $9.3 million at March 31, 2023 and December 31, 2022, respectively. Interest income is accrued on the principal amount of the loan based on the loan's contractual interest rate. We report accrued interest income for our mortgage loans as accrued investment income on our consolidated balance sheets, and the amount of the accrued income was $7.4 million and $7.7 million at March 31, 2023 and December 31, 2022, respectively.

Note 4 - Investments - Continued

The carrying amount of mortgage loans by property type and geographic region are presented below.

	March 31, 2023		December 31, 2022	
	(in millions of dollars)			
	Carrying Amount	Percent of Total	Carrying Amount	Percent of Total
Property Type				
Apartment	$ 683.8	28.6 %	$ 688.6	28.3 %
Industrial	709.7	29.7	745.3	30.6
Office	423.3	17.7	423.0	17.4
Retail	529.6	22.2	534.5	21.9
Other	43.6	1.8	44.0	1.8
Total	$ 2,390.0	100.0 %	$ 2,435.4	100.0 %
Region				
New England	$ 56.8	2.4 %	$ 52.4	2.2 %
Mid-Atlantic	190.3	8.0	192.4	7.9
East North Central	303.8	12.7	313.0	12.9
West North Central	179.5	7.5	181.4	7.4
South Atlantic	547.5	22.9	539.3	22.1
East South Central	100.9	4.2	101.8	4.2
West South Central	210.5	8.8	212.6	8.7
Mountain	296.6	12.4	298.7	12.3
Pacific	504.1	21.1	543.8	22.3
Total	$ 2,390.0	100.0 %	$ 2,435.4	100.0 %

The risk in our mortgage loan portfolio is primarily related to vacancy rates. Events or developments, such as economic conditions that impact the ability of the borrowers to ensure occupancy of the property, may have a negative effect on our mortgage loan portfolio, particularly to the extent that our portfolio is concentrated in an affected region or property type. An increase in vacancies increases the probability of default, which would negatively affect our expected losses in our mortgage loan portfolio.

We evaluate each of our mortgage loans individually for impairment and assign an internal quality rating based on a comprehensive rating system used to evaluate the risk of the loan. The factors we use to derive our internal quality ratings may include the following:

- Loan-to-value ratio based on internal valuation of the property
- Debt service coverage ratio based on current operating income
- Property location, including regional economics, trends, and demographics
- Age, condition, and construction quality of property
- Current and historical occupancy of property
- Lease terms relative to market
- Tenant size and financial strength
- Borrower's financial strength
- Borrower's equity in transaction
- Additional collateral, if any

Although all available and applicable factors are considered in our analysis, loan-to-value and debt service coverage ratios are the most critical factors in determining whether we will initially issue the loan and also in assigning values and determining impairment. We assign an overall rating to each loan using an internal rating scale of AA (highest quality) to B (lowest

Note 4 - Investments - Continued

quality). We review and adjust, as needed, our internal quality ratings on an annual basis. This review process is performed more frequently for mortgage loans deemed to have a higher risk of delinquency.

We estimate an allowance for credit losses that we expect to incur over the life of our mortgage loans using a probability of default method. For each loan, we estimate the probability that the loan will default before its maturity (probability of default) and the amount of the loss if the loan defaults (loss given default). These two factors result in an expected loss percentage that is applied to the amortized cost of each loan to determine the expected credit loss. As we are the original underwriter of the mortgage loans, the amortized cost generally equals the principal amount of the loan. We measure losses on defaults of our mortgage loans as the excess amortized cost of the mortgage loan over the fair value of the underlying collateral in the event that we foreclose on the loan or over the expected future cash flows of the loan if we retain the mortgage loan until payoff. We do not purchase mortgage loans with existing credit impairments.

In estimating the probability of default, we consider historical experience, current market conditions, and reasonable and supportable forecasts about the future market conditions. We utilize our historical loan experience in combination with a large third-party industry database for a period of time that aligns with the average life of our loans based on the maturity dates of the loans and prepayment experience. Our model utilizes an industry database of the historical loss experience based on our actual portfolio characteristics such as loan-to-value, debt service coverage, collateral type, geography, and late payment history. In addition, because we actively manage our portfolio, we may extend the term of a loan in certain situations and will accordingly extend the maturity date in the estimate of probability of default. In estimating the loss given default, we primarily consider the type and value of collateral and secondarily the expected liquidation costs and time to recovery.

The primary market factors that we consider in our forecast of future market conditions are gross domestic product, unemployment rates, interest rates, inflation, commercial real estate values, household formation, and retail sales. We also forecast certain loan specific factors such as growth in the fair value and net operating income of collateral by property type. We include our estimate of these factors over a two-year period and for the remainder of the loans' estimated lives, adjusted for estimated prepayments. Past the two-year forecast period, we revert to the historical assumptions ratably by the end of the fifth year of the loan after which we utilize only historical assumptions.

We utilize various scenarios to estimate our allowance for expected losses ranging from a base case scenario that reflects normal market conditions to a severe case scenario that reflects adverse market conditions. We will adjust our allowance each period to utilize the scenario or weighting of the scenarios that best reflects our view of current market conditions.

Note 4 - Investments - Continued

The following tables present information about mortgage loans by the applicable internal quality indicators:

	March 31, 2023		December 31, 2022	
	(in millions of dollars)			
	Carrying Amount	Percent of Total	Carrying Amount	Percent of Total
Internal Mortgage Rating				
AA	$ 80.2	3.4 %	$ 92.3	3.8 %
A	803.7	33.6	843.9	34.6
BBB	1,465.2	61.3	1,458.0	59.9
BB	40.9	1.7	41.2	1.7
Total	$ 2,390.0	100.0 %	$ 2,435.4	100.0 %
Loan-to-Value Ratio[1]				
<= 65%	$ 1,352.1	56.6 %	$ 1,389.6	57.0 %
> 65% <= 75%	917.8	38.4	937.2	38.5
> 75% <= 85%	91.5	3.8	75.0	3.1
> 85%	28.6	1.2	33.6	1.4
Total	$ 2,390.0	100.0 %	$ 2,435.4	100.0 %

[1]Loan-to-Value Ratio utilizes the most recent internal valuation of the property

Note 4 - Investments - Continued

There were no gross write-offs for the periods ending March 31, 2023 or December 31, 2022. The following tables present the amortized cost of our mortgage loans by year of origination and internal quality indicators at March 31, 2023 and December 31, 2022, respectively:

	March 31, 2023						
	Prior to 2019	2019	2020	2021	2022	2023	Total
	(in millions of dollars)						
Internal Mortgage Rating							
AA	$ 69.3	$ 11.0	$ —	$ —	$ —	$ —	$ 80.3
A	569.6	96.0	35.7	80.3	23.8	—	805.4
BBB	752.4	235.6	133.1	274.1	64.6	13.2	1,473.0
BB	41.3	—	—	—	—	—	41.3
Total Amortized Cost	1,432.6	342.6	168.8	354.4	88.4	13.2	2,400.0
Allowance for credit losses	(6.2)	(1.4)	(0.6)	(1.1)	(0.6)	(0.1)	(10.0)
Carrying Amount	$ 1,426.4	$ 341.2	$ 168.2	$ 353.3	$ 87.8	$ 13.1	$ 2,390.0
Loan-to-Value Ratio[1]							
<=65%	$ 932.6	$ 197.0	$ 80.8	$ 128.0	$ 16.7	$ —	$ 1,355.1
>65<=75%	386.6	145.6	79.6	226.4	71.7	13.2	923.1
>75%<=85%	84.3	—	8.4	—	—	—	92.7
>85%	29.1	—	—	—	—	—	29.1
Total Amortized Cost	1,432.6	342.6	168.8	354.4	88.4	13.2	2,400.0
Allowance for credit losses	(6.2)	(1.4)	(0.6)	(1.1)	(0.6)	(0.1)	(10.0)
Carrying Amount	$ 1,426.4	$ 341.2	$ 168.2	$ 353.3	$ 87.8	$ 13.1	$ 2,390.0

[1]Loan-to-Value Ratio utilizes the most recent internal valuation of the property

Note 4 - Investments - Continued

	December 31, 2022						
	Prior to 2018	2018	2019	2020	2021	2022	Total
	(in millions of dollars)						
Internal Mortgage Rating							
AA	$ 53.8	$ 27.5	$ 11.1	$ —	$ —	$ —	$ 92.4
A	485.0	123.3	96.8	35.9	80.6	24.0	845.6
BBB	534.0	219.8	236.9	134.0	275.8	64.6	1,465.1
BB	35.7	5.9	—	—	—	—	41.6
Total Amortized Cost	1,108.5	376.5	344.8	169.9	356.4	88.6	2,444.7
Allowance for credit losses	(4.3)	(1.8)	(1.3)	(0.6)	(0.8)	(0.5)	(9.3)
Carrying Amount	$ 1,104.2	$ 374.7	$ 343.5	$ 169.3	$ 355.6	$ 88.1	$ 2,435.4
Loan-to-Value Ratio[1]							
<=65%	$ 782.6	$ 189.0	$ 193.9	$ 81.3	$ 128.9	$ 16.9	$ 1,392.6
>65<=75%	230.2	181.6	150.9	80.1	227.5	71.7	942.0
>75%<=85%	67.5	—	—	8.5	—	—	76.0
>85%	28.2	5.9	—	—	—	—	34.1
Total Amortized Cost	1,108.5	376.5	344.8	169.9	356.4	88.6	2,444.7
Allowance for credit losses	(4.3)	(1.8)	(1.3)	(0.6)	(0.8)	(0.5)	(9.3)
Carrying Amount	$ 1,104.2	$ 374.7	$ 343.5	$ 169.3	$ 355.6	$ 88.1	$ 2,435.4

[1]Loan-to-Value Ratio utilizes the most recent internal valuation of the property

Note 4 - Investments - Continued

The following table presents a roll-forward of allowance for expected credit losses by loan-to-value ratio for the three months ended March 31, 2023 and 2022:

	Three Months Ended March 31, 2023				
	Beginning of Year	Current Period Provisions	Write-Offs	Recoveries	End of Period
	(in millions of dollars)				
Loan-to-Value Ratio[1]					
<=65%	$ 3.0	$ —	$ —	$ —	$ 3.0
>65<=75%	4.7	0.6	—	—	5.3
>75%<=85%	1.1	0.1	—	—	1.2
>85%	0.5	—	—	—	0.5
Total	$ 9.3	$ 0.7	$ —	$ —	$ 10.0

	Three Months Ended March 31, 2022				
	Beginning of Year	Current Period Provisions	Write-Offs	Recoveries	End of Period
	(in millions of dollars)				
Loan-to-Value Ratio[1]					
<=65%	$ 2.6	$ (0.2)	$ —	$ —	$ 2.4
>65<=75%	4.7	(0.2)	—	—	4.5
>75%<=85%	0.7	—	—	—	0.7
>85%	0.3	—	—	—	0.3
Total	$ 8.3	$ (0.4)	$ —	$ —	$ 7.9

[1]Loan-to-Value Ratio utilizes the most recent internal valuation of the property

The increase in our estimate of expected losses during the first quarter of 2023 is primarily driven by heightened uncertainty surrounding the future macroeconomic outlook and reflects market conditions as of March 31, 2023.

There were no troubled debt restructurings during the three months ended March 31, 2023 and 2022. At March 31, 2023 and December 31, 2022, we held no mortgage loans that were greater than 90 days past due regarding principal and/or interest payments.

We had no loan foreclosures for the three months ended March 31, 2023 and 2022.

Other than our allowance for expected credit losses, we had no specifically identified impaired mortgage loans during three months ended March 31, 2023, or 2022, nor did we recognize any interest income on mortgage loans subsequent to impairment.

At March 31, 2023, we had no commitments to fund commercial mortgage loans. Consistent with how we determine the estimate of current expected credit losses for our funded mortgage loans each period, we estimate expected credit losses for loans that have not been funded but we are committed to fund at the end of each period. At March 31, 2023 and December 31, 2022, we had no amount and a nominal amount, respectively, of expected credit losses related to unfunded commitments on our consolidated balance sheets.

Investment Real Estate

Our real estate held for the production of income balance was $71.2 million and $71.6 million at March 31, 2023 and December 31, 2022, respectively, and the associated accumulated depreciation was $123.4 million and $122.1 million at

Note 4 - Investments - Continued

March 31, 2023 and December 31, 2022, respectively. We did not recognize any impairments related to our real estate during the quarter ended March 31, 2023 or March 31, 2022.

Our held for sale real estate balance was $95.1 million at both March 31, 2023 and December 31, 2022 and the associated accumulated depreciation was $54.2 million at both March 31, 2023 and December 31, 2022.

In the first quarter of 2022, we reclassified property previously held for the production of income to property held for sale. The carrying value of the property was $40.1 million as of both March 31, 2023 and December 31, 2022 and is primarily recorded within our Corporate segment. The estimated fair value less costs to sell is above the carrying value of the property and we expect to close the sale of the property in the second quarter of 2023.

Transfers of Financial Assets

To manage our cash position more efficiently, we may enter into repurchase agreements with unaffiliated financial institutions. We generally use repurchase agreements as a means to finance the purchase of invested assets or for short-term general business purposes until projected cash flows become available from our operations or existing investments. Our repurchase agreements are typically outstanding for less than 30 days. We post collateral through our repurchase agreement transactions whereby the counterparty commits to purchase securities with the agreement to resell them to us at a later, specified date. The fair value of collateral posted is generally 102 percent of the cash received.

Our investment policy also permits us to lend fixed maturity securities to unaffiliated financial institutions in short-term securities lending agreements. These agreements increase our investment income with minimal risk. Our securities lending policy requires that a minimum of 102 percent of the fair value of the securities loaned be maintained as collateral. We may receive cash and/or securities as collateral under these agreements. Cash received as collateral is typically reinvested in short-term investments. If securities are received as collateral, we are not permitted to sell or re-post them.

As of March 31, 2023, the carrying amount of fixed maturity securities loaned to third parties under our securities lending program was $89.3 million, for which we received collateral in the form of cash and securities of $56.6 million and $36.1 million, respectively. As of December 31, 2022, the carrying amount of fixed maturity securities loaned to third parties under our securities lending program was $152.4 million, for which we received collateral in the form of cash and securities of $88.5 million and $69.8 million, respectively. We had no outstanding repurchase agreements at March 31, 2023 or December 31, 2022.

The remaining contractual maturities of our securities lending agreements disaggregated by class of collateral pledged are as follows:

	March 31, 2023	December 31, 2022
	Overnight and Continuous	
	(in millions of dollars)	
Borrowings		
United States Government and Government Agencies and Authorities	$ —	$ 0.3
State, Municipalities, and Political Subdivisions	—	—
Public Utilities	6.5	6.3
All Other Corporate Bonds	50.1	81.9
Total Borrowings	$ 56.6	$ 88.5
Gross Amount of Recognized Liability for Securities Lending Transactions	56.6	88.5
Amounts Related to Agreements Not Included in Offsetting Disclosure Contained Herein	$ —	$ —

Certain of our U.S. insurance subsidiaries are members of regional FHLBs. Membership, which requires that we purchase a minimum amount of FHLB common stock on which we receive dividends, provides access to low-cost funding. Advances

received from the FHLB are used for the purchase of fixed maturity securities. Additional common stock purchases may be required, based on the amount of funds we borrow from the FHLBs. The carrying value of common stock owned, collateral posted, and advances received are as follows:

	March 31, 2023	December 31, 2022
	(in millions of dollars)	
Carrying Value of FHLB Common Stock	$ 15.7	$ 17.1
Advances from FHLB	68.0	99.1
Carrying Value of Collateral Posted to FHLB		
Fixed Maturity Securities	$ 420.2	$ 527.1
Commercial Mortgage Loans	783.9	801.9
Total Carrying Value of Collateral Posted to FHLB	$ 1,204.1	$ 1,329.0

Offsetting of Financial Instruments

We enter into master netting agreements with each of our derivative's counterparties. These agreements provide for conditional rights of set-off upon the occurrence of an early termination event. An early termination event is considered a default, and it allows the non-defaulting party to offset its contracts in a loss position against any gain positions or payments due to the defaulting party. Under our agreements, default type events are defined as failure to pay or deliver as contractually agreed, misrepresentation, bankruptcy, or merger without assumption. See Note 5 for further discussion of collateral related to our derivative contracts.

We have securities lending agreements with unaffiliated financial institutions that post collateral to us in return for the use of our fixed maturity securities. A right of set-off exists that allows us to keep and apply collateral received in the event of default by the counterparty. Default within a securities lending agreement would typically occur if the counterparty failed to return the securities borrowed from us as contractually agreed. In addition, if we default by not returning collateral received, the counterparty has a right of set-off against our securities or any other amounts due to us.

Note 4 - Investments - Continued

Shown below are our financial instruments that either meet the accounting requirements that allow them to be offset in our balance sheets or that are subject to an enforceable master netting arrangement or similar agreement. Our accounting policy is to not offset these financial instruments in our balance sheets. Net amounts disclosed below have been reduced by the amount of collateral pledged to or received from our counterparties.

	March 31, 2023					
	Gross Amount of Recognized Financial Instruments	Gross Amount Offset in Balance Sheet	Net Amount Presented in Balance Sheet	Gross Amount Not Offset in Balance Sheet		Net Amount
				Financial Instruments	Cash Collateral	
	(in millions of dollars)					
Financial Assets:						
Derivatives	$ 95.1	$ —	$ 95.1	$ (36.0)	$ (51.2)	$ 7.9
Securities Lending	89.3	—	89.3	(32.7)	(56.6)	—
Total	$ 184.4	$ —	$ 184.4	$ (68.7)	$ (107.8)	$ 7.9
Financial Liabilities:						
Derivatives	$ 49.3	$ —	$ 49.3	$ (49.1)	$ —	$ 0.2
Securities Lending	56.6	—	56.6	(56.6)	—	—
Total	$ 105.9	$ —	$ 105.9	$ (105.7)	$ —	$ 0.2

	December 31, 2022					
	Gross Amount of Recognized Financial Instruments	Gross Amount Offset in Balance Sheet	Net Amount Presented in Balance Sheet	Gross Amount Not Offset in Balance Sheet		Net Amount
				Financial Instruments	Cash Collateral	
	(in millions of dollars)					
Financial Assets:						
Derivatives	$ 89.1	$ —	$ 89.1	$ (38.0)	$ (49.4)	$ 1.7
Securities Lending	152.4	—	152.4	(63.9)	(88.5)	—
Total	$ 241.5	$ —	$ 241.5	$ (101.9)	$ (137.9)	$ 1.7
Financial Liabilities:						
Derivatives	$ 74.0	$ —	$ 74.0	$ (73.2)	$ —	$ 0.8
Securities Lending	88.5	—	88.5	(88.5)	—	—
Total	$ 162.5	$ —	$ 162.5	$ (161.7)	$ —	$ 0.8

Note 4 - Investments - Continued

Net Investment Income

Net investment income reported in our consolidated statements of income is presented below.

	Three Months Ended March 31	
	2023	2022
	(in millions of dollars)	
Fixed Maturity Securities	$ 455.1	$ 455.5
Derivatives	11.9	14.4
Mortgage Loans	23.4	27.0
Policy Loans	5.0	4.7
Other Long-term Investments		
Perpetual Preferred Securities[1]	0.9	2.9
Private Equity Partnerships[2]	14.3	32.4
Other	1.8	2.1
Short-term Investments	14.1	0.8
Gross Investment Income	526.5	539.8
Less Investment Expenses	14.7	9.6
Less Investment Income on Participation Fund Account Assets	3.0	3.0
Net Investment Income	$ 508.8	$ 527.2

[1]The net unrealized gain (loss) recognized in net investment income for the three months ended March 31, 2023 related to perpetual preferred securities still held at March 31, 2023 was $0.7 million. The net unrealized gain (loss) recognized in net investment income for the three months ended March 31, 2022 related to perpetual preferred securities still held at March 31, 2022 was $2.4 million.

[2]The net unrealized gain (loss) recognized in net investment income for the three months ended March 31, 2023 related to private equity partnerships still held at March 31, 2023 was $17.8 million, reduced by net management fees and partnership expenses of $(3.5) million. The net unrealized gain (loss) recognized in net investment income for the three months ended March 31, 2022 related to private equity partnerships still held at March 31, 2022 was $36.2 million, reduced by net management fees and partnership expense of $(3.8) million. See Note 3 for further discussion of private equity partnerships.

Note 4 - Investments - Continued

Investment Gain and Loss

Investment gains and losses are as follows:

	Three Months Ended March 31	
	2023	2022
	(in millions of dollars)	
Fixed Maturity Securities		
Gross Gains on Sales	$ 0.5	$ 0.3
Gross Losses on Sales	(0.2)	(8.8)
Credit Losses	—	(4.1)
Mortgage Loans and Other Invested Assets		
Gross Gains on Sales	0.2	1.4
Gross Losses on Sales	—	—
Change in Allowance for Credit Losses	(0.7)	0.5
Embedded Derivative in Modified Coinsurance Arrangement	0.3	(3.4)
All Other Derivatives	(0.6)	1.8
Foreign Currency Transactions	0.6	(1.5)
Net Investment Gain (Loss)	$ 0.1	$ (13.8)

Note 5 - Derivative Financial Instruments

Purpose of Derivatives

We are exposed to certain risks relating to our ongoing business operations. The primary risks managed by using derivative instruments are interest rate risk, risk related to matching duration for our assets and liabilities, foreign currency risk, credit risk, and equity risk. Historically, we have utilized current and forward interest rate swaps, current and forward currency swaps, forward benchmark interest rate locks, currency forward contracts, forward contracts on specific fixed income securities, credit default swaps, and total return swaps. Transactions hedging interest rate risk are primarily associated with our individual and group long-term care and individual and group disability products. All other product portfolios are periodically reviewed to determine if hedging strategies would be appropriate for risk management purposes. We do not use derivative financial instruments for speculative purposes.

Derivatives designated as cash flow hedges and used to reduce our exposure to interest rate and duration risk are as follows:

- *Interest rate swaps* were used to hedge interest rate risks and to improve the matching of assets and liabilities. An interest rate swap is an agreement in which we agree with other parties to exchange, at specified intervals, the difference between fixed rate and variable rate interest amounts. We used interest rate swaps to hedge the anticipated purchase of fixed maturity securities thereby protecting us from the potential adverse impact of declining interest rates on the associated policy reserves. We also used interest rate swaps to hedge the potential adverse impact of rising interest rates in anticipation of issuing fixed rate long-term debt.

- *Forward benchmark interest rate locks* are used to minimize interest rate risk associated with the anticipated purchase or disposal of fixed maturity securities or the anticipated issuance of fixed rate long term debt. A forward benchmark interest rate lock is a derivative contract without an initial investment where we and the counterparty agree to purchase or sell a specific benchmark interest rate fixed maturity bond at a future date at a pre-determined price or yield.

Note 5 - Derivative Financial Instruments - Continued

Derivatives designated as either cash flow or fair value hedges and used to reduce our exposure to foreign currency risk are as follows:

- *Foreign currency interest rate swaps* are used to hedge the currency risk of certain foreign currency-denominated fixed maturity securities owned for portfolio diversification. Under these swap agreements, we agree to pay, at specified intervals, fixed rate foreign currency-denominated principal and interest payments in exchange for fixed rate payments in the functional currency of the operating segment.

Derivatives not designated as hedging instruments and used to reduce our exposure to foreign currency risk, credit losses on securities owned, and volatility of the underlying deferred assets in our non-qualified defined contribution plan are as follows:

- *Foreign currency interest rate swaps* previously designated as hedges were used to hedge the currency risk of certain foreign currency-denominated fixed maturity securities owned for portfolio diversification. These derivatives were effective hedges prior to novation to a new counterparty. In conjunction with the novation, these derivatives were de-designated as hedges. We agree to pay, at specified intervals, fixed rate foreign currency-denominated principal and interest payments in exchange for fixed rate payments in the functional currency of the operating segment. We hold offsetting swaps wherein we agree to pay fixed rate principal and interest payments in the functional currency of the operating segment in exchange for fixed rate foreign currency-denominated payments.

- *Credit default swaps* were used as economic hedges against credit risk but do not qualify for hedge accounting. A credit default swap is an agreement in which we agree with another party to pay, at specified intervals, a fixed-rate fee in exchange for insurance against a credit event on a specific investment. If a defined credit event occurred, our counterparty could have either paid us a net cash settlement, or we could have surrendered the specific investment to them in exchange for cash equal to the full notional amount of the swap. Credit events typically include events such as bankruptcy, failure to pay, or certain types of debt restructuring.

- *Foreign currency forward* contracts are used to minimize foreign currency risk. A foreign currency forward is a derivative without an initial investment where we and the counterparty agree to exchange a specific amount of currencies, at a specific exchange rate, on a specific date. We use these forward contracts to hedge the currency risk arising from foreign-currency denominated investments.

- *Total Return Swap*s are used to economically hedge a portion of the liability related to our non-qualified defined contribution plan. A total return swap is an agreement in which we pay a floating rate of interest to the counterparty and receive the total return on a portfolio of exchange traded funds. These swaps are cash settled on the last day of every month and the notional is re-established each month based on periodic distributions from and contributions to the plan assets.

Note 5 - Derivative Financial Instruments - Continued

Derivative Risks

The basic types of risks associated with derivatives are market risk (that the value of the derivative will be adversely impacted by changes in the market, primarily the change in interest and exchange rates) and credit risk (that the counterparty will not perform according to the terms of the contract). The market risk of the derivatives should generally offset the market risk associated with the hedged financial instrument or liability. To help limit the credit exposure of the derivatives, we enter into master netting agreements with our counterparties whereby contracts in a gain position can be offset against contracts in a loss position. We also typically enter into bilateral, cross-collateralization agreements with our counterparties to help limit the credit exposure of the derivatives. These agreements require the counterparty in a loss position to submit acceptable collateral with the other counterparty in the event the net loss position meets or exceeds an agreed upon amount. Credit exposure on derivatives is limited to the value of those contracts in a net gain position, including accrued interest receivable less collateral held. At March 31, 2023 and December 31, 2022, we had $7.9 million and $1.7 million credit exposure on derivatives, respectively. The table below summarizes the nature and amount of collateral received from and posted to our derivative counterparties.

	March 31, 2023	December 31, 2022
	(in millions of dollars)	
Carrying Value of Collateral Received from Counterparties		
Cash	$ 52.0	$ 49.4
Carrying Value of Collateral Posted to Counterparties		
Cash	$ —	$ 5.1
Fixed Maturity Securities	18.4	39.6
	$ 18.4	$ 44.7

See Note 4 for further discussion of our master netting agreements.

The majority of our derivative instruments contain provisions that require us to maintain specified issuer credit ratings and financial strength ratings. Should our ratings fall below these specified levels, we would be in violation of the provisions, and our derivatives counterparties could terminate our contracts and request immediate payment. The aggregate fair value of all derivative instruments with credit risk-related contingent features that were in a liability position was $49.3 million and $74.0 million at March 31, 2023 and December 31, 2022, respectively.

Cash Flow Hedges

As of March 31, 2023 and December 31, 2022, we had $168.9 million notional amount of receive fixed, pay fixed, open current and forward foreign currency interest rate swaps to hedge fixed income foreign currency-denominated securities.

As of March 31, 2023 and December 31, 2022, we had $1,114.0 million and $764.0 million, respectively, notional amount of forward benchmark interest rate locks to hedge the anticipated purchase of fixed maturity securities.

As of March 31, 2023, we expect to amortize approximately $30.9 million of net deferred gains on derivative instruments during the next twelve months. This amount will be reclassified from accumulated other comprehensive income into earnings and reported on the same income statement line item as the hedged item. The income statement line items that will be affected by this amortization are net investment income and interest and debt expense. Additional amounts that may be reclassified from accumulated other comprehensive income into earnings to offset the earnings impact of foreign currency translation of hedged items are not estimable.

As of March 31, 2023, we are hedging the variability of future cash flows associated with forecasted transactions through the year 2052.

Note 5 - Derivative Financial Instruments - Continued

Fair Value Hedges

As of March 31, 2023 and December 31, 2022, we had $590.4 million and $557.8 million, respectively, notional amount of receive fixed, pay fixed, open current and forward foreign currency interest rate swaps to hedge fixed income foreign currency-denominated securities.

The following table summarizes the carrying amount of hedged assets and the related cumulative basis adjustments related to our fair value hedges:

	Carrying Amount of Hedged Assets		Cumulative Amount of Fair Value Hedging Adjustment Included in the Carrying Amount of the Hedged Assets	
	March 31, 2023	December 31, 2022	March 31, 2023	December 31, 2022
	(in millions of dollars)			
Fixed maturity securities:				
Receive fixed functional currency interest, pay fixed foreign currency interest	$ 407.0	$ 394.4	$ (21.6)	$ (24.8)

For the three months ended March 31, 2023 and March 31, 2022, $2.5 million and $3.3 million respectively, of the derivative instruments' gain (loss) was excluded from the assessment of hedge effectiveness. There were no instances wherein we discontinued fair value hedge accounting due to a hedged firm commitment no longer qualifying as a fair value hedge.

Derivatives not Designated as Hedging Instruments

As of March 31, 2023 and December 31, 2022, we held $132.0 million notional amount of receive fixed, pay fixed, foreign currency interest rate swaps. These derivatives are not designated as hedges, and as such, changes in fair value related to these derivatives are reported in earnings as a component of net investment gain or loss.

As of March 31, 2023 and December 31, 2022, we held $54.4 million and $54.3 million, respectively, notional amount of foreign currency forwards to mitigate the foreign currency risk associated with specific securities owned. These derivatives are not designated as hedges, and as such, changes in fair value related to these derivatives are reported in earnings as a component of net investment gain or loss.

As of March 31, 2023 and December 31, 2022, we held $84.3 million and $76.9 million, respectively, notional amount of total return swaps to mitigate the volatility associated with changes in the fair value of the underlying notional assets in our non-qualified defined contribution plan. This derivative is an economic hedge not designated as a hedging instrument, and changes in fair value are reported as a component of other expenses in our income statement.

We have an embedded derivative in a modified coinsurance arrangement for which we include in our net investment gains and losses a calculation intended to estimate the value of the option of our reinsurance counterparty to cancel the reinsurance contract with us. However, neither party can unilaterally terminate the reinsurance agreement except in extreme circumstances resulting from regulatory supervision, delinquency proceedings, or other direct regulatory action. Cash settlements or collateral related to this embedded derivative are not required at any time during the reinsurance contract or at termination of the reinsurance contract. There are no credit-related counterparty triggers, and any accumulated embedded derivative gain or loss reduces to zero over time as the reinsured business winds down.

Locations and Amounts of Derivative Financial Instruments

The following tables summarize the notional amounts and fair values of derivative financial instruments, as reported in our consolidated balance sheets. Derivative assets are included in other long-term investments, while derivative liabilities are included in other liabilities within our consolidated balance sheets. The notional amounts represent the basis upon which our counterparty pay and receive amounts are calculated.

Note 5 - Derivative Financial Instruments - Continued

	March 31, 2023		
		Derivative Assets	Derivative Liabilities
	Notional Amount	Fair Value	Fair Value
		(in millions of dollars)	
Designated as Hedging Instruments			
Cash Flow Hedges			
Forward Benchmark Interest Rate Locks	$ 1,114.0	$ 9.0	$ 23.8
Foreign Currency Interest Rate Swaps	168.9	17.6	3.3
Total Cash Flow Hedges	1,282.9	26.6	27.1
Fair Value Hedges			
Foreign Currency Interest Rate Swaps	590.4	64.8	4.9
Total Designated as Hedging Instruments	$ 1,873.3	$ 91.4	$ 32.0
Not Designated as Hedging Instruments			
Foreign Currency Forwards	$ 54.4	$ 3.7	$ —
Foreign Currency Interest Rate Swaps	132.0	—	17.3
Total Return Swaps	84.3	—	—
Embedded Derivative in Modified Coinsurance Arrangement	—	—	13.6
Total Not Designated as Hedging Instruments	$ 270.7	$ 3.7	$ 30.9
Total Derivatives	$ 2,144.0	$ 95.1	$ 62.9

Note 5 - Derivative Financial Instruments - Continued

	December 31, 2022		
		Derivative Assets	Derivative Liabilities
	Notional Amount	Fair Value	Fair Value
		(in millions of dollars)	
Designated as Hedging Instruments			
Cash Flow Hedges			
Forward Benchmark Interest Rate Locks	$ 764.0	$ 1.6	$ 48.4
Foreign Currency Interest Rate Swaps	168.9	17.5	3.1
Total Cash Flow Hedges	932.9	19.1	51.5
Fair Value Hedges			
Foreign Currency Interest Rate Swaps	557.8	66.0	5.4
Total Designated as Hedging Instruments	$ 1,490.7	$ 85.1	$ 56.9
Not Designated as Hedging Instruments			
Foreign Currency Forwards	$ 54.3	$ 4.0	$ 0.1
Foreign Currency Interest Rate Swaps	132.0	—	17.0
Total Return Swaps	76.9	—	—
Embedded Derivative in Modified Coinsurance Arrangement	—	—	13.9
Total Not Designated as Hedging Instruments	$ 263.2	$ 4.0	$ 31.0
Total Derivatives	$ 1,753.9	$ 89.1	$ 87.9

Note 5 - Derivative Financial Instruments - Continued

The following tables summarize the location of gains and losses of derivative financial instruments designated as hedging instruments, as reported in our consolidated statements of income.

	Three Months Ended March 31					
	2023			2022		
	Net Investment Income	Net Investment Gain (Loss)	Interest and Debt Expense	Net Investment Income	Net Investment Gain (Loss)	Interest and Debt Expense
	(in millions of dollars)					
Total Income and Expense Presented in the Consolidated Statements of Income of Which Hedged Items are Recorded	$ 508.8	$ 0.1	$ 48.1	$ 527.2	$ (13.8)	$ 46.9
Gain (Loss) on Cash Flow Hedging Relationships						
Interest Rate Swaps:						
Hedged items	49.5	—	0.7	50.4	—	0.7
Derivatives Designated as Hedging Instruments	10.4	—	—	13.4	—	—
Foreign Exchange Contracts:						
Hedged items	2.5	—	—	2.8	—	—
Derivatives Designated as Hedging Instruments	0.3	—	—	0.2	—	—
Forward Benchmark Interest Rate Locks:						
Hedged items	0.7	—	—	—	—	—
Derivatives Designated as Hedging Instruments	—	—	—	—	—	—
Gain (Loss) on Fair Value Hedging Relationships						
Foreign Exchange Contracts						
Hedged items	3.2	3.2	—	2.7	(5.3)	—
Derivatives Designated as Hedging Instruments	1.3	(3.2)	—	1.4	5.3	—

The following table summarizes the location of gains and losses of derivative financial instruments designated as cash flow hedging instruments, as reported in our consolidated statements of comprehensive income (loss).

	Three Months Ended March 31	
	2023	2022
	(in millions of dollars)	
Gain (Loss) Recognized in Other Comprehensive Income (Loss) on Derivatives		
Forwards	$ 29.9	$ (1.0)
Foreign Exchange Contracts	(0.2)	(2.1)
Total	$ 29.7	$ (3.1)

Note 5 - Derivative Financial Instruments - Continued

The following table summarizes the location of gains and losses on our derivatives not designated as hedging instruments, as reported in our consolidated statements of income.

	Three Months Ended March 31	
	2023	2022
	(in millions of dollars)	
Net Investment Gain (Loss)		
Foreign Exchange Contracts	$ (0.6)	$ 1.8
Embedded Derivative in Modified Coinsurance Arrangement	0.3	(3.4)
Total	$ (0.3)	$ (1.6)
Other Expenses		
(Gain) Loss on Total Return Swaps	$ (4.6)	$ 5.7

Note 6 - Accumulated Other Comprehensive Loss

Components of our accumulated other comprehensive loss, after tax, and related changes are as follows:

	Net Unrealized Gain (Loss) on Securities	Effect of Change in Discount Rate Assumptions on the LFPB[1]	Net Gain (Loss) on Hedges	Foreign Currency Translation Adjustment	Unrecognized Pension and Postretirement Benefit Costs	Total
	(in millions of dollars)					
Balance at December 31, 2022	$ (3,028.4)	$ 313.9	$ (9.6)	$ (390.1)	$ (334.1)	$ (3,448.3)
Other Comprehensive Income (Loss) Before Reclassifications	823.4	(573.9)	25.6	24.7	(6.7)	293.1
Amounts Reclassified from Accumulated Other Comprehensive Income or Loss	(0.2)	—	(8.2)	—	1.3	(7.1)
Net Other Comprehensive Income (Loss)	823.2	(573.9)	17.4	24.7	(5.4)	286.0
Balance at March 31, 2023	$ (2,205.2)	$ (260.0)	$ 7.8	$ (365.4)	$ (339.5)	$ (3,162.3)
Balance at December 31, 2021	$ 4,014.4	$ (8,570.7)	$ 61.8	$ (274.1)	$ (396.0)	$ (5,164.6)
Other Comprehensive Income (Loss) Before Reclassifications	(2,903.8)	3,658.1	0.4	(32.0)	1.1	723.8
Amounts Reclassified from Accumulated Other Comprehensive Income or Loss	10.0	—	(10.8)	—	3.1	2.3
Net Other Comprehensive Income (Loss)	(2,893.8)	3,658.1	(10.4)	(32.0)	4.2	726.1
Balance at March 31, 2022	$ 1,120.6	$ (4,912.6)	$ 51.4	$ (306.1)	$ (391.8)	$ (4,438.5)

[1]Liability for Future Policy Benefits

Note 6 - Accumulated Other Comprehensive Loss - Continued

The effect of change in discount rate assumptions on the liability for future policy benefits consists of the following components:

	March 31 2023	December 31 2022	Change
	(in millions of dollars)		
Future Policy Benefits	$ (437.9)	$ 445.0	$ (882.9)
Reinsurance Recoverable	(592.3)	(748.4)	156.1
Income Tax	770.2	617.3	152.9
Total	$ (260.0)	$ 313.9	$ (573.9)

	March 31 2022	December 31 2021	Change
	(in millions of dollars)		
Future Policy Benefits	$ (7,168.8)	$ (12,565.6)	$ 5,396.8
Reinsurance Recoverable	236.6	992.5	(755.9)
Income Tax	2,019.6	3,002.4	(982.8)
Total	$ (4,912.6)	$ (8,570.7)	$ 3,658.1

Note 6 - Accumulated Other Comprehensive Loss - Continued

Amounts reclassified from accumulated other comprehensive loss were recognized in our consolidated statements of income as follows:

	Three Months Ended March 31	
	2023	2022
	(in millions of dollars)	
Net Unrealized Gain (Loss) on Securities		
Net Investment Gain (Loss)		
Net Gain (Loss) on Sales of Fixed Maturity Securities	$ 0.3	$ (8.5)
Credit Losses on Fixed Maturity Securities	—	(4.1)
	0.3	(12.6)
Income Tax Expense (Benefit)	0.1	(2.6)
Total	$ 0.2	$ (10.0)
Net Gain (Loss) on Hedges		
Net Investment Income		
Gain on Interest Rate Swaps	$ 10.4	$ 13.4
Gain on Foreign Exchange Contracts	—	0.3
	10.4	13.7
Income Tax Expense	2.2	2.9
Total	$ 8.2	$ 10.8
Unrecognized Pension and Postretirement Benefit Costs		
Other Expenses		
Amortization of Net Actuarial Loss	$ (1.8)	$ (4.0)
Amortization of Prior Service Credit	0.1	0.1
	(1.7)	(3.9)
Income Tax Benefit	(0.4)	(0.8)
Total	$ (1.3)	$ (3.1)

Note 7 - Liability for Future Policy Benefits and Policyholders' Account Balances

Liability for Future Policy Benefits

Liabilities for future policy benefits represent the cost of claims that we estimate we will eventually pay to our policyholders which also includes policy liabilities for claims not yet incurred and for claims that have been incurred or are estimated to have been incurred but not yet reported to us. Liabilities for future policy benefits also include the related expenses for our non interest-sensitive life and accident and health products. The liability for future policy benefits is calculated based on the present value of the estimated future policy benefits less the present value of estimated future net premiums collected. Net premiums represent the portion of the gross premium required to provide for all benefits and expenses, excluding acquisition costs or any costs that are required to be charged to expense as incurred. In calculating the liability for future policy benefits, our long-duration contracts are grouped into cohorts by product type and contract issue year.

The calculation of the liability for future policy benefits involves numerous assumptions including assumptions related to discount rate, lapses, mortality, and morbidity. The discount rate assumptions were initially set based on the expected investment yield of the assets supporting the reserves at the transition date of ASU 2018-12, which was January 1, 2021, for policies originally issued on or before the transition date. The discount rate assumptions for new cohorts established after the transition date, are initially set based on the policy issuance date or policy renewal date, and are based on an upper-medium grade fixed-income instrument, which is generally equivalent to a single-A interest rate matched to the duration of our insurance liabilities. As cohorts are grouped by product type and issue year, a weighted average discount rate is utilized as policies are issued or renewed throughout the year. We utilize a reference portfolio of fixed-income instruments that have been A-rated by one of the major credit rating agencies. For products with liability cash flows that exceed the duration of observable single-A fixed income instruments, we use the last market observable yield and use extrapolation approaches to determine yield assumptions for durations beyond the last market observable duration. For the discount rate assumptions for products in our Unum International segment, we utilize observable market data in the local debt markets in the UK and Poland.

The initial, also referred to as the original, discount rate assumptions established for each cohort are used to determine interest accretion which is reported as a component of policy benefits on the statements of income. After policy issuance or policy renewal, the discount rate assumptions are updated quarterly and used to update the liability at each reporting date to the current discount rate, with the corresponding change reflected as the change in the effect of discount rate assumptions on the liability for future policy benefits, net of reinsurance, on the statement of changes in other comprehensive income (loss). The weighted average current discount rate was 4.8 percent at March 31, 2023 compared to 5.0 percent at December 31, 2022 with the decrease due primarily to a decrease in U.S. Treasury rates. The weighted average current discount rate was 3.4 percent at March 31, 2022 compared to 2.5 percent at December 31, 2021 with the increase due primarily to an increase in U.S. Treasury rates.

Policyholder lapse and mortality assumptions reflect the probability that an insureds' coverage is discontinued due to lapsation or death of the insured. For our life insurance products, mortality assumptions also reflect the probability that a benefit payment occurs. Policyholder lapse and mortality assumptions are based on our actual historical experience adjusted for future expectations. Claim incidence and claim resolution rate assumptions related to morbidity and mortality are based on actual experience or industry standards adjusted as appropriate to reflect our actual experience and future expectations. The claim incidence rate assumption is the rate at which new claims are submitted and the development of this assumption may involve many factors, including the age of the insured, the insured's occupation or industry, the benefit plan design, and certain external factors such as consumer confidence and levels of unemployment. The claim resolution rate assumption is the probability that a claim will close due to recovery or death of the insured and is used to estimate how long benefits will be paid on an open claim. Certain product lines may utilize additional assumptions in calculating the liability for future policy benefits in addition to those listed above. For long-term care, premium rate increases are also a key assumption and for group long-term disability, benefit offsets are also a key assumption. For our voluntary benefits products, claim costs are also a key assumption. Claim costs capture the combined effect of the incidence rate, the expected level of benefit to be paid, and the claim resolution rate.

Note 7 - Liability for Future Policy Benefits and Policyholders' Account Balances - Continued

Cash flow assumptions are reviewed and updated, as needed, at least annually. Assumptions may be updated more frequently if necessary based on trending experience and future expectations. On a quarterly basis, cohort level cash flow measures are updated based on the emergence of actual experience. The updated cash flows are used to determine the updated net premiums and the net premium ratio, which is the present value of benefits and related expenses divided by the present value of gross premiums. The updated net premium ratio is used to calculate the updated liability for future policy benefits as of the beginning of the year, at the original discount rate. The change in the liability for future policy benefits, at the original discount rate, as of the beginning of the year, resulting from changes in cash flow assumptions and resulting from the emergence of actual experience from expected experience, is reflected as the policy benefits - remeasurement loss (gain) in the consolidated statements of income. The impact of issuances, interest accretion, premiums collected, benefit payments and lapses are reflected as policy benefits in the consolidated statements of income.

For most products, a net premium methodology is applied to each cohort to estimate the liability for claims not yet incurred in which discounted gross benefits are compared to discounted gross premiums. In this methodology, actual experience to date is combined with projected future cash flows to determine a net premium ratio for each cohort. The future cash flows include the costs of future expected claims as well as future cash flows on claims that have already been incurred. The net premium ratio is then used to estimate the liability for future policy benefits. The liability for future policy benefits represents the present value of future claims and associated expenses less the present value of future net premiums, which is derived by multiplying the present value of future gross premium by the net premium ratio.

For our group products in the Unum US and Unum International segments, we evaluate the liability for future policy benefits. Given the term nature of the products, their renewal features, and level funding nature of the premium for these products, we have determined that the liability value is generally zero for policies that are not on claim. In this situation, our liability for future policy benefit values are limited to the liability associated with claims incurred as of the valuation date.

Multiple estimation methods exist to establish liabilities for the incurred claim component of future policy benefits. Available reserving methods utilized to calculate these liabilities include the tabular reserve method, the paid loss development method, the incurred loss development method, the count and severity method, and the expected claim cost method. No single method is better than the others in all situations and for all product lines. The estimation methods we have chosen are those that we believe produce the most accurate and reliable liability.

We use a tabular reserve methodology on reported claims for our Unum US group long-term disability and individual disability claims as well as for our Closed Block long-term care claims. Under the tabular reserve methodology, the liability for reported claims is based on certain characteristics of the actual reported claimants and their related policy provisions, such as age, length of time disabled, and medical diagnosis, as well as assumptions regarding claim duration, discount rate, and policy benefit offsets. We believe the tabular reserve method is the most accurate to calculate long-term liabilities and allows us to use the most available known facts about each claim. Incurred, but not reported (IBNR) liabilities for future policy benefits for our longer-term products are calculated using the count and severity method using historical patterns of the claims to be reported and the associated claim costs. For Unum US group short-term disability products, an estimate of the value of future payments to be made on claims already submitted, as well as on IBNR claims, is determined in aggregate using a paid loss development method rather than on the individual claimant basis that we use for reported claims on longer-term products. The average length of time between the event triggering a claim under a policy and the final resolution of those claims is much shorter for these products and results in less estimation variability.

Liabilities for claims for Unum US group life and accidental death and dismemberment products are related primarily to death claims reported but not yet paid, IBNR death claims, and a liability for waiver of premium benefits in the event the policyholder becomes disabled. The death claim liability is based on the actual face amount to be paid, the IBNR liability is calculated using the count and severity method based on historical patterns of the claims, and the waiver of premium benefits liability is calculated using the tabular reserve methodology.

Liabilities for claims related to the group and individual dental and vision products reported in our Unum US and Colonial Life segments have a short claim payout period. As a result, the liabilities, which primarily represent IBNR and a small amount of claims pending payment, are calculated using the paid loss development method.

Note 7 - Liability for Future Policy Benefits and Policyholders' Account Balances - Continued

Liabilities for future policy benefits supporting the group products within our Unum International segment are calculated using generally the same methodology that we use for Unum US group disability and group life liabilities. Liabilities for future policy benefits for our Unum UK group life dependent product, which provides an annuity to the beneficiary upon the death of an employee, are calculated using discounted cash flows, based on our assumptions for claim duration and discount rates. The assumptions used in calculating liabilities for future policy benefits for this segment are based on standard country-specific industry experience, adjusted for our own experience.

Certain products in the Colonial Life segment and the Unum US voluntary benefits product line have shorter-term benefits, which generally have less estimation variability than our longer-term products because of the shorter claim payout period. Our liabilities for future policy benefits for these lines of business are predominantly determined using the incurred loss development method based on our own experience. The incurred loss development method uses the historical patterns of payments by loss date to predict future claim payments for each loss date. Where the incurred loss development method may not be appropriate, we estimate the incurred claims using an expected claim cost per policy or other measure of exposure.

For the three months ended March 31, 2023 and 2022, there were no new cohorts for which net premiums exceeded gross premiums. Since the adoption of ASU 2018-12, we identified certain cohorts within the Colonial Life segment, related to our cancer and critical illness product line, for which net premiums exceeded gross premiums. There were no other product lines with cohorts for which net premiums exceeded gross premiums for the three months ended March 31, 2023 and 2022.

Actual variance from expected experience was favorable during the first three months of 2023 and 2022 due primarily to the Unum US group disability and Unum US group life and accidental death and dismemberment product lines. The favorability in the Unum US group disability product line was primarily due to higher than expected claim resolutions driven by recoveries. The favorability in the Unum US group life and accidental death and dismemberment product line was driven primarily by lower than expected new claim incidence for waiver of premium benefits.

Note 7 - Liability for Future Policy Benefits and Policyholders' Account Balances - Continued

The following table presents balances as well as the changes in the liability for future policy benefits for traditional long duration products.

	Consolidated	
	March 31	
	2023	2022
	(in millions of dollars)	
Present Value of Expected Net Premiums		
Balance, beginning of year	$ 12,426.2	$ 15,881.3
Beginning balance at original discount rate	12,695.3	13,186.2
Effect of changes in cash flow assumptions	—	—
Effect of actual variances from expected experience	(131.9)	(115.9)
Adjusted beginning of year balance	12,563.4	13,070.3
Issuances	315.8	349.6
Interest accretion	138.7	147.0
Net premiums collected	(393.7)	(418.8)
Foreign currency	3.4	(10.3)
Ending balance at original discount rate	12,627.6	13,137.8
Effect of change in discount rate assumptions	(27.0)	1,371.4
Balance, end of period	$ 12,600.6	$ 14,509.2
Present Value of Expected Future Policy Benefits		
Balance, beginning of year	$ 48,929.4	$ 65,305.0
Beginning balance at original discount rate	49,689.0	50,397.2
Effect of changes in cash flow assumptions	—	—
Effect of actual variances from expected experience	(283.4)	(185.7)
Adjusted beginning of year balance	49,405.6	50,211.5
Issuances[1]	1,131.4	1,208.1
Interest accretion	556.8	573.6
Benefit payments	(1,613.2)	(1,658.1)
Foreign currency	49.3	(83.9)
Ending balance at original discount rate	49,529.9	50,251.2
Effect of change in discount rate assumptions	345.3	8,312.4
Balance, end of period	$ 49,875.2	$ 58,563.6
Net liability for future policy benefits	$ 37,274.6	$ 44,054.4
Other	1,849.5	2,196.7
Total liability for future policy benefits	39,124.1	46,251.1
Less: Reinsurance recoverable related to future policy benefits	8,148.2	9,424.6
Net liability for future policy benefits, after reinsurance recoverable	$ 30,975.9	$ 36,826.5

[1]Issuances include new policy issuances for most product lines. For our Unum US group disability, Unum US group life and AD&D and Closed Block - All Other product lines and certain of our Unum International product lines, this line represents new claim incurrals.

Note 7 - Liability for Future Policy Benefits and Policyholders' Account Balances - Continued

The following tables summarize the amount of gross premiums and interest accretion reflected in the statements of income as well as the undiscounted and discounted expected gross premiums and expected future benefit payments and the weighted average interest rates for traditional long duration products presented in the rollforward activity above.

	Consolidated	
	March 31	
	2023	2022
	(in millions of dollars)	
Amount recognized in the statement of income:		
Gross premiums or assessments	$ 2,390.0	$ 2,345.7
Interest accretion	$ 418.1	$ 426.6

	Consolidated	
	March 31	
	2023	2022
	(in millions of dollars, except weighted average data)	
Amount of undiscounted:		
Expected future benefit payments	$ 96,591.0	$ 97,828.7
Expected future gross premiums	$ 35,284.9	$ 35,260.2
Amount of discounted (at interest accretion rate):		
Expected future gross premiums	$ 23,805.9	$ 23,907.2
Weighted average interest rate:		
Interest accretion rate	4.8 %	4.7 %
Current discount rate	4.8 %	3.4 %
Weighted average duration of the liability	10.9 years	10.8 years

Note 7 - Liability for Future Policy Benefits and Policyholders' Account Balances - Continued

Unum US Segment

The following table presents the balances and changes in the reserves for future policy benefits for traditional long duration products in the Unum US segment.

	March 31, 2023				
	Group Disability	Group Life and AD&D	Individual Disability	Voluntary Benefits	Total Unum US
	(in millions of dollars)				
Present Value of Expected Net Premiums					
Balance, beginning of year	$ —	$ —	$ 1,202.9	$ 868.2	$ 2,071.1
Beginning balance at original discount rate	—	—	1,228.1	937.9	2,166.0
Effect of changes in cash flow assumptions	—	—	—	—	—
Effect of actual variances from expected experience	—	—	(24.9)	(73.6)	(98.5)
Adjusted beginning of year balance	—	—	1,203.2	864.3	2,067.5
Issuances	—	—	48.8	85.7	134.5
Interest accretion	—	—	12.3	7.0	19.3
Net premiums collected	—	—	(44.7)	(37.8)	(82.5)
Ending balance at original discount rate	—	—	1,219.6	919.2	2,138.8
Effect of change in discount rate assumptions	—	—	(6.3)	(50.9)	(57.2)
Balance, end of period	$ —	$ —	$ 1,213.3	$ 868.3	$ 2,081.6
Present Value of Expected Future Policy Benefits					
Balance, beginning of year	$ 5,533.3	$ 972.6	$ 3,192.8	$ 1,999.5	$ 11,698.2
Beginning balance at original discount rate	5,793.1	998.5	3,244.5	2,141.2	12,177.3
Effect of changes in cash flow assumptions	—	—	—	—	—
Effect of actual variances from expected experience	(107.5)	(21.2)	(36.0)	(85.9)	(250.6)
Adjusted beginning of year balance	5,685.6	977.3	3,208.5	2,055.3	11,926.7
Issuances[1]	425.3	228.4	50.2	92.3	796.2
Interest accretion	52.2	5.9	41.0	21.3	120.4
Benefit payments	(484.8)	(259.2)	(69.0)	(49.1)	(862.1)
Ending balance at original discount rate	5,678.3	952.4	3,230.7	2,119.8	11,981.2
Effect of change in discount rate assumptions	(179.5)	(18.8)	15.2	(90.7)	(273.8)
Balance, end of period	$ 5,498.8	$ 933.6	$ 3,245.9	$ 2,029.1	$ 11,707.4
Net liability for future policy benefits	$ 5,498.8	$ 933.6	$ 2,032.6	$ 1,160.8	$ 9,625.8
Other	0.5	0.9	27.5	16.6	45.5
Total liability for future policy benefits	5,499.3	934.5	2,060.1	1,177.4	9,671.3
Less: Reinsurance recoverable related to future policy benefits	42.5	5.6	195.2	12.5	255.8
Net liability for future policy benefits, after reinsurance recoverable	$ 5,456.8	$ 928.9	$ 1,864.9	$ 1,164.9	$ 9,415.5

[1]Issuances include new policy issuances for most product lines. Issuances for Unum US group disability and Unum US group life and AD&D represents new claim incurrals.

Note 7 - Liability for Future Policy Benefits and Policyholders' Account Balances - Continued

	March 31, 2022				
	Group Disability	Group Life and AD&D	Individual Disability	Voluntary Benefits	Total Unum US
	(in millions of dollars)				
Present Value of Expected Net Premiums					
Balance, beginning of year	$ —	$ —	$ 1,494.3	$ 1,124.8	$ 2,619.1
Beginning balance at original discount rate	—	—	1,279.6	1,032.3	2,311.9
Effect of changes in cash flow assumptions	—	—	—	—	—
Effect of actual variances from expected experience	—	—	(22.1)	(54.1)	(76.2)
Adjusted beginning of year balance	—	—	1,257.5	978.2	2,235.7
Issuances	—	—	48.3	101.8	150.1
Interest accretion	—	—	13.4	7.8	21.2
Net premiums collected	—	—	(45.7)	(48.3)	(94.0)
Ending balance at original discount rate	—	—	1,273.5	1,039.5	2,313.0
Effect of change in discount rate assumptions	—	—	105.8	0.8	106.6
Balance, end of period	$ —	$ —	$ 1,379.3	$ 1,040.3	$ 2,419.6
Present Value of Expected Future Policy Benefits					
Balance, beginning of year	$ 6,725.7	$ 1,124.1	$ 4,017.3	$ 2,697.3	$ 14,564.4
Beginning balance at original discount rate	6,158.3	1,058.3	3,253.3	2,201.8	12,671.7
Effect of changes in cash flow assumptions	—	—	—	—	—
Effect of actual variances from expected experience	(56.4)	(7.6)	(20.5)	(56.8)	(141.3)
Adjusted beginning of year balance	6,101.9	1,050.7	3,232.8	2,145.0	12,530.4
Issuances[1]	448.8	242.8	49.6	107.6	848.8
Interest accretion	58.3	6.8	39.3	22.1	126.5
Benefit payments	(492.4)	(294.2)	(64.6)	(54.0)	(905.2)
Ending balance at original discount rate	6,116.6	1,006.1	3,257.1	2,220.7	12,600.5
Effect of change in discount rate assumptions	197.3	24.6	409.3	210.2	841.4
Balance, end of period	$ 6,313.9	$ 1,030.7	$ 3,666.4	$ 2,430.9	$ 13,441.9
Net liability for future policy benefits	$ 6,313.9	$ 1,030.7	$ 2,287.1	$ 1,390.6	$ 11,022.3
Other	0.6	0.8	54.4	15.2	71.0
Total liability for future policy benefits	6,314.5	1,031.5	2,341.5	1,405.8	11,093.3
Less: Reinsurance recoverable related to future policy benefits	58.0	4.7	216.8	28.7	308.2
Net liability for future policy benefits, after reinsurance recoverable	$ 6,256.5	$ 1,026.8	$ 2,124.7	$ 1,377.1	$ 10,785.1

[1]Issuances include new policy issuances for most product lines. Issuances for Unum US group disability and Unum US group life and AD&D represents new claim incurrals.

Note 7 - Liability for Future Policy Benefits and Policyholders' Account Balances - Continued

The following tables summarize the amount of gross premiums and interest accretion reflected in the statements of income as well as the undiscounted and discounted expected gross premiums and expected future benefit payments and the weighted average interest rates for traditional long duration products in the Unum US segment presented in the rollforward activity above.

	March 31, 2023				
	Group Disability	Group Life and AD&D	Individual Disability	Voluntary Benefits	Total Unum US
	(in millions of dollars)				
Amount recognized in the statement of income:					
Gross premiums or assessments	$ 718.2	$ 462.2	$ 157.3	$ 199.3	$ 1,537.0
Interest accretion	$ 52.2	$ 5.9	$ 28.7	$ 14.3	$ 101.1

	March 31, 2022				
	Group Disability	Group Life and AD&D	Individual Disability	Voluntary Benefits	Total Unum US
	(in millions of dollars)				
Amount recognized in the statement of income:					
Gross premiums or assessments	$ 676.1	$ 460.1	$ 148.4	$ 202.8	$ 1,487.4
Interest accretion	$ 58.3	$ 6.8	$ 25.9	$ 14.3	$ 105.3

	March 31, 2023				
	Group Disability	Group Life and AD&D	Individual Disability	Voluntary Benefits	Total Unum US
	(in millions of dollars, except weighted average data)				
Amount of undiscounted:					
Expected future benefit payments	$ 6,834.2	$ 1,085.2	$ 5,148.4	$ 4,564.8	$ 17,632.6
Expected future gross premiums	$ —	$ —	$ 5,540.1	$ 3,941.1	$ 9,481.2
Amount of discounted (at interest accretion rate):					
Expected future gross premiums	$ —	$ —	$ 3,973.7	$ 2,890.7	$ 6,864.4
Weighted average interest rate:					
Interest accretion rate	3.8 %	2.2 %	5.1 %	5.1 %	4.1 %
Current discount rate	4.6 %	2.7 %	4.8 %	5.0 %	4.5 %
Weighted average duration of the liability	4.3 years	2.7 years	9.4 years	17.9 years	6.8 years

Note 7 - Liability for Future Policy Benefits and Policyholders' Account Balances - Continued

	March 31, 2022				
	Group Disability	Group Life and AD&D	Individual Disability	Voluntary Benefits	Total Unum US
	(in millions of dollars, except weighted average data)				
Amount of undiscounted:					
Expected future benefit payments	$ 7,396.0	$ 1,168.8	$ 5,199.6	$ 4,222.2	$ 17,986.6
Expected future gross premiums	$ —	$ —	$ 5,567.9	$ 4,152.4	$ 9,720.3
Amount of discounted (at interest accretion rate):					
Expected future gross premiums	$ —	$ —	$ 3,953.4	$ 3,182.0	$ 7,135.4
Weighted average interest rate:					
Interest accretion rate	3.9 %	2.4 %	5.0 %	5.1 %	4.1 %
Current discount rate	3.1 %	2.0 %	3.4 %	3.6 %	3.2 %
Weighted average duration of the liability	4.3 years	3.0 years	9.5 years	15.9 years	6.5 years

Note 7 - Liability for Future Policy Benefits and Policyholders' Account Balances - Continued

Unum International Segment

The following table presents the balances and changes in the reserves for future policy benefits for traditional long duration products in the Unum International segment.

	March 31	
	2023	2022
	(in millions of dollars)	
Present Value of Expected Net Premiums		
Balance, beginning of year	$ 197.1	$ 260.5
Beginning balance at original discount rate	246.8	258.1
Effect of changes in cash flow assumptions	—	—
Effect of actual variances from expected experience	4.5	2.2
Adjusted beginning of year balance	251.3	260.3
Issuances	6.3	5.0
Interest accretion	2.2	2.1
Net premiums collected	(5.2)	(5.7)
Foreign currency	3.4	(10.3)
Ending balance at original discount rate	258.0	251.4
Effect of change in discount rate assumptions	(38.4)	(27.2)
Balance, end of period	$ 219.6	$ 224.2
Present Value of Expected Future Policy Benefits		
Balance, beginning of year	$ 2,231.4	$ 3,181.8
Beginning balance at original discount rate	2,495.5	2,703.8
Effect of changes in cash flow assumptions	—	—
Effect of actual variances from expected experience	2.2	15.7
Adjusted beginning of year balance	2,497.7	2,719.5
Issuances[1]	105.4	105.6
Interest accretion	15.7	18.0
Benefit payments	(118.6)	(118.8)
Foreign currency	49.3	(83.9)
Ending balance at original discount rate	2,549.5	2,640.4
Effect of change in discount rate assumptions	(211.8)	144.7
Balance, end of period	$ 2,337.7	$ 2,785.1
Net liability for future policy benefits	$ 2,118.1	$ 2,560.9
Other	30.5	31.2
Total liability for future policy benefits	2,148.6	2,592.1
Less: Reinsurance recoverable related to future policy benefits	74.7	101.0
Net liability for future policy benefits, after reinsurance recoverable	$ 2,073.9	$ 2,491.1

[1]Issuances for Unum International primarily represents new claim incurrals.

Note 7 - Liability for Future Policy Benefits and Policyholders' Account Balances - Continued

The following tables summarize the amount of gross premiums and interest accretion reflected in the statements of income as well as the undiscounted and discounted expected gross premiums and expected future benefit payments and the weighted average interest rates for traditional long duration products in the Unum International segment presented in the rollforward activity above.

	March 31	
	2023	2022
	(in millions of dollars)	
Amount recognized in the statement of income:		
Gross premiums or assessments	$ 208.5	$ 205.0
Interest accretion	$ 13.5	$ 15.9

	March 31	
	2023	2022
	(in millions of dollars, except weighted average data)	
Amount of undiscounted:		
Expected future benefit payments	$ 3,988.8	$ 4,181.4
Expected future gross premiums	$ 995.8	$ 902.4
Amount of discounted (at interest accretion rate):		
Expected future gross premiums	$ 657.2	$ 609.0
Weighted average interest rate:		
Interest accretion rate	3.9 %	3.9 %
Current discount rate	4.8 %	3.0 %
Weighted average duration of the liability	8.6 years	8.8 years

Note 7 - Liability for Future Policy Benefits and Policyholders' Account Balances - Continued

Colonial Life Segment

The following table presents the balances and changes in the reserves for future policy benefits for traditional long duration products in the Colonial Life segment.

	March 31	
	2023	2022
	(in millions of dollars)	
Present Value of Expected Net Premiums		
Balance, beginning of year	$ 3,745.4	$ 4,597.0
Beginning balance at original discount rate	4,046.4	4,158.9
Effect of changes in cash flow assumptions	—	—
Effect of actual variances from expected experience	(46.3)	4.0
Adjusted beginning of year balance	4,000.1	4,162.9
Issuances	175.0	194.5
Interest accretion	33.0	34.7
Net premiums collected	(164.1)	(176.9)
Ending balance at original discount rate	4,044.0	4,215.2
Effect of change in discount rate assumptions	(229.5)	110.7
Balance, end of period	$ 3,814.5	$ 4,325.9
Present Value of Expected Future Policy Benefits		
Balance, beginning of year	$ 5,581.1	$ 7,054.8
Beginning balance at original discount rate	6,163.9	6,201.5
Effect of changes in cash flow assumptions	—	—
Effect of actual variances from expected experience	(39.5)	(7.3)
Adjusted beginning of year balance	6,124.4	6,194.2
Issuances	184.9	203.4
Interest accretion	55.4	56.7
Benefit payments	(168.3)	(166.5)
Ending balance at original discount rate	6,196.4	6,287.8
Effect of change in discount rate assumptions	(460.5)	248.8
Balance, end of period	$ 5,735.9	$ 6,536.6
Net liability for future policy benefits	$ 1,921.4	$ 2,210.7
Other	20.7	26.0
Total liability for future policy benefits	1,942.1	2,236.7
Less: Reinsurance recoverable related to future policy benefits	0.8	1.9
Net liability for future policy benefits, after reinsurance recoverable	$ 1,941.3	$ 2,234.8

Note 7 - Liability for Future Policy Benefits and Policyholders' Account Balances - Continued

The following tables summarize the amount of gross premiums and interest accretion reflected in the statements of income as well as the undiscounted and discounted expected gross premiums and expected future benefit payments and the weighted average interest rates for traditional long duration products in the Colonial Life segment presented in the rollforward activity above.

	March 31	
	2023	2022
	(in millions of dollars)	
Amount recognized in the statement of income:		
Gross premiums or assessments	$ 412.2	$ 412.6
Interest accretion	$ 22.4	$ 22.0

	March 31	
	2023	2022
	(in millions of dollars, except weighted average data)	
Amount of undiscounted:		
Expected future benefit payments	$ 10,121.7	$ 9,697.9
Expected future gross premiums	$ 12,359.9	$ 11,653.5
Amount of discounted (at interest accretion rate):		
Expected future gross premiums	$ 9,030.0	$ 8,717.0
Weighted average interest rate:		
Interest accretion rate	4.3 %	4.4 %
Current discount rate	5.0 %	3.6 %
Weighted average duration of the liability	17.4 years	16.5 years

Note 7 - Liability for Future Policy Benefits and Policyholders' Account Balances - Continued

Closed Block Segment

The following table presents the balances and changes in the reserves for future policy benefits for traditional long duration products in the Closed Block segment.

	March 31, 2023		
	Long-term Care	All Other	Total Closed Block
	(in millions of dollars)		
Present Value of Expected Net Premiums			
Balance, beginning of year	$ 6,412.6	$ —	$ 6,412.6
Beginning balance at original discount rate	6,236.1	—	6,236.1
Effect of changes in cash flow assumptions	—	—	—
Effect of actual variances from expected experience	8.4	—	8.4
Adjusted beginning of year balance	6,244.5	—	6,244.5
Interest accretion	84.2	—	84.2
Net premiums collected	(141.9)	—	(141.9)
Ending balance at original discount rate	6,186.8	—	6,186.8
Effect of change in discount rate assumptions	298.1	—	298.1
Balance, end of period	$ 6,484.9	$ —	$ 6,484.9
Present Value of Expected Future Policy Benefits			
Balance, beginning of year	$ 21,199.9	$ 8,218.8	$ 29,418.7
Beginning balance at original discount rate	20,221.6	8,630.7	28,852.3
Effect of changes in cash flow assumptions	—	—	—
Effect of actual variances from expected experience	12.6	(8.1)	4.5
Adjusted beginning of year balance	20,234.2	8,622.6	28,856.8
Issuances[1]	—	44.9	44.9
Interest accretion	274.7	90.6	365.3
Benefit payments	(198.4)	(265.8)	(464.2)
Ending balance at original discount rate	20,310.5	8,492.3	28,802.8
Effect of change in discount rate assumptions	1,547.8	(256.4)	1,291.4
Balance, end of period	$ 21,858.3	$ 8,235.9	$ 30,094.2
Net liability for future policy benefits	$ 15,373.4	$ 8,235.9	$ 23,609.3
Other[2]	25.3	1,727.5	1,752.8
Total liability for future policy benefits	15,398.7	9,963.4	25,362.1
Less: Reinsurance recoverable related to future policy benefits	5.6	7,811.2	7,816.8
Net liability for future policy benefits, after reinsurance recoverable	$ 15,393.1	$ 2,152.2	$ 17,545.3

[1]Issuances for Closed Block - All Other represents new claim incurrals.

[2]Other for Closed Block - All Other primarily includes our closed block group pension products and certain of our ceded closed block individual life products.

Note 7 - Liability for Future Policy Benefits and Policyholders' Account Balances - Continued

	March 31, 2022		
	Long-term Care	All Other	Total Closed Block
	(in millions of dollars)		
Present Value of Expected Net Premiums			
Balance, beginning of year	$ 8,404.7	$ —	$ 8,404.7
Beginning balance at original discount rate	6,457.3	—	6,457.3
Effect of changes in cash flow assumptions	—	—	—
Effect of actual variances from expected experience	(45.9)	—	(45.9)
Adjusted beginning of year balance	6,411.4	—	6,411.4
Interest accretion	89.0	—	89.0
Net premiums collected	(142.2)	—	(142.2)
Ending balance at original discount rate	6,358.2	—	6,358.2
Effect of change in discount rate assumptions	1,181.3	—	1,181.3
Balance, end of period	$ 7,539.5	$ —	$ 7,539.5
Present Value of Expected Future Policy Benefits			
Balance, beginning of year	$ 30,089.6	$ 10,414.4	$ 40,504.0
Beginning balance at original discount rate	19,870.8	8,949.4	28,820.2
Effect of changes in cash flow assumptions	—	—	—
Effect of actual variances from expected experience	(50.5)	(2.3)	(52.8)
Adjusted beginning of year balance	19,820.3	8,947.1	28,767.4
Issuances[1]	—	50.3	50.3
Interest accretion	277.0	95.4	372.4
Benefit payments	(176.1)	(291.5)	(467.6)
Ending balance at original discount rate	19,921.2	8,801.3	28,722.5
Effect of change in discount rate assumptions	6,424.6	652.9	7,077.5
Balance, end of period	$ 26,345.8	$ 9,454.2	$ 35,800.0
Net liability for future policy benefits	$ 18,806.3	$ 9,454.2	$ 28,260.5
Other[2]	27.3	2,041.2	2,068.5
Total liability for future policy benefits	18,833.6	11,495.4	30,329.0
Less: Reinsurance recoverable related to future policy benefits	6.7	9,006.7	9,013.4
Net liability for future policy benefits, after reinsurance recoverable	$ 18,826.9	$ 2,488.7	$ 21,315.6

[1]Issuances for Closed Block - All Other represents new claim incurrals.

[2]Other for Closed Block - All Other primarily includes our closed block group pension products and certain of our ceded closed block individual life products.

Note 7 - Liability for Future Policy Benefits and Policyholders' Account Balances - Continued

The following tables summarize the amount of gross premiums and interest accretion reflected in the statements of income as well as the undiscounted and discounted expected gross premiums and expected future benefit payments and the weighted average interest rates for traditional long duration products in the Closed Block segment presented in the rollforward activity above.

	March 31, 2023		
	Long-term Care	All Other	Total Closed Block
	(in millions of dollars)		
Amount recognized in the statement of income:			
Gross premiums or assessments	$ 175.1	$ 57.2	$ 232.3
Interest accretion	$ 190.5	$ 90.6	$ 281.1

	March 31, 2022		
	Long-term Care	All Other	Total Closed Block
	(in millions of dollars)		
Amount recognized in the statement of income:			
Gross premiums or assessments	$ 174.8	$ 65.9	$ 240.7
Interest accretion	$ 188.0	$ 95.4	$ 283.4

	March 31, 2023		
	Long-term Care	All Other	Total Closed Block
	(in millions of dollars, except weighted average data)		
Amount of undiscounted:			
Expected future benefit payments	$ 52,312.2	$ 12,535.7	$ 64,847.9
Expected future gross premiums	$ 12,448.0	$ —	$ 12,448.0
Amount of discounted (at interest accretion rate):			
Expected future gross premiums	$ 7,254.3	$ —	$ 7,254.3
Weighted average interest rate:			
Interest accretion rate	5.6 %	4.6 %	5.2 %
Current discount rate	5.0%	4.9 %	5.0 %
Weighted average duration of the liability	15.3 years	7.4 years	12.3 years

Note 7 - Liability for Future Policy Benefits and Policyholders' Account Balances - Continued

	March 31, 2022		
	Long-term Care	All Other	Total Closed Block
	(in millions of dollars, except weighted average data)		
Amount of undiscounted:			
Expected future benefit payments	$ 53,051.9	$ 12,910.9	$ 65,962.8
Expected future gross premiums	$ 12,984.0	$ —	$ 12,984.0
Amount of discounted (at interest accretion rate):			
Expected future gross premiums	$ 7,445.8	$ —	$ 7,445.8
Weighted average interest rate:			
Interest accretion rate	5.5 %	4.6 %	5.2 %
Current discount rate	3.6 %	3.5 %	3.6 %
Weighted average duration of the liability	16.1 years	7.3 years	12.6 years

Reconciliation

A reconciliation of the liability for future policy benefits reflected in the preceding rollforwards to the related liability balances in the consolidated balance sheets are as follows:

	March 31	
	2023	2022
	(in millions of dollars)	
Liability for future policy benefits		
Unum US[1]	$ 9,671.3	$ 11,093.3
Unum International	2,148.6	2,592.1
Colonial Life	1,942.1	2,236.7
Closed Block[1]	25,362.1	30,329.0
Other products[1]	227.4	223.6
Total liability for future policy benefits	$ 39,351.5	$ 46,474.7

[1]Unum US excludes dental & vision and medical stop-loss product lines and Closed Block excludes our participating fund account, which represents policies issued by one of our subsidiaries prior to its 1986 conversion from a mutual stock life insurance company. The liabilities associated with these products are included within Other products.

Policyholders' Account Balances

Policyholders' account balances primarily include our universal life and corporate-owned life insurance products. Policyholders' account balances reflect customer deposits and interest credited less cost of insurance, administration expenses, surrender charges, and customer withdrawals. Our unearned revenue reserve, claim reserves and certain other reserves related to our universal life products and corporate-owned life insurance products are also reported as a component of policyholders' account balances. The unearned revenue reserve is amortized over the expected life of the related contracts on the same basis as DAC. Policyholders' account balances require loss recognition testing. We perform loss recognition tests on these reserves annually, or more frequently if appropriate, using best estimate assumptions as of the date of the test, without a provision for adverse deviation. We group the policy reserves for each major product line within a reporting segment when we perform the

Note 7 - Liability for Future Policy Benefits and Policyholders' Account Balances - Continued

loss recognition tests. If the policy reserves determined using these best estimate assumptions are higher than our existing policy reserves net of any deferred acquisition cost balance, the existing policy reserves are increased or deferred acquisition costs are reduced to immediately recognize the deficiency. This becomes the new basis for reserves going forward, subject to future loss recognition testing. Anticipated investment income, based on our anticipated portfolio yield rates after consideration for defaults and investment expenses, is considered when performing loss recognition testing for long-duration contracts.

The following table presents the balances and changes in the policyholders' account balances:

	March 31, 2023			
	Unum US - Voluntary Benefits	Colonial Life	Closed Block - All Other	Total
	(in millions of dollars, except weighted average data)			
Balance, beginning of year	$ 586.8	$ 852.4	$ 4,159.4	$ 5,598.6
Premiums received	15.4	22.3	6.3	44.0
Policy charges[1]	(15.5)	(19.0)	(26.3)	(60.8)
Surrenders and withdrawals	(9.0)	(10.2)	(5.1)	(24.3)
Benefit payments	(3.0)	(2.2)	(65.3)	(70.5)
Interest credited	5.7	8.6	79.7	94.0
Other	2.0	(0.2)	(17.2)	(15.4)
Balance, end of period	582.4	851.7	4,131.5	5,565.6
Reserves in excess of account balance	94.8	15.8	33.4	144.0
Total policyholders' account balances	677.2	867.5	4,164.9	5,709.6
Less: Reinsurance recoverable related to policyholders' account balances	1.0	0.2	4,164.9	4,166.1
Net policyholders' account balances, after reinsurance recoverable	$ 676.2	$ 867.3	$ —	$ 1,543.5
Weighted average crediting rate	3.9 %	4.0%	7.9%	6.9%
Net amount at risk[2]	$ 4,794.7	$ 9,182.6	$ 1,842.7	$ 15,820.0
Cash surrender value	$ 572.3	$ 805.0	$ 4,036.2	$ 5,413.5

[1]Contracts included in the policyholder account balances are generally charged a premium and/or monthly assessments on the basis of the account balance.

[2]For those guarantees of benefits that are payable in the event of death, the net amount at risk is generally defined as the current guaranteed minimum death benefit in excess of the current account balance at the balance sheet date.

Note 7 - Liability for Future Policy Benefits and Policyholders' Account Balances - Continued

	March 31, 2022			
	Unum US - Voluntary Benefits	Colonial Life	Closed Block - All Other	Total
	(in millions of dollars, except weighted average data)			
Balance, beginning of year	$ 598.7	$ 849.2	$ 4,231.7	$ 5,679.6
Premiums received	17.2	23.4	5.1	45.7
Policy charges[1]	(16.9)	(20.0)	(27.5)	(64.4)
Surrenders and withdrawals	(10.2)	(10.0)	(3.1)	(23.3)
Benefit payments	(3.5)	(2.3)	(68.8)	(74.6)
Interest credited	6.9	8.5	74.8	90.2
Other	2.2	0.1	(25.2)	(22.9)
Balance, end of period	594.4	848.9	4,187.0	5,630.3
Reserves in excess of account balance	86.2	20.6	35.2	142.0
Total policyholders' account balances	680.6	869.5	4,222.2	5,772.3
Less: Reinsurance recoverable related to policyholders' account balances	1.2	0.3	4,222.2	4,223.7
Net policyholders' account balances, after reinsurance recoverable	$ 679.4	$ 869.2	$ —	$ 1,548.6
Weighted average crediting rate	4.6%	4.0%	7.3%	6.5%
Net amount at risk[2]	$ 5,219.2	$ 9,811.4	$ 1,937.7	$ 16,968.3
Cash surrender value	$ 588.7	$ 789.3	$ 4,049.7	$ 5,427.7

[1]Contracts included in the policyholder account balances are generally charged a premium and/or monthly assessments on the basis of the account balance.

[2]For those guarantees of benefits that are payable in the event of death, the net amount at risk is generally defined as the current guaranteed minimum death benefit in excess of the current account balance at the balance sheet date.

Note 7 - Liability for Future Policy Benefits and Policyholders' Account Balances - Continued

The balance of the 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 is as follows.

Range of Guaranteed Minimum Crediting Rate	March 31, 2023				
	At Guaranteed Minimum	1 Basis Point - 50 Basis Points Above	51 Basis Points - 150 Basis Points Above	Greater than 150 Basis Points Above	Total
	(in millions of dollars)				
	Unum US - Voluntary Benefits				
3.00% - 3.99%	$ 93.1	$ —	$ —	$ —	$ 93.1
4.00% - 4.99%	270.8	185.2	—	—	456.0
5.00% - 6.00%	33.3	—	—	—	33.3
	397.2	185.2	—	—	582.4
	Colonial Life				
4.00% - 5.00%	845.6	6.1	—	—	851.7
	Closed Block - All Other				
3.00% - 5.99%	1,511.4	29.3	6.5	—	1,547.2
6.00% - 8.99%	27.0	—	—	—	27.0
9.00% - 11.99%	2,371.6	—	—	—	2,371.6
12.00% - 15.00%	185.7	—	—	—	185.7
	4,095.7	29.3	6.5	—	4,131.5
Total	$ 5,338.5	$ 220.6	$ 6.5	$ —	$ 5,565.6

Note 7 - Liability for Future Policy Benefits and Policyholders' Account Balances - Continued

Range of Guaranteed Minimum Crediting Rate	March 31, 2022				
	At Guaranteed Minimum	1 Basis Point - 50 Basis Points Above	51 Basis Points - 150 Basis Points Above	Greater than 150 Basis Points Above	Total
	(in millions of dollars)				
	Unum US - Voluntary Benefits				
3.00% - 3.99%	$ 96.6	$ —	$ —	$ —	$ 96.6
4.00% - 4.99%	284.5	178.5	—	—	463.0
5.00% - 6.00%	34.8	—	—	—	34.8
	415.9	178.5	—	—	594.4
	Colonial Life				
4.00% - 5.00%	843.1	5.8	—	—	848.9
	Closed Block - All Other				
3.00% - 5.99%	1,770.8	28.8	6.5	—	1,806.1
6.00% - 8.99%	29.3	—	—	—	29.3
9.00% - 11.99%	2,193.7	—	—	—	2,193.7
12.00% - 15.00%	157.9	—	—	—	157.9
	4,151.7	28.8	6.5	—	4,187.0
Total	$ 5,410.7	$ 213.1	$ 6.5	$ —	$ 5,630.3

Note 8 - Deferred Acquisition Costs

DAC represents the deferred incremental direct costs associated with the successful acquisition of new or renewal insurance contracts. Such costs include commissions, other agency compensation, certain selection and policy issue expenses, and certain field expenses. Acquisition costs that do not vary with the production of new business, such as commissions on group products which are generally level throughout the life of the policy, are excluded from the deferral.

Our insurance contracts are grouped by product type and contract issue year into cohorts consistent with the grouping used to estimate the related contract liabilities. DAC is amortized on a constant level basis over the life of the policy. For all products, in-force volume metrics are used as the constant level basis. The lapse and mortality assumptions used to amortize DAC for our traditional long-duration products are consistent with the assumptions used to estimate the liability for future policy benefits. The underlying assumptions used to determine DAC amortization are updated concurrently with any related assumption changes for the liability for future policy benefits and changes in estimates are recognized prospectively over the remaining expected term of the related contracts. Amortization expense is adjusted based on actual versus expected experience through an adjustment to the prospective rate of amortization.

For certain products, policyholders can elect to modify product benefits, features, rights, or coverages by exchanging a contract for a new contract or by amendment, endorsement, or rider to a contract, or by the election of a feature or coverage within a contract. These transactions are known as internal replacement transactions, principally on group contracts. Internal replacement transactions wherein the modification does not substantially change the policy are accounted for as continuations of the replaced contracts. The original policy continues to be reflected as an in force policy within its original cohort. The policy's expected life then impacts the amortization of remaining unamortized deferred acquisition costs within its cohort. The costs of replacing the policy are accounted for as policy maintenance costs and expensed as incurred. Internal replacement transactions that result in a policy that is substantially changed are accounted for as an extinguishment of the original policy and the issuance of a new policy. The original policy that was replaced is terminated from its original cohort and this termination is reflected in the amortization rate of remaining unamortized deferred acquisition costs for the cohort. The costs of acquiring the new policy are capitalized and amortized as part of a new cohort.

The following tables display the changes in DAC throughout the period:

	Three Months Ended March 31, 2023			
	Unum US	Unum International	Colonial Life	Total
	(in millions of dollars)			
Balance, beginning of year	$ 1,185.1	$ 37.0	$ 1,337.9	$ 2,560.0
Capitalization	79.0	3.5	75.2	157.7
Amortization expense	(65.8)	(1.8)	(48.3)	(115.9)
Foreign currency	—	0.6	—	0.6
Balance, end of period	$ 1,198.3	$ 39.3	$ 1,364.8	$ 2,602.4

	Three Months Ended March 31, 2022			
	Unum US	Unum International	Colonial Life	Total
	(in millions of dollars)			
Balance, beginning of year	$ 1,152.9	$ 36.4	$ 1,238.1	$ 2,427.4
Capitalization	68.3	3.5	70.0	141.8
Amortization expense	(56.9)	(2.1)	(44.6)	(103.6)
Foreign currency	—	(1.3)	—	(1.3)
Balance, end of period	$ 1,164.3	$ 36.5	$ 1,263.5	$ 2,464.3

Note 8 - Deferred Acquisition Costs - Continued

	Three Months Ended March 31, 2023					
	Unum US Segment					
	Group Disability	Group Life and AD&D	Individual Disability	Voluntary Benefits	Dental and Vision	Total
	(in millions of dollars)					
Balance, beginning of year	$ 61.0	$ 49.3	$ 464.4	$ 601.0	$ 9.4	$ 1,185.1
Capitalization	14.6	9.8	21.3	30.3	3.0	79.0
Amortization expense	(13.1)	(9.8)	(13.3)	(27.1)	(2.5)	(65.8)
Balance, end of period	$ 62.5	$ 49.3	$ 472.4	$ 604.2	$ 9.9	$ 1,198.3

	Three Months Ended March 31, 2022					
	Unum US Segment					
	Group Disability	Group Life and AD&D	Individual Disability	Voluntary Benefits	Dental and Vision	Total
	(in millions of dollars)					
Balance, beginning of year	$ 60.9	$ 53.9	$ 441.8	$ 588.6	$ 7.7	$ 1,152.9
Capitalization	12.7	9.1	17.5	26.6	2.4	68.3
Amortization expense	(11.1)	(9.4)	(12.3)	(21.9)	(2.2)	(56.9)
Balance, end of period	$ 62.5	$ 53.6	$ 447.0	$ 593.3	$ 7.9	$ 1,164.3

Note 9 - Segment Information

We have three principal operating business segments: Unum US, Unum International, and Colonial Life. Our other segments are Closed Block and Corporate.

Segment information is shown below. Certain prior year amounts were reclassified to conform to current year presentation.

	Three Months Ended March 31	
	2023	2022
	(in millions of dollars)	
Premium Income		
Unum US		
Group Disability		
Group Long-term Disability	$ 504.7	$ 463.9
Group Short-term Disability	240.3	221.6
Group Life and Accidental Death & Dismemberment		
Group Life	413.1	412.6
Accidental Death & Dismemberment	43.5	42.1
Supplemental and Voluntary		
Voluntary Benefits	214.5	218.6
Individual Disability	124.2	113.6
Dental and Vision	69.3	70.6
	1,609.6	1,543.0
Unum International		
Unum UK		
Group Long-term Disability	91.7	103.4
Group Life	39.2	32.2
Supplemental	31.8	29.0
Unum Poland	25.9	23.2
	188.6	187.8
Colonial Life		
Accident, Sickness, and Disability	235.7	239.7
Life	105.3	101.7
Cancer and Critical Illness	88.5	89.3
	429.5	430.7
Closed Block		
Long-term Care	175.1	174.8
All Other	56.5	65.1
	231.6	239.9
Total Premium Income	$ 2,459.3	$ 2,401.4

Note 9 - Segment Information - Continued

	Unum US	Unum International	Colonial Life	Closed Block	Corporate	Total
			(in millions of dollars)			
Three Months Ended March 31, 2023						
Premium Income	$ 1,609.6	$ 188.6	$ 429.5	$ 231.6	$ —	$ 2,459.3
Net Investment Income	157.3	30.9	37.3	257.2	26.1	508.8
Other Income	53.6	0.4	0.2	13.5	0.2	67.9
Adjusted Operating Revenue	$ 1,820.5	$ 219.9	$ 467.0	$ 502.3	$ 26.3	$ 3,036.0
Adjusted Operating Income (Loss)	$ 312.5	$ 38.4	$ 93.9	$ 58.2	$ (33.5)	$ 469.5
Three Months Ended March 31, 2022						
Premium Income	$ 1,543.0	$ 187.8	$ 430.7	$ 239.9	$ —	$ 2,401.4
Net Investment Income	171.0	34.5	38.1	274.8	8.8	527.2
Other Income	47.1	0.2	0.3	16.0	2.2	65.8
Adjusted Operating Revenue	$ 1,761.1	$ 222.5	$ 469.1	$ 530.7	$ 11.0	$ 2,994.4
Adjusted Operating Income (Loss)	$ 168.3	$ 25.9	$ 102.9	$ 78.6	$ (40.4)	$ 335.3

	March 31 2023	December 31 2022
	(in millions of dollars)	
Assets		
Unum US	$ 16,085.8	$ 16,356.3
Unum International	3,237.7	3,129.4
Colonial Life	4,678.8	4,575.0
Closed Block	34,472.5	33,776.6
Corporate	3,949.0	3,311.2
Total Assets	$ 62,423.8	$ 61,148.5

We measure and analyze our segment performance on the basis of "adjusted operating revenue" and "adjusted operating income" or "adjusted operating loss", which differ from total revenue and income before income tax as presented in our consolidated statements of income due to the exclusion of investment gains and losses, the amortization of the cost of reinsurance, and the impact of non-contemporaneous reinsurance as specified in the reconciliations below. We believe adjusted operating revenue and adjusted operating income or loss are better performance measures and better indicators of the revenue and profitability and underlying trends in our business. These performance measures are in accordance with GAAP guidance for segment reporting, but they should not be viewed as a substitute for total revenue, income before income tax, or net income.

Investment gains or losses primarily include realized investment gains or losses, expected investment credit losses, and gains or losses on derivatives. Investment gains or losses depend on market conditions and do not necessarily relate to decisions regarding the underlying business of our segments. Our investment focus is on investment income to support our insurance liabilities as opposed to the generation of investment gains or losses. Although we may experience investment gains or losses which will affect future earnings levels, a long-term focus is necessary to maintain profitability over the life of the business since our underlying business is long-term in nature, and we need to earn the interest rates assumed in calculating our liabilities.

Note 9 - Segment Information - Continued

We have exited a substantial portion of our Closed Block individual disability product line through the two phases of the reinsurance transaction that were executed in December 2020 and March 2021. As a result, we exclude the amortization of the cost of reinsurance that we recognized upon the exit of the business related to the policies on claim status as well as the impact of non-contemporaneous reinsurance that resulted from the adoption of ASU 2018-12. Due to the execution of the second phase of the reinsurance transaction occurring after January 1, 2021, the transition date of ASU 2018-12, in accordance with the provisions of the ASU related to non-contemporaneous reinsurance, we were required to establish the ceded reserves using an upper-medium grade fixed-income instrument as of the reinsurance transaction date in March 2021 which resulted in higher ceded reserves compared to that which was reported historically. However, the direct reserves for the block reinsured in the second phase were calculated using the original discount rate utilized as of the transition date. Both the direct and ceded reserves are then remeasured at each reporting period using a current discount rate reflective of an upper-medium grade fixed-income instrument, with the changes recognized in OCI. While the total equity impact is neutral, the different original discount rates utilized for direct and ceded reserves result in disproportionate earnings impacts. The impact of non-contemporaneous reinsurance will fluctuate depending on the magnitude of reserve changes during the period. We believe that the exclusion of these items provides a better view of our results from our ongoing businesses.

We may at other times exclude certain other items from our discussion of financial ratios and metrics in order to enhance the understanding and comparability of our operational performance and the underlying fundamentals but this exclusion is not an indication that similar items may not recur and does not replace net income or net loss as a measure of our overall profitability.

A reconciliation of total revenue to "adjusted operating revenue" and income before income tax to "adjusted operating income" is as follows:

	Three Months Ended March 31	
	2023	2022
	(in millions of dollars)	
Total Revenue	$ 3,036.1	$ 2,980.6
Excluding:		
Net Investment Gain (Loss)	0.1	(13.8)
Adjusted Operating Revenue	$ 3,036.0	$ 2,994.4
Income Before Income Tax	$ 451.3	$ 295.7
Excluding:		
Net Investment Gain (Loss)	0.1	(13.8)
Amortization of the Cost of Reinsurance	(11.0)	(13.4)
Non-Contemporaneous Reinsurance	(7.3)	(12.4)
Adjusted Operating Income	$ 469.5	$ 335.3

Note 10 - Employee Benefit Plans

Defined Benefit Pension and Other Postretirement Benefit (OPEB) Plans

We sponsor several defined benefit pension and OPEB plans for our employees, including non-qualified pension plans. The U.S. qualified and non-qualified defined benefit pension plans comprise the majority of our total benefit obligation and benefit cost. We maintain a separate defined benefit plan for eligible employees in our U.K. operation. The U.S. defined benefit pension plans were closed to new entrants on December 31, 2013, the OPEB plan was closed to new entrants on December 31, 2012, and the U.K. plan was closed to new entrants on December 31, 2002.

Note 10 - Employee Benefit Plans - Continued

The following table provides the components of the net periodic benefit cost (credit) for the defined benefit pension and OPEB plans.

	Three Months Ended March 31					
	Pension Benefits					
	U.S. Plans		U.K. Plan		OPEB	
	2023	2022	2023	2022	2023	2022
	(in millions of dollars)					
Service Cost	$ 2.3	$ 1.9	$ —	$ —	$ —	$ —
Interest Cost	22.0	16.8	1.9	1.4	1.1	0.7
Expected Return on Plan Assets	(23.0)	(26.5)	(2.1)	(3.0)	(0.1)	(0.1)
Amortization of:						
Net Actuarial (Gain) Loss	3.8	4.1	0.6	0.1	(2.6)	(0.2)
Prior Service Credit	—	—	—	—	(0.1)	(0.1)
Total Net Periodic Benefit Cost (Credit)	$ 5.1	$ (3.7)	$ 0.4	$ (1.5)	$ (1.7)	$ 0.3

The service cost component of net periodic pension and postretirement benefit cost (credit) is included as a component of compensation expense in our consolidated statements of income. All other components of net periodic pension and postretirement benefit cost (credit) are included in other expenses.

Note 11 - Stockholders' Equity and Earnings Per Common Share

Earnings Per Common Share

Net income per common share is determined as follows:

	Three Months Ended March 31	
	2023	2022
	(in millions of dollars, except share data)	
Numerator		
Net Income	$ 358.3	$ 240.4
Denominator (000s)		
Weighted Average Common Shares - Basic	198,111.2	202,628.8
Dilution for Assumed Exercises of Nonvested Stock Awards	1,408.9	875.5
Weighted Average Common Shares - Assuming Dilution	199,520.1	203,504.3
Net Income Per Common Share		
Basic	$ 1.81	$ 1.19
Assuming Dilution	$ 1.80	$ 1.18

We compute basic earnings per share by dividing net income by the weighted average number of common shares outstanding for the period. In computing earnings per share assuming dilution, we include potential common shares that are dilutive (those that reduce earnings per share). We use the treasury stock method to account for the effect of nonvested stock success units, nonvested restricted stock units, and nonvested performance share units on the computation of diluted earnings per share. Under this method, the potential common shares from nonvested stock success units and nonvested restricted stock units will each have a dilutive effect, as individually measured, when the average market price of Unum Group common stock during the period exceeds the grant price of the nonvested stock success units and nonvested restricted stock units. The outstanding nonvested stock success units and nonvested restricted stock units have grant prices ranging from $14.20 to $45.57. Potential common shares from performance based share units will have a dilutive effect as the attainment of performance conditions is

Note 11 - Stockholders' Equity and Earnings Per Common Share - Continued

progressively achieved during the vesting period. There were no outstanding performance based share units as of March 31, 2023. Potential common shares not included in the computation of diluted earnings per share because the impact would be antidilutive, approximated 0.7 million and 0.3 million potential common shares for the three months ended March 31, 2023 and 2022, respectively.

Common Stock

As part of our capital deployment strategy, we may repurchase shares of Unum Group's common stock, as authorized by our board of directors. During December 2022, our board of directors authorized the repurchase of up to $200.0 million of Unum Group's outstanding common stock beginning January 1, 2023. In February 2023, our board of directors authorized an increase to the share repurchase program such that we are now authorized to repurchase up to $250.0 million of Unum Group's outstanding common stock. This share repurchase program has an expiration date of December 31, 2023, with the timing and amount of repurchase activity to be based on market conditions and other considerations, including the level of available cash, alternative uses for cash, and our stock price.

In August 2022, the Inflation Reduction Act was signed into law in the U.S. and, effective January 1, 2023, imposes a one percent excise tax on corporate stock repurchases after December 31, 2022. This excise tax is recorded as part of the cost basis of treasury stock and is assessed on the fair value of stock repurchases, reduced by the fair value of any shares issued during the period.

Common stock repurchases, which are accounted for using the cost method and classified as treasury stock until otherwise retired, were as follows:

	Three Months Ended March 31	
	2023	2022
	(in millions)	
Shares Repurchased	1.3	1.3
Cost of Shares Repurchased[1]	$ 53.6	$ 37.5

[1]Includes a de minimis amount of commissions and $0.1 million of excise tax for the three months ended March 31, 2023. There were no commissions or excise taxes during the three months ended March 31, 2022.

In February 2022, we entered into an accelerated share repurchase agreement with a financial counterparty to repurchase $50.0 million of Unum Group's common stock in aggregate. As part of this transaction, we paid $50.0 million to the financial counterparty and received an initial delivery of 1.3 million shares of our common stock, which represented approximately 75 percent of the total delivery under the agreement. We simultaneously entered into a forward contract indexed to the price of Unum Group common stock, which subjected the transaction to a future price adjustment. Under the terms of the share repurchase agreement, we were to receive, or be required to pay, a price adjustment based on the volume weighted average price of Unum Group common stock during the term of the agreement, less a discount. Any price adjustment payable to us was to be settled in shares of Unum Group common stock. Any price adjustment we would have been required to pay would have been settled in either cash or common stock at our option. The final price adjustment settlement, along with the delivery of the remaining shares, occurred in April 2022, resulting in the delivery to us of 0.4 million additional shares. As a result of the final settlement occurring subsequent to March 31, 2022, we recorded a decrease to additional paid-in capital within stockholders' equity on our consolidated balance sheet for the value of the shares held back by the counterparty as of March 31, 2022, which was reclassified to treasury stock in the second quarter of 2022 in connection with the final settlement of the agreement. In total, we repurchased 1.7 million shares pursuant to the February 2022 accelerated share repurchase agreement.

Preferred Stock

Unum Group has 25.0 million shares of preferred stock authorized with a par value of $0.10 per share. No preferred stock has been issued to date.

Note 12 - Commitments and Contingent Liabilities

Commitments

See Notes 3 and 4 for further discussion on certain of our investment commitments.

Contingent Liabilities

We are a defendant in a number of litigation matters that have arisen in the normal course of business, including the matters discussed below. Further, state insurance regulatory authorities and other federal and state authorities regularly make inquiries and conduct investigations concerning our compliance with applicable insurance and other laws and regulations. Given the complexity and scope of our litigation and regulatory matters, it is not possible to predict the ultimate outcome of all pending investigations or legal proceedings or provide reasonable estimates of potential losses, except if noted in connection with specific matters.

In some of these matters, no specified amount is sought. In others, very large or indeterminate amounts, including punitive and treble damages, are asserted. There is a wide variation of pleading practice permitted in the United States courts with respect to requests for monetary damages, including some courts in which no specified amount is required and others which allow the plaintiff to state only that the amount sought is sufficient to invoke the jurisdiction of that court. Further, some jurisdictions permit plaintiffs to allege damages well in excess of reasonably possible verdicts. Based on our extensive experience and that of others in the industry with respect to litigating or resolving claims through settlement over an extended period of time, we believe that the monetary damages asserted in a lawsuit or claim bear little relation to the merits of the case, or the likely disposition value. Therefore, the specific monetary relief sought is not stated.

Unless indicated otherwise in the descriptions below, reserves have not been established for litigation and contingencies. An estimated loss is accrued when it is both probable that a liability has been incurred and the amount of the loss can be reasonably estimated.

Claim Handling Matters

We and our insurance subsidiaries, in the ordinary course of our business, are engaged in claim litigation where disputes arise as a result of a denial or termination of benefits. Most typically these lawsuits are filed on behalf of a single claimant or policyholder, and in some of these individual actions punitive damages are sought, such as claims alleging bad faith in the handling of insurance claims. For our general claim litigation, we maintain reserves based on experience to satisfy judgments and settlements in the normal course. We expect that the ultimate liability, if any, with respect to general claim litigation, after consideration of the reserves maintained, will not be material to our consolidated financial condition. Nevertheless, given the inherent unpredictability of litigation, it is possible that an adverse outcome in certain claim litigation involving punitive damages could, from time to time, have a material adverse effect on our consolidated results of operations in a period, depending on the results of operations for the particular period.

From time to time class action allegations are pursued where the claimant or policyholder purports to represent a larger number of individuals who are similarly situated. Since each insurance claim is evaluated based on its own merits, there is rarely a single act or series of actions which can properly be addressed by a class action. Nevertheless, we monitor these cases closely and defend ourselves appropriately where these allegations are made.

Note 13 - Other

Income Tax

In August 2022, the Inflation Reduction Act (IRA) was signed into law in the U.S. and includes certain corporate tax provisions effective January 1, 2023. The IRA imposes a new 15 percent corporate alternative minimum tax (CAMT) on adjusted financial statement income (AFSI) on corporations that have average AFSI over $1.0 billion in any prior three-year period, starting with years 2020 to 2022. We anticipate that our company will be an applicable corporation. We have not recorded any CAMT as of March 31, 2023. We do not expect that any CAMT incurred would impact earnings since it would be offset with a credit toward regular income tax in subsequent years.

Note 13 - Other - Continued

Allowance for Expected Credit Losses on Premiums Receivable

At March 31, 2023 and December 31, 2022, the allowance for expected credit losses on premiums receivables was $31.6 million and $32.5 million, respectively, on gross premiums receivable of $635.6 million and $557.6 million, respectively. The decrease in the allowance of $0.9 million during the three months ended March 31, 2023 was driven primarily by improvements in the age of premiums receivable.

At March 31, 2022 and December 31, 2021, the allowance for expected credit losses on premiums receivables was $35.0 million and $34.2 million, respectively, on gross premiums receivable of $600.9 million and $530.7 million, respectively. The increase in the allowance of $0.8 million during the three months ended March 31, 2022 was driven primarily by an increase in the gross premiums receivable, partially offset by improvements in unemployment levels.

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

Executive Summary

Unum Group, a Delaware general business corporation, and its insurance and non-insurance subsidiaries, which collectively with Unum Group we refer to as the Company, operate in the United States, the United Kingdom, Poland, and, to a limited extent, in certain other countries. The principal operating subsidiaries in the United States are Unum Life Insurance Company of America (Unum America), Provident Life and Accident Insurance Company (Provident), The Paul Revere Life Insurance Company, Colonial Life & Accident Insurance Company, Starmount Life Insurance Company, in the United Kingdom, Unum Limited, and in Poland, Unum Zycie TUiR S.A. (Unum Poland). We are a leading provider of financial protection benefits in the United States and the United Kingdom. Our products include disability, life, accident, critical illness, dental and vision, and other related services. We market our products primarily through the workplace.

We have three principal operating business segments: Unum US, Unum International, and Colonial Life. Our other segments are the Closed Block and Corporate segments. These segments are discussed more fully under "Segment Results" included herein in this Item 2.

The benefits we provide help the working world thrive throughout life's moments and protect people from the financial hardship of illness, injury, or loss of life. As a leading provider of employee benefits, we offer a broad portfolio of products and services through the workplace that provide support when it is needed most.

Specifically, we offer group, individual, voluntary, and dental and vision products as well as provide certain fee-based services. These products and services, which can be sold stand-alone or combined with other coverages, help employers of all sizes attract and retain the talented and capable workforce they need to succeed while protecting the incomes and livelihood of their employees. We believe employer-sponsored benefits are the most effective way to provide workers with access to information and options to protect their financial stability. Working people and their families, particularly those at lower and middle incomes, are perhaps the most vulnerable in today's economy yet are often overlooked by many providers of financial products and services. For many of these people, employer-sponsored benefits are the primary defense against the potentially catastrophic fallout of death, illness, or injury.

We have established a corporate culture consistent with the social values our products provide. Because we see important links between the obligations we have to all of our stakeholders, we place a strong emphasis on operating with integrity and contributing to positive change in our communities. Accordingly, we are committed not only to meeting the needs of our customers who depend on us, but also to being accountable for our actions through sound and consistent business practices, a strong internal compliance program, a comprehensive risk management strategy, and an engaged employee workforce.

This discussion and analysis should be read in conjunction with the consolidated financial statements and notes thereto in Part I, Item 1 and Item 3 contained in this Form 10-Q and with the "Cautionary Statement Regarding Forward-Looking Statements" included below the Table of Contents, as well as the discussion, analysis, and consolidated financial statements and notes thereto in Part I, Items 1 and 1A, and Part II, Items 7, 7A, and 8 of our annual report on Form 10-K for the year ended December 31, 2022.

Prior period financial information has been adjusted to reflect our modified retrospective adoption, effective January 1, 2023, of the Accounting Standards Update (ASU) 2018-12, related to targeted improvements to the accounting for long-duration contracts. See "Accounting Developments" included herein in this Item 2 as well as Note 2 of the "Notes to Consolidated Financial Statements" contained herein in Item 1.

Operating Performance and Capital Management

For the first quarter of 2023, we reported net income of $358.3 million, or $1.80 per diluted common share, compared to net income of $240.4 million, or $1.18 per diluted common share, in the first quarter of 2022.

Included in our results for the first quarter of 2023 are:

- A net investment gain of $0.1 million before tax and $0.1 million after tax, with a de minimis impact on earnings per diluted common share;

- Amortization of the cost of reinsurance of $11.0 million before tax and $8.7 million after tax, or $0.04 per diluted common share; and,
- Non-contemporaneous reinsurance of $7.3 million before tax and $5.7 million after tax, or $0.03 per diluted common share.

Included in our results for the first quarter of 2022 are:

- A net investment loss of $13.8 million before tax and $10.6 million after tax, or $0.05 per diluted common share;
- Amortization of the cost of reinsurance of $13.4 million before tax and $10.6 million after tax, or $0.05 per diluted common share; and,
- Non-contemporaneous reinsurance of $12.4 million before tax and $9.8 million after tax, or $0.05 per diluted common share.

Excluding these items, after-tax adjusted operating income for the first quarter of 2023 was $372.6 million, or $1.87 per diluted common share compared to $271.4 million, or $1.33 per diluted common share, for the first quarter of 2022. See "Reconciliation of Non-GAAP and Other Financial Measures" contained herein in this Item 2 for further discussion and a reconciliation of these items.

Our Unum US segment reported an increase in adjusted operating income of 85.7 percent in the first quarter of 2023 compared to the same period of 2022, due primarily to favorable benefits experience across most product lines, partially offset by higher operating expenses and lower net investment income. The benefit ratio for our Unum US segment was 60.8 percent in the first quarter of 2023, compared to 72.5 percent in first quarter of 2022. Unum US sales increased 22.5 percent in first quarter 2023 compared to the same period of 2022.

Our Unum International segment reported an increase in adjusted operating income, as measured in U.S. dollars, of 48.3 percent in the first quarter of 2023 compared to the same period of 2022. As measured in local currency, our Unum UK line of business reported an increase in adjusted operating income of 66.7 percent in the first quarter of 2023 compared to the same period of 2022 due to higher premium income and favorable benefits experience, partially offset by higher operating expenses and lower net investment income. The benefit ratio for our Unum UK line of business was 68.5 percent in the first quarter of 2023, compared to 81.2 percent in the same period of 2022. Unum International sales, as measured in U.S. dollars, increased 33.9 percent in the first quarter of 2023 compared to the same period of 2022. Unum UK sales, as measured in local currency, increased 37.8 percent in the first quarter of 2023 compared to the same period of 2022.

Our Colonial Life segment reported a decrease in adjusted operating income of 8.7 percent in the first quarter of 2023 compared to the same period of 2022, due primarily to higher operating expenses, partially offset by slightly favorable benefits experience. The benefit ratio for Colonial Life was 53.0 percent in the first quarter of 2023, compared to 53.2 percent in the same period of 2022. Colonial Life sales increased 2.7 percent in the first quarter of 2023 compared to the same period of 2022.

Our Closed Block segment reported income before income tax and net investment gains and losses of $39.9 million in the first quarter of 2023 compared to income before income tax and net investment gains and losses of $52.8 million in the same period of 2022, both of which includes the amortization of the cost of reinsurance and the impact of non-contemporaneous reinsurance related to the Closed Block individual disability reinsurance transaction. Excluding these items, our Closed Block segment reported adjusted operating income of $58.2 million in the first quarter of 2023, compared to $78.6 million in the same period of 2022. The long-term care interest adjusted loss ratio was less favorable during the first quarter of 2023 relative to the same period of 2022 but is within our long-term range of expectations.

A rising interest rate environment could continue to positively impact our yields on new investments but could also continue to create unrealized losses in our current holdings. Our net investment income has been pressured as the majority of our investments were made at a decreasing level of interest rates indicative of the prevailing trend over the last decades. As of March 31, 2023, we do not hold any securities with a decline in fair value below amortized cost which we intend to sell and it is not more likely than not that we will be required to sell before recovery in amortized cost. The net unrealized loss on our fixed maturity securities was $1.9 billion at March 31, 2023, compared to $3.0 billion at December 31, 2022, with the decrease due primarily to a decrease in U.S. Treasury rates. The earned book yield on our investment portfolio was 4.35 percent for the first three months of 2023 compared to a yield of 4.57 percent for full year 2022.

Additionally, a rising interest rate environment could result in reserve decreases specific to our liability for future policy benefits, as the reserve discount rate assumptions used in the calculation of our liability are updated at each reporting date using

a yield that is reflective of an upper-medium grade fixed income instrument, which is generally equivalent to a single-A interest rate matched to the duration of certain of our insurance liabilities. The change in discount rate assumptions on the liability for future policy benefits, net of reinsurance, due primarily to the decrease in U.S. Treasury rates during the first quarter of 2023, resulted in an increase to the liability for future policy benefits, net of reinsurance, of approximately $0.7 billion.

We believe our capital and financial positions are strong. At March 31, 2023, the risk-based capital (RBC) ratio for our traditional U.S. insurance subsidiaries, calculated on a weighted average basis using the NAIC Company Action Level formula, was approximately 425 percent. We repurchased 1.3 million shares of Unum Group common stock under our share repurchase program during each of the first quarters of 2023 and 2022. Our weighted average common shares outstanding, assuming dilution, equaled 199.5 million and 203.5 million for the first quarter of 2023 and 2022, respectively. As of March 31, 2023, Unum Group and our intermediate holding companies had available holding company liquidity of $1,343 million that was held primarily in bank deposits, commercial paper, money market funds, corporate bonds, municipal bonds, and asset backed securities. See Note 11 of the "Notes to Consolidated Financial Statements" contained herein in Item 1.

Inflation Reduction Act

In August 2022, the Inflation Reduction Act (IRA) was signed into law in the U.S. and includes certain corporate tax provisions effective January 1, 2023. The IRA imposes a new 15 percent corporate alternative minimum tax (CAMT) on adjusted financial statement income (AFSI) on corporations that have average AFSI over $1.0 billion in any prior three-year period, starting with years 2020 to 2022. We anticipate that our company will be an applicable corporation. We have not recorded any CAMT as of March 31, 2023. We do not expect that any CAMT incurred would impact earnings since it would be offset with a credit toward regular income tax in subsequent years. The IRA also imposes a one percent excise tax on the fair market value of corporate stock repurchases after December 31, 2022. This excise tax is recorded as part of the cost basis of treasury stock and is assessed on the fair value of stock repurchases, reduced by the fair value of any shares issued during the period. We have recorded $0.1 million of excise tax in stockholders' equity, as part of the cost basis of treasury stock, as of March 31, 2023.

U.K. Tax Law Change

In June 2021, the Finance Act 2021 was enacted, resulting in a U.K. tax rate increase from 19 percent to 25 percent, effective April 1, 2023.

Coronavirus Disease 2019 (COVID-19)

COVID-19 has caused disruption to the global economy and has unfavorably impacted our company as well as the overall insurance industry. During 2022 and in the first quarter of 2023, we experienced lower mortality in our life products lines, resulting primarily from lessening impacts of COVID-19 on our insured population when compared to pandemic levels. Due to the volatile and unprecedented nature of these events, we still cannot fully estimate the ultimate impact of the COVID-19 pandemic. We continue to closely monitor pandemic trends that have and may continue to have adverse impacts on our business.

Consolidated Company Outlook

We believe our strategy of providing financial protection products at the workplace puts us in a position of strength. We continue to fulfill our corporate purpose of helping the working world thrive throughout life’s moments by providing excellent service to people at their time of need. Our strategy remains centered on growing our core businesses, through investing and transforming our operations and technology to anticipate and respond to the changing needs of our customers, expanding into new adjacent markets through meaningful partnerships and effective deployment of our capital across our portfolio.

As the pandemic impacts have lessened, we have experienced recovery in our earnings driven by the underlying strength of our business and expect positive operating trends in our core businesses to continue in 2023, including improved claim experience. The products and services we provide delivered significant value to employers, employees and their families, throughout the COVID-19 pandemic and we believe this will help drive sales and premium growth in 2023.

The current interest rate environment could continue to positively impact our yields on new investments, but could also continue to create unrealized losses in our current holdings. We also may continue to experience further volatility in miscellaneous investment income primarily related to changes in partnership net asset values as well as bond calls.

As part of our discipline in pricing and reserving, we continuously monitor emerging claim trends and interest rates. We will continue to take appropriate pricing actions on new business and renewals that are reflective of the current environment and may continue to utilize derivative financial instruments to manage interest rate risk.

Our business is well-diversified by geography within our markets, industry exposures and case size, and we continue to analyze and employ strategies that we believe will help us navigate the current environment. These strategies allow us to maintain financial flexibility to support the needs of our businesses, while also returning capital to our shareholders. We have strong core businesses that have a track record of generating significant free cash flow, and we will continue to invest in our operations and expand into adjacent markets where we can best leverage our expertise and capabilities to capture market growth opportunities as those opportunities emerge. We believe that consistent operating results, combined with the implementation of strategic initiatives and the effective deployment of capital, will allow us to meet our financial objectives.

Further discussion is included in "Reconciliation of Non-GAAP and Other Financial Measures," "Accounting Developments", "Consolidated Operating Results," "Segment Results," "Investments," and "Liquidity and Capital Resources" contained herein in this Item 1 and in the "Notes to Consolidated Financial Statements" contained herein in Item 2.

Reconciliation of Non-GAAP and Other Financial Measures

We analyze our performance using non-GAAP financial measures. A non-GAAP financial measure is a numerical measure of a company's performance, financial position, or cash flows that excludes or includes amounts that are not normally excluded or included in the most directly comparable measure calculated and presented in accordance with U.S generally accepted accounting principles (GAAP). The non-GAAP financial measure of "after-tax adjusted operating income" differs from net income as presented in our consolidated operating results and income statements prepared in accordance with GAAP due to the exclusion of investment gains or losses, the amortization of the cost of reinsurance, and the impact of non-contemporaneous reinsurance as specified in the reconciliations below. Investment gains or losses primarily include realized investment gains or losses, expected investment credit losses, and gains or losses on derivatives. We believe after-tax adjusted operating income is a better performance measure and better indicator of the profitability and underlying trends in our business.

Investment gains or losses depend on market conditions and do not necessarily relate to decisions regarding the underlying business of our segments. Our investment focus is on investment income to support our insurance liabilities as opposed to the generation of investment gains or losses. Although we may experience investment gains or losses which will affect future earnings levels, a long-term focus is necessary to maintain profitability over the life of the business since our underlying business is long-term in nature, and we need to earn the interest rates assumed in calculating our liabilities.

We have exited a substantial portion of our Closed Block individual disability product line through the two phases of the reinsurance transaction that were executed in December 2020 and March 2021. As a result, we exclude the amortization of the cost of reinsurance that we recognized upon the exit of the business related to the policies on claim status as well as the impact of non-contemporaneous reinsurance that resulted from the adoption of ASU 2018-12. Due to the execution of the second phase of the reinsurance transaction occurring after January 1, 2021, the transition date of ASU 2018-12, in accordance with the provisions of the ASU related to non-contemporaneous reinsurance, we were required to establish the ceded reserves using an upper-medium grade fixed-income instrument as of the reinsurance transaction date in March 2021 which resulted in higher ceded reserves compared to that which was reported historically. However, the direct reserves for the block reinsured in the second phase were calculated using the original discount rate utilized as of the transition date. Both the direct and ceded reserves are then remeasured at each reporting period using a current discount rate reflective of an upper-medium grade fixed-income instrument, with the changes recognized in OCI. While the total equity impact is neutral, the different original discount rates utilized for direct and ceded reserves result in disproportionate earnings impacts. The impact of non-contemporaneous reinsurance will fluctuate depending on the magnitude of reserve changes during the period. We believe that the exclusion of these items provides a better view of our results from our ongoing businesses.

We may at other times exclude certain other items from our discussion of financial ratios and metrics in order to enhance the understanding and comparability of our operational performance and the underlying fundamentals, but this exclusion is not an indication that similar items may not recur and does not replace net income or net loss as a measure of our overall profitability.

A reconciliation of GAAP financial measures to our non-GAAP financial measures is as follows:

	Three Months Ended March 31			
	2023		2022	
	(in millions)	per share *	(in millions)	per share *
Net Income	$ 358.3	$ 1.80	$ 240.4	$ 1.18
Excluding:				
Net Investment Gain (Loss) (net of tax benefit of $—; $3.2)	0.1	—	(10.6)	(0.05)
Amortization of the Cost of Reinsurance (net of tax benefit of $2.3; $2.8)	(8.7)	(0.04)	(10.6)	(0.05)
Non-Contemporaneous Reinsurance (net of tax benefit of $1.6; $2.6)	(5.7)	(0.03)	(9.8)	(0.05)
After-tax Adjusted Operating Income	$ 372.6	$ 1.87	$ 271.4	$ 1.33

*Assuming Dilution

We measure and analyze our segment performance on the basis of "adjusted operating revenue" and "adjusted operating income" or "adjusted operating loss", which differ from total revenue and income before income tax as presented in our consolidated statements of income due to the exclusion of investment gains and losses, the amortization of the cost of reinsurance, and the impact of non-contemporaneous reinsurance as specified in the reconciliations below. These performance measures are in accordance with GAAP guidance for segment reporting, but they should not be viewed as a substitute for total revenue, income before income tax, or net income.

A reconciliation of total revenue to "adjusted operating revenue" and income before income tax to "adjusted operating income" is as follows:

	Three Months Ended March 31	
	2023	2022
	(in millions of dollars)	
Total Revenue	$ 3,036.1	$ 2,980.6
Excluding:		
Net Investment Gain (Loss)	0.1	(13.8)
Adjusted Operating Revenue	$ 3,036.0	$ 2,994.4
Income Before Income Tax	$ 451.3	$ 295.7
Excluding:		
Net Investment Gain (Loss)	0.1	(13.8)
Amortization of the Cost of Reinsurance	(11.0)	(13.4)
Non-Contemporaneous Reinsurance	(7.3)	(12.4)
Adjusted Operating Income	$ 469.5	$ 335.3

Critical Accounting Estimates

We prepare our financial statements in accordance with GAAP. The preparation of financial statements in conformity with GAAP requires us to make estimates and assumptions that affect amounts reported in our financial statements and accompanying notes. Estimates and assumptions could change in the future as more information becomes known, which could impact the amounts reported and disclosed in our financial statements.

The accounting estimates deemed to be most critical to our financial position and results of operations are those related to the liability for future policy benefits, deferred acquisition costs, valuation of investments, pension and postretirement benefit plans, income taxes, and contingent liabilities. The critical accounting estimates for which there were significant changes during the three months ended March 31, 2023 due to the adoption of ASU 2018-12, are included below. For additional information on the accounting estimates for which there was not a significant change during the three months ended March 31, 2023, refer to the discussion under "Critical Accounting Estimates" in Part II, Item 7 of our annual report on Form 10-K for the year ended December 31, 2022.

Liability for Future Policy Benefits

Liabilities for future policy benefits represent the cost of claims that we estimate we will eventually pay to our policyholders and the related expenses for our non interest-sensitive products. Liability for future policy benefits includes policy liabilities for claims not yet incurred and for claims that have been incurred or are estimated to have been incurred but not yet reported to us. Liability for future policy benefits equaled $39.4 billion and $38.6 billion at March 31, 2023 and December 31, 2022, respectively, or approximately 74.0 percent and 73.6 percent of our total liabilities, respectively. Liability for future policy benefits ceded to reinsurers was $8.1 billion at both March 31, 2023 and December 31, 2022, respectively, and are reported as a reinsurance recoverable in our consolidated balance sheets.

Liabilities for future policy benefits are initially established in the same period in which we issue a policy, and equal the difference between projected future policy benefits and projected future premiums, allowing a margin for expenses and profit. The liabilities for future policy benefits build up and release over time, based on the emergence of cash flows, including premiums received and claims paid, and updated expectations for future cash flows.

Liabilities for future policy benefits are updated at each reporting date to reflect changes in the liability based on policy development over time, emerging experience, and any assumption updates required to maintain the best estimate basis for expected future cash flows as required by GAAP. These future policy benefit liabilities are based on actual known facts regarding the liability, such as the benefits available under the applicable policy, the covered benefit period, the age, and, as appropriate, the occupation and cause of disability of the claimant, as well as assumptions derived from our actual historical experience and expected future changes in experience for factors such as the claim duration, claim administration expenses, discount rate, policy benefit offsets, including those for social security and other government-based welfare benefits. The liability for future policy benefits also includes the liabilities for incurred claims.

Future policy benefit liabilities primarily relate to our traditional long-duration products which include our group, individual disability and certain of our voluntary benefits products in our Unum US segment; group, individual disability and life products in our Unum International segment; certain of our voluntary benefits products in our Colonial Life segment; and long-term care and certain of our other products in our Closed Block segment.

In calculating the liability for future policy benefits, our long-duration contracts are grouped into cohorts by product type and contract issue year. Liabilities for future policy benefits for claims not yet incurred are generally determined using the net premium model as prescribed by GAAP. At each reporting period, the liability for future policy benefits is remeasured at the current discount rate with the change recorded in other comprehensive income.

The calculation of the liability for future policy benefits involves numerous assumptions including discount rate, lapses, mortality, and morbidity. Certain product lines may utilize additional assumptions in calculating the liability for future policy benefits in addition to those listed above. For long-term care, premium rate increases are also a key assumption and for group long-term disability, benefit offsets are also a key assumption. For voluntary benefits products, claim costs are a key assumption. Claim costs capture the combined effect of the incidence rate, the expected level of benefit to be paid, and the claim resolution rate. Cash flow assumptions are reviewed and updated, as needed, at least annually. Assumptions may be updated more frequently if necessary based on trending experience.

On a quarterly basis, cohort level cash flow measures are updated based on the emergence of actual experience. The updated cash flows, based on experience emergence and any assumption updates, are used to determine the updated net premiums, the portion of the gross premium required to provide for all benefits and expenses, excluding acquisition costs or any costs that are required to be charged to expense as incurred. The updated net premium ratio is used to calculate the updated liability for future policy benefit as of the beginning of year, at the original discount rate. To the extent the present value of future benefits and expenses exceeds the present value of future gross premiums, an immediate charge is recognized in net income, such that net premiums are set equal to gross premiums. Future policy benefit liabilities are floored at zero at the cohort level in situations where the liabilities for future policy benefits are less than zero. The change in the liability for future policy benefits, at the original discount rate, as of the beginning of the year, resulting from cash flow changes is reflected as the change in benefits - remeasurement gain or loss in the consolidated statements of income. The impact of issuances, interest accretion, premiums collected, benefit payments and lapses are reflected as the change in benefits in the consolidated statements of income.

Key Assumptions

The calculation of the liability for future policy benefits involves numerous assumptions, but the primary assumptions used to calculate the liability are (1) the discount rate, (2) the claim resolution rate, (3) the claim incidence rate, and (4) policyholder mortality and lapses:

1. The discount rate, which is used in calculating the liability for future policy benefits, is the interest rate that we use to discount future cash flows including premium and claim payments to determine the present value. A higher discount rate produces a lower reserve. If the discount rate is higher than our future investment returns, our invested assets will not earn enough investment income to support our future claim payments. The original discount rates are initially set at the transition date of ASU 2018-12, which was January 1, 2021, for policies originally issued on or before the transition date, or at the policy issuance date, for policies issued after the transition date. For policies issued after the transition date, the original discount rate assumptions reflect an upper-medium grade (low-credit risk) fixed-income instrument yield based on the currency in which the liabilities are assumed. For all cohorts, the liability is then remeasured at the each reporting period using the current discount rate reflective of an upper-medium grade fixed-income instrument. We primarily utilize a forward curve which is derived from the underlying spot curve using interpolation to develop an ultimate forward rate.

2. The claim resolution rate is the probability that a disability or long-term care claim will close due to recovery or death of the insured. It is important because it is used to estimate how long benefits will be paid for a claim. Estimated resolution rates that are set too high will result in liabilities that are lower than they need to be to pay the claim benefits over time. Claim resolution assumptions involve many factors, including the cause of disability, the policyholder's age, the type of contractual benefits provided, and the time since initial disability. We primarily use our own claim experience to develop our claim resolution assumptions. These assumptions are established for the probability of death and the probability of recovery from disability. Our studies incorporate actual claim resolution experience over a number of years and consider any observed trends over the study period. We also consider any expected future changes in claim resolution experience.

3. The incidence rate is the rate at which new claims are submitted to us. The incidence rate is affected by many factors, including the age of the insured, the insured's occupation or industry, the benefit plan design, and certain external factors such as consumer confidence and levels of unemployment. We establish our incidence assumption using a historical review of actual incidence results along with an outlook of future incidence expectations.

4. Policyholder lapse and mortality assumptions reflect the probability that insureds’ coverage is discontinued due to lapsation or death of the insured. For our life insurance products, mortality assumptions also reflect the probability that a benefit payment occurs. These rates are affected by many factors, including the age of the insured, the insured's occupation or industry, the benefit plan design, and the length of time from policy or certificate issue to valuation date. We establish our mortality and lapse assumptions using a historical review of actual results along with an outlook of future expectations.

Establishing liability for future policy benefit assumptions is complex and involves many factors. Liabilities for future policy benefits, particularly for policies offering insurance coverage for long-term disabilities and long-term care, are dependent on numerous assumptions other than just those presented in the preceding discussion. The impact of internal and external events, such as changes in claims operational procedures, economic trends such as the rate of unemployment and the level of consumer confidence, the emergence of new diseases, new trends and developments in medical treatments, and legal trends and legislative changes, including changes to social security and other government-based welfare benefits programs which provide policy benefit offsets, among other factors, will influence claim incidence rates, claim resolution rates, and claim costs. In addition, for policies offering coverage for disability or long-term care at advanced ages, the level and pattern of mortality rates at advanced ages will impact overall benefit costs. Reserve assumptions differ by product line and by policy type within a product line. Additionally, in any period and over time, our actual experience may have a positive or negative variance from our long-term assumptions, either singularly or collectively, and these variances may offset each other. We review our assumptions at least annually with a long-term view of our expected experience over the life of a block of business rather than test just one or a few assumptions independently that may be aberrant over a short period of time. Based on this review, we update our assumptions to reflect our current best estimates. Therefore, while it is possible to evaluate the sensitivity of overall results in our liability for future policy benefits based upon a change in each individual assumption, the actual impacts of changes to a variety of underlying assumptions must be considered in the aggregate by product line in order to judge the overall potential implications to the liability for future policy benefits. The following section presents an overview of our trend analysis for key assumptions and the results of variability in our assumptions, in aggregate, for the

liabilities for future policy benefits which we believe are reasonably possible to have a material impact on our future financial results if actual claims yield a materially different amount than what we currently expect and have reserved for, either favorable or unfavorable.

Cash Flow Assumption Review

Our cash flow assumption reviews during the years ended December 31, 2022 and 2021 resulted in the following net favorable impacts to income before income tax as a result of updating certain assumptions:

	December 31	
	2022	2021
	(in millions of dollars)	
Cash Flow Assumption Update Impacts to Income Before Income Tax		
Unum US		
Group Disability	$ 121.0	$ 215.0
Group Life and Accidental Death and Dismemberment	34.0	—
Individual Disability	(18.6)	4.0
Voluntary Benefits	17.0	12.2
Total Unum US	153.4	231.2
Unum International	24.5	4.6
Colonial Life	55.3	23.5
Closed Block		
Long-term Care	2.9	(24.4)
Closed Block - All Other	(11.0)	—
Total Closed Block	(8.1)	(24.4)
Total	$ 225.1	$ 234.9

There were no significant changes in our cash flow assumptions during the three months ended March 31, 2023.

2022 Significant Cash Flow Assumption Updates:

The cash flow assumption updates in our US group long-term disability product line and our waiver of premium benefits for our Unum US group life product line reduced our liability for future policy benefits by $121.0 million and $34.0 million before tax with a corresponding increase to policy benefits - remeasurement gain, respectively, due primarily to sustained improvement in claim recovery trends since our last assumption update, partially offset by lower social security benefit offsets for our group long-term disability product line.

The cash flow assumption updates in our Colonial Life segment reduced our liability for future policy benefits by $55.3 million with a corresponding increase to policy benefits - remeasurement gain, due primarily to improvement in certain of our claim cost assumptions since our most recent assumption update.

2021 Significant Cash Flow Assumption Updates:

The cash flow assumption updates in our US group long-term disability product line and our waiver of premium benefits for our Unum US group life product line reduced our liability for future policy benefits by $215.0 million before tax with a corresponding increase to policy benefits - remeasurement gain, due primarily to sustained improvement in claim recovery trends since our last assumption update.

Trends in Key Assumptions

Generally, we do not expect our mortality and morbidity claim incidence trends or our persistency trends to change significantly in the short-term, and to the extent that these trends do change, we expect those changes to be gradual over a longer period of time. We have historically experienced an increase in our group long-term disability morbidity claim incidence trends during and following a recessionary period and believe claim incidence trends may continue to somewhat follow general economic conditions and demographics of the general workforce.

Regarding the 2020 COVID-19 pandemic and the related impact on the social and economic environment, we experienced elevated mortality and disability claims incidence rates during 2020 and 2021. Our view on our long-term mortality and morbidity expectations has not been impacted by this limited experience.

Generally, we do not expect our persistency trends to change significantly in the short-term, and to the extent that these trends do change, we expect those changes to be gradual over a longer period of time.

Although both short-term and long-term interest rates increased in 2022 and into 2023, the long-term discount rates underlying the majority of our liabilities are reflective of rates based on the issue year of the cohort or rates underlying the liabilities at transition to the updated accounting basis as prescribed by ASU 2018-12. The discount rate assumption for new cohorts, after the transition date, is based on the interest rate of an upper-medium grade fixed-income instrument for that cohort period.

Our claim resolution rate assumption used in determining the liability for future policy benefits is our expectation of the resolution rate we will experience over the life of the block of business and will vary from actual experience in any one period, both favorably and unfavorably. Claim resolution rates are very sensitive to operational and environmental changes and have a greater chance of significant variability in a shorter period of time than our other reserve assumptions. These rates are reviewed on a quarterly basis for the death and recovery components separately. While claim resolution rates in our Unum US group long-term disability product line have shown some variability over the last several years, they have exhibited an increasing trend.

Sensitivity Analysis

We monitor our key assumptions and test the sensitivity of our liability for future policy benefits under a range of scenarios. This sensitivity analysis was completed as of December 31, 2022 for our product lines with a higher level of estimation uncertainty and utilizes the liability for future policy benefits valued at the original discount rate. See "Quantitative and Qualitative Disclosures about Market Risk" contained herein in Item 3 for information regarding the sensitivity of the current discount rate used to remeasure the liability for future policy benefits at each reporting date.

In our estimation, scenarios based on certain variations in each of our assumptions for our Unum US group long-term disability product line could produce a change of approximately $100 million which represents 1.8 percent of our Unum US group disability liability for future policy benefits balance. Of the assumptions impacting the estimated change in the liability for future policy benefits, the largest contributor is the claim resolution rate for which we assumed a change of approximately 10 percent.

In our estimation, scenarios based on certain variations in each of our assumptions for our Unum US voluntary benefits product line could produce a change of approximately $15 million which represents 1.3 percent of our Unum US voluntary benefits liability for future policy benefits balance. Of the assumptions impacting the estimated change in the liability for future policy benefits, the largest contributor is the claim costs for which we assumed a change of approximately 10 percent.

In our estimation, scenarios based on certain possible variations in each of our assumptions for our Colonial Life segment could produce a change of approximately $60 million which represents 3.2 percent of our Colonial Life liability for future policy benefits balance. Of the assumptions impacting the estimated change in the liability for future policy benefits, the largest contributor is the claim costs, for which we assumed a change of approximately 10 percent.

We also consider variability in our assumptions related to the long-term care liability for future policy benefits. In our estimation, scenarios based on certain variations in each of our assumptions could produce potential results as illustrated in the chart below. The liability for future policy benefits for long-term care is based upon a number of key assumptions, and each assumption has various factors which may impact the long-term outcome. Key assumptions with respect to active policy lapses and mortality, claims incidence and resolutions, and future premium rate increases must incorporate extended views of expectations for many years into the future. The liability for future policy benefits is highly sensitive to these estimates. Key

assumptions and related impacts are also heavily interrelated in both their outcome and in their effects on the liability for future policy benefits. For example, changes in the view of morbidity and mortality might be mitigated by either potential future premium rate increases and/or morbidity improvements due to general improvement in health and/or medical breakthroughs. There is a potentially wide range of outcomes for each assumption and in totality. As a result, and given the size of the long-term care liability for future policy benefits in relation to the total liability for future policy benefits, our sensitivity analysis for long-term care reflects the potential impact to the present value of gross liability cash flows for future policy benefits for updates to our key assumptions for long-term care is as follows. The impact of changes to these assumptions would partially be reflected in the period in which the assumptions are updated and partially across future periods.

		PV Gross LFPB Cash Flows[1]	
Long-Term Care Cash Flow Assumptions	Sensitivity	Unfavorable	Favorable
		(in millions of dollars)	
Active Policy Lapses and Mortality	7.5 %	$ 440	$ 420
Claim Incidence	3.0 %	390	400
Claim Resolutions	2.0 %	300	290
Morbidity/Mortality Improvement[2]	No Improvement/2x	980	1,390
Future Unapproved Premium Rate Increases	10.0 %	80	80

[1]Present value of cash flows specific to the LFPB at original discount rate, except using gross premiums instead of net premiums.

[2]Unfavorable scenario reflects no future improvement. Favorable scenario reflects improvement rates twice as high as baseline.

The impact to current period liability for future benefits would be smaller in magnitude than the present value of gross liability for future policy benefits cash flows due to the updating of the net premium ratio. The current period liability for future policy benefits impact may be asymmetrical (i.e. larger for the unfavorable scenario) for some sensitivities if the assumption update causes the net premium ratio to be capped at 100 percent for any given cohort.

We believe that these sensitivities provide a reasonable estimate of the possible changes in liability for future policy benefit balances for those product lines where we believe it is possible that variability in the assumptions, in the aggregate, could result in a material impact on our liability for future policy benefit levels, but we record our liability for future policy benefits based on our long-term best estimate for our cohorts and these assumptions are reviewed and updated annually to reflect the current best estimates. Product lines that have long-term claim payout periods have a greater potential for significant variability in claim costs, either positive or negative. We closely monitor emerging experience and use these results to inform our view of long-term assumptions.

Deferred Acquisition Costs (DAC)

DAC represents the deferred incremental direct costs associated with the successful acquisition of new or renewal insurance contracts. Such costs include commissions, other agency compensation, certain selection and policy issue expenses, and certain field expenses. Acquisition costs that do not vary with the production of new business, such as commissions on group products which are generally level throughout the life of the policy, are excluded from the deferral. The DAC balance equaled $2,602.4 million and $2,560.0 million at March 31, 2023 and December 31, 2022 respectively, or approximately 4.2 percent of our total assets at each period.

Generally, we do not expect our key assumptions for DAC to change significantly in the short-term, and to the extent that these trends do change, we expect those changes to be gradual over a longer period of time.

Certain of the policy issue expenses include employee costs resulting from time spent on acquisition activities that result in the sale or renewal of policies, including selling and underwriting. The estimates of time spent on the successful acquisition of new or renewal business are reviewed and updated, as needed, at least annually. There were no significant changes in these assumptions during the years ended December 31, 2022 or 2021 or the three months ended March 31, 2023.

The lapse and mortality assumptions used to amortize DAC for our traditional long-duration products are consistent with the assumptions used to estimate the liability for future policy benefits. The underlying assumptions used to determine DAC amortization are updated concurrently with any related assumption changes for the liability for future policy benefits and changes in estimates are recognized prospectively over the remaining expected term of the related contracts. Amortization expense is adjusted based on actual versus expected experience through an adjustment to the prospective rate of amortization.

During the years ended December 31, 2022 and 2021, we updated our policyholder lapse and mortality assumptions used to develop the future amortization for DAC for the Unum US individual disability and voluntary benefits product lines as well as for the Colonial Life segment, consistent with the related assumption updates for the corresponding liabilities for future policy benefits. There were no significant changes in these assumptions during the three months ended March 31, 2023.

See Note 8 of the "Notes to Consolidated Financial Statements" contained herein in Item 1 for further discussion of our DAC accounting policy and DAC rollforward.

Accounting Developments

In 2018, the Financial Accounting Standards Board issued ASU 2018-12, “Targeted Improvements to the Accounting for Long-Duration Contracts”. This update significantly amended the accounting and disclosure requirements for long-duration insurance contracts. The update is effective for periods beginning January 1, 2023. We adopted this guidance effective January 1, 2023 using the modified retrospective approach with changes applied as of January 1, 2021, also referred to as the transition date. We adjusted all prior period operating results, balance sheets, and related metrics throughout this document.

See Note 2 of the "Notes to Consolidated Financial Statements" contained herein in Item 1 for further information.

Consolidated Operating Results

(in millions of dollars)

	Three Months Ended March 31		
	2023	% Change	2022
Revenue			
Premium Income	$ 2,459.3	2.4 %	$ 2,401.4
Net Investment Income	508.8	(3.5)	527.2
Net Investment Gain (Loss)	0.1	(100.7)	(13.8)
Other Income	67.9	3.2	65.8
Total Revenue	3,036.1	1.9	2,980.6
Benefits and Expenses			
Policy Benefits	1,882.1	(5.1)	1,983.0
Policy Benefits - Remeasurement Gain	(145.7)	111.8	(68.8)
Commissions	293.9	7.6	273.2
Interest and Debt Expense	48.1	2.6	46.9
Deferral of Acquisition Costs	(157.7)	11.2	(141.8)
Amortization of Deferred Acquisition Costs	115.9	11.9	103.6
Compensation Expense	275.0	10.8	248.3
Other Expenses	273.2	13.6	240.5
Total Benefits and Expenses	2,584.8	(3.7)	2,684.9
Income Before Income Tax	451.3	52.6	295.7
Income Tax	93.0	68.2	55.3
Net Income	$ 358.3	49.0	$ 240.4

Fluctuations in exchange rates, particularly between the British pound sterling and the U.S. dollar for our U.K. operations, have an effect on our consolidated financial results. In periods when the pound weakens relative to the preceding period, translating pounds into dollars decreases current period results relative to the prior period. In periods when the pound strengthens, translating pounds into dollars increases current period results relative to the prior period.

The weighted average pound/dollar exchange rate for our Unum UK line of business was 1.213 and 1.339 for the three months ended March 31, 2023 and 2022, respectively. If the first quarter 2022 results for our U.K. operations had been translated at the lower exchange rate of 2023, our adjusted operating revenue and adjusted operating income by segment would have both been lower by approximately $19 million and $2 million, respectively, in the first quarter of 2022. However, it is important to distinguish between translating and converting foreign currency. Except for a limited number of transactions, we do not actually convert pounds into dollars. As a result, we view foreign currency translation as a financial reporting item and not a reflection of operations or profitability in the U.K.

Premium income in our Unum US and Unum International segments increased in the first quarter of 2023 relative to the same period of 2022 driven by in-force block growth and higher overall sales while premium income declined slightly in our Colonial Life segment. Premium income continues to decline, as expected, in our Closed Block segment.

Net investment income decreased in the first quarter of 2023 relative to the same period of 2022 due to lower miscellaneous investment income and lower investment income from inflation index-linked bonds held by Unum UK, partially offset by a higher level of invested assets and an increased yield on invested assets.

We did not recognize any credit losses on fixed maturity securities during the first quarter of 2023 and credit losses on fixed maturity securities were $4.1 million in the first quarter of 2022. Also included in net investment gains and losses were changes in the fair value of an embedded derivative in a modified coinsurance arrangement, which resulted in gains (losses) of $0.3 million and $(3.4) million in the first quarter of 2023 and 2022, respectively. The changes in the embedded derivative are

primarily driven by movements in credit spreads in the overall investment market. See Note 4 in the "Notes to Consolidated Financial Statements" contained herein in Item 1 for further information on investment gains and losses.

Other income is primarily comprised of fee-based service products in the Unum US segment, which include leave management services and administrative services only (ASO) business, and the underlying results and associated net investment income of certain assumed blocks of reinsured business in the Closed Block segment.

Overall benefits experience in the first quarter of 2023 was favorable relative to the same period of 2022 with a consolidated benefit ratio, which includes the remeasurement gain or loss, of 70.6 percent and 79.7 percent, respectively. Excluding the impact of non-contemporaneous reinsurance, the consolidated benefit ratios were 70.3 percent and 79.2 percent in the first quarter of 2023 and 2022, respectively. The benefit ratio, which includes the remeasurement gain or loss, for each of our operating business segments is discussed more fully in "Segment Results" as follows.

Commissions and the deferral of acquisition costs were higher during the first quarter of 2023 compared to the same period of 2022 driven by higher sales and in-force block growth in our principal operating business segments. The increase in amortization of deferred acquisition costs in the first quarter of 2023 compared to the same period of 2022 is due primarily to growth in the level of the deferred asset in our Unum US voluntary benefits product line and in our Colonial Life segment.

Other expenses and compensation expense, on a combined basis, increased in the first quarter of 2023 compared to the same period of 2022 due to an increase in employee-related expenses, an increase in operational investments in our business, and growth in our fee-based service products.

Our effective income tax rate for the first quarter of 2023 was 20.6 percent, compared to 18.7 percent for the same prior year period. Our effective income tax rate differed from the U.S. statutory rate of 21 percent in effect for the first quarters of 2023 and 2022 primarily due to the foreign tax rate differential.

Consolidated Sales Results

Shown below are sales results for our three principal operating business segments.

(in millions)

	Three Months Ended March 31		
	2023	% Change	2022
Unum US	$ 276.6	22.5 %	$ 225.8
Unum International	$ 45.8	33.9 %	$ 34.2
Colonial Life	$ 106.8	2.7 %	$ 104.0

Sales shown in the preceding chart generally represent the annualized premium income on new sales which we expect to receive and report as premium income during the next 12 months following or beginning in the initial quarter in which the sale is reported, depending on the effective date of the new sale. Sales do not correspond to premium income reported as revenue in accordance with GAAP. This is because new annualized sales premiums reflect current sales performance and what we expect to recognize as premium income over a 12-month period, while premium income reported in our financial statements is reported on an "as earned" basis rather than an annualized basis and also includes renewals and persistency of in-force policies written in prior years as well as current new sales.

Sales, persistency of the existing block of business, employment and salary growth, and the effectiveness of a renewal program are indicators of growth in premium income. Trends in new sales, as well as existing market share, also indicate the potential for growth in our respective markets and the level of market acceptance of price levels and new product offerings. Sales results may fluctuate significantly due to case size and timing of sales submissions.

See "Segment Results" as follows for a discussion of sales by segment.

Segment Results

Our reporting segments are comprised of the following: Unum US, Unum International, Colonial Life, Closed Block, and Corporate.

In describing our results, we may at times note certain items and exclude the impact on financial ratios and metrics to enhance the understanding and comparability of our operational performance and the underlying fundamentals, but this exclusion is not an indication that similar items may not recur. We also measure and analyze our segment performance on the basis of "adjusted operating revenue" and "adjusted operating income" or "adjusted operating loss", which differ from total revenue and income before income tax as presented in our consolidated statements of income due to the exclusion of investment gains and losses and certain other items. These performance measures are in accordance with GAAP guidance for segment reporting, but they should not be viewed as a substitute for total revenue, income before income tax, or net income. See "Reconciliation of Non-GAAP Financial Measures" contained herein in this Item 2.

Unum US Segment

The Unum US segment is comprised of the group disability, group life and accidental death and dismemberment, and supplemental and voluntary lines of business. The group disability line of business includes long-term and short-term disability, medical stop-loss, and fee-based service products. The supplemental and voluntary line of business includes voluntary benefits, individual disability, and dental and vision products.

Unum US Operating Results

Shown below are financial results for the Unum US segment. In the sections following, financial results and key ratios are also presented for the major lines of business within the segment.

(in millions of dollars, except ratios)

	Three Months Ended March 31		
	2023	% Change	2022
Adjusted Operating Revenue			
Premium Income	$1,609.6	4.3 %	$1,543.0
Net Investment Income	157.3	(8.0)	171.0
Other Income	53.6	13.8	47.1
Total	1,820.5	3.4	1,761.1
Benefits and Expenses			
Policy Benefits	1,129.4	(4.6)	1,184.3
Policy Benefits - Remeasurement Gain	(151.0)	(130.9)	(65.4)
Commissions	168.9	10.2	153.2
Deferral of Acquisition Costs	(79.0)	15.7	(68.3)
Amortization of Deferred Acquisition Costs	65.8	15.6	56.9
Other Expenses	373.9	12.6	332.1
Total	1,508.0	(5.3)	1,592.8
Adjusted Operating Income	$ 312.5	85.7	$ 168.3
Operating Ratios (% of Premium Income):			
Benefit Ratio	60.8 %		72.5 %
Other Expense Ratio[1]	22.5 %		20.9 %
Adjusted Operating Income Ratio	19.4 %		10.9 %

[1]Ratio of Other Expenses to Premium Income plus Unum US Group Disability Other Income, which is primarily related to fee-based services.

Unum US Group Disability Operating Results

Shown below are financial results and key performance indicators for Unum US group disability.

(in millions of dollars, except ratios)

	Three Months Ended March 31		
	2023	% Change	2022
Adjusted Operating Revenue			
Premium Income			
Group Long-term Disability	$ 504.7	8.8 %	$ 463.9
Group Short-term Disability	240.3	8.4	221.6
Total Premium Income	745.0	8.7	685.5
Net Investment Income	81.1	(10.2)	90.3
Other Income	52.6	16.1	45.3
Total	878.7	7.0	821.1
Benefits and Expenses			
Policy Benefits	554.5	(1.7)	563.9
Policy Benefits - Remeasurement Gain	(107.5)	(90.6)	(56.4)
Commissions	58.4	11.2	52.5
Deferral of Acquisition Costs	(14.6)	15.0	(12.7)
Amortization of Deferred Acquisition Costs	13.1	18.0	11.1
Other Expenses	229.1	14.6	199.9
Total	733.0	(3.3)	758.3
Adjusted Operating Income	$ 145.7	132.0	$ 62.8
Operating Ratios (% of Premium Income):			
Benefit Ratio	60.0 %		74.0 %
Other Expense Ratio[1]	28.7 %		27.4 %
Adjusted Operating Income Ratio	19.6 %		9.2 %
Persistency:			
Group Long-term Disability	90.6 %		90.4 %
Group Short-term Disability	87.2 %		89.2 %

[1]Ratio of Other Expenses to Premium Income plus Other Income, which is primarily related to fee-based services.

Premium income was higher in the first quarter of 2023 compared to the same period of 2022 driven by in-force block growth and higher sales, partially offset by lower persistency in the group short-term disability product line. Net investment income was lower in the first quarter of 2023 relative to the same period of 2022 due to a lower level of invested assets, a decrease in the yield on invested assets, and lower miscellaneous investment income. Other income increased in the first quarter of 2023 compared to the same period of 2022 due to growth in our fee-based service products.

The benefit ratio was favorable in the first quarter of 2023 compared to the same period of 2022 due to lower claims incidence in both the group short-term and long-term disability product lines, favorable claim resolutions driven by recoveries in our group long-term disability product line, and favorable discount rate impacts on new claims. New claims for our group products are established using the discount rate based on an upper-medium grade fixed-income instrument, which is generally equivalent to a single-A interest rate, as of the policy issuance or policy renewal date. As a result, the increase in the discount rates for the first quarter of 2023 compared to the same period of 2022 contributed to the favorable benefits experience.

Commissions and the deferral of acquisition costs were higher in the first quarter of 2023 compared to the same period of 2022 due primarily to in-force block growth and higher sales. The amortization of deferred acquisition costs increased in the first quarter of 2023 compared to the same period of 2022 primarily due to an increase in lapses in our group short-term disability product line. Our other expense ratio, which includes other income that is primarily related to fee-based service products, increased in the first quarter of 2023 compared to the same period of 2022 due primarily to increases in employee-related costs and an increase in operational investments in our business, particularly related to growth in our fee-based service products.

Unum US Group Life and Accidental Death and Dismemberment Operating Results

Shown below are financial results and key performance indicators for Unum US group life and accidental death and dismemberment.

(in millions of dollars, except ratios)

	Three Months Ended March 31		
	2023	% Change	2022
Adjusted Operating Revenue			
Premium Income			
Group Life	$ 413.1	0.1 %	$ 412.6
Accidental Death & Dismemberment	43.5	3.3	42.1
Total Premium Income	456.6	0.4	454.7
Net Investment Income	22.6	(9.2)	24.9
Other Income	0.4	—	0.4
Total	479.6	(0.1)	480.0
Benefits and Expenses			
Policy Benefits	363.5	(10.7)	407.1
Policy Benefits - Remeasurement Gain	(21.2)	(178.9)	(7.6)
Commissions	39.7	8.2	36.7
Deferral of Acquisition Costs	(9.8)	7.7	(9.1)
Amortization of Deferred Acquisition Costs	9.8	4.3	9.4
Other Expenses	57.5	6.3	54.1
Total	439.5	(10.4)	490.6
Adjusted Operating Income (Loss)	$ 40.1	N.M.	$ (10.6)
Operating Ratios (% of Premium Income):			
Benefit Ratio	75.0 %		87.9 %
Other Expense Ratio	12.6 %		11.9 %
Adjusted Operating Income (Loss) Ratio	8.8 %		(2.3)%
Persistency:			
Group Life	88.8 %		89.0 %
Accidental Death & Dismemberment	87.6 %		88.2 %

N.M. = not a meaningful percentage

Premium income was slightly higher in the first quarter of 2023 compared to the same period of 2022 due to higher sales, partially offset by lower persistency. Net investment income was lower in the first quarter of 2023 relative to the same period of 2022 due primarily to lower miscellaneous investment income and a decrease in the level of invested assets.

The benefit ratio in the first quarter of 2023 was favorable compared to the same period of 2022 due to lower mortality in the group life product line, resulting primarily from lessening impacts of COVID-19 on our insured population.

Commissions and deferral of acquisition costs were higher in the first quarter of 2023 compared to the same period of 2022 due to higher sales. The amortization of deferred acquisition costs in the first quarter of 2023 was generally consistent compared to the same period of 2022. The other expense ratio increased in the first quarter of 2023 compared to the same period of 2022 due primarily to an increase in employee-related costs and operational investments in our business.

Unum US Supplemental and Voluntary Operating Results

Shown below are financial results and key performance indicators for Unum US supplemental and voluntary product lines.

(in millions of dollars, except ratios)

	Three Months Ended March 31		
	2023	% Change	2022
Adjusted Operating Revenue			
Premium Income			
Voluntary Benefits	$ 214.5	(1.9)%	$ 218.6
Individual Disability	124.2	9.3	113.6
Dental and Vision	69.3	(1.8)	70.6
Total Premium Income	408.0	1.3	402.8
Net Investment Income	53.6	(3.9)	55.8
Other Income	0.6	(57.1)	1.4
Total	462.2	0.5	460.0
Benefits and Expenses			
Policy Benefits	211.4	(0.9)	213.3
Policy Benefits - Remeasurement Gain	(22.3)	N.M.	(1.4)
Commissions	70.8	10.6	64.0
Deferral of Acquisition Costs	(54.6)	17.4	(46.5)
Amortization of Deferred Acquisition Costs	42.9	17.9	36.4
Other Expenses	87.3	11.8	78.1
Total	335.5	(2.4)	343.9
Adjusted Operating Income	$ 126.7	9.1	$ 116.1
Operating Ratios (% of Premium Income):			
Benefit Ratios:			
Voluntary Benefits	36.0 %		44.9 %
Individual Disability	45.3 %		54.6 %
Dental and Vision	80.2 %		73.4 %
Other Expense Ratio	21.4 %		19.4 %
Adjusted Operating Income Ratio	31.1 %		28.8 %
Persistency:			
Voluntary Benefits	74.2 %		75.9 %
Individual Disability	89.2 %		89.3 %
Dental and Vision	76.9 %		84.0 %

N.M. = not a meaningful percentage

Premium income was higher in the first quarter of 2023 compared to the same period of 2022, with higher sales in the individual disability product line, partially offset by lower persistency. Net investment income was lower in the first quarter of

2023 compared to the same period of 2022 due primarily to a decline in yield on invested assets, partially offset by an increase in the level of invested assets.

The benefit ratio for voluntary benefits was favorable in the first quarter of 2023 compared to the same period of 2022 primarily due to lower reserves driven by lapses as well as lower mortality within the life product line, resulting primarily from lessening impacts of COVID-19 on our insured population. The benefit ratio for individual disability was favorable in the first quarter of 2023 compared to the same period of 2022 due primarily to higher mortality and lower claims incidence. The benefit ratio for dental and vision was unfavorable in the first quarter of 2023 compared to the same period of 2022 due primarily to higher claims incidence.

Commissions and deferral of acquisition costs were higher for the first quarter of 2023 relative to the same period of 2022 due primarily to higher sales in the voluntary benefits and individual disability product lines. The amortization of deferred acquisition costs increased in the first quarter of 2023 relative to the same period of 2022 due to growth in the level of the deferred asset. Our other expense ratio increased in the first quarter of 2023 compared to the same period of 2022 due primarily to an increase in employee-related costs and an increase in operational investments in our business.

Sales

(in millions of dollars)

	Three Months Ended March 31		
	2023	% Change	2022
Sales by Product			
Group Disability and Group Life and AD&D			
Group Long-term Disability	$ 53.9	32.8 %	$ 40.6
Group Short-term Disability	37.0	33.1	27.8
Group Life and AD&D	39.1	16.4	33.6
Subtotal	130.0	27.5	102.0
Supplemental and Voluntary			
Voluntary Benefits	110.9	17.6	94.3
Individual Disability	26.7	31.5	20.3
Dental and Vision	9.0	(2.2)	9.2
Subtotal	146.6	18.4	123.8
Total Sales	$ 276.6	22.5	$ 225.8
Sales by Market Sector			
Group Disability and Group Life and AD&D			
Core Market (< 2,000 employees)	$ 84.0	28.0 %	$ 65.6
Large Case Market	46.0	26.4	36.4
Subtotal	130.0	27.5	102.0
Supplemental and Voluntary	146.6	18.4	123.8
Total Sales	$ 276.6	22.5	$ 225.8

Group sales increased during the first quarter of 2023 compared to the same period of 2022 due to growth with existing customers in both the core market, which we define as employee groups with fewer than 2,000 employees, and the large case market, partially offset by lower sales to new customers in both the core and large case markets.

Voluntary benefits sales increased during the first quarter of 2023 compared to the same period of 2022 due primarily to higher sales to new customers in the large case markets. Individual disability sales, which are primarily concentrated in the multi-life market, increased in the first quarter of 2023 compared to the same period of 2022 due to higher sales to both new and existing customers. Dental and vision sales were generally consistent in the first quarter of 2023 compared to the same period of 2022 with lower sales to new customers offset by higher sales to existing customers.

Segment Outlook

We remain committed to offering consumers a broad set of financial protection benefit products at the worksite. During 2023, we will continue to invest in a unique customer experience defined by simplicity, empathy, and deep industry expertise through the increased utilization of digital capabilities and technology to enhance enrollment, underwriting, the client administration experience, and claims processing. In addition, we will focus on strategically aligned sales through continuing to enhance the connectivity, alignment, and support for brokers and technology partners. With respect to smaller employers, we will continue to provide a comprehensive set of consumer-focused products, enhance our distribution model, and utilize our digital tools to bring industry leading enrollment capabilities and a fully integrated customer experience. Our differentiated offerings and market leading leave management services provide substantial growth opportunities, particularly with larger employers, and stronger persistency in our core products. We believe our active client management, integrated customer experience across our product lines, and strong risk management, will enable us to continue to grow our market over the long-term.

We anticipate increased adjusted operating income growth in 2023 supported by premium growth and improved claim experience. We expect strong full year premium income, partially due to favorable, but normalizing, levels of in-force block growth as a result of wage inflation and an increase in the number of lives covered for our group products, as well as continued strong sales momentum. While we expect our group life claim experience to continue to improve as impacts from COVID-19 lessen, we may also continue to experience claims volatility, particularly in our group disability and group and voluntary life products. Furthermore, we could continue to experience increased expenses as we continue to invest in our people and capabilities, including our leave management services.

The current interest rate environment could continue to positively impact our yields on new investments but could also continue to create further unrealized losses in our current holdings. Our net investment income may continue to be impacted by volatility in miscellaneous investment income.

As part of our discipline in pricing and reserving, we continuously monitor emerging claim trends and interest rates. We will continue to take appropriate pricing actions on new business and renewals that are reflective of the current environment. We continuously monitor key indicators to assess our risks and adjust our business plans accordingly.

Unum International Segment

The Unum International segment is comprised of our operations in both the United Kingdom and Poland. Our Unum UK products include insurance for group long-term disability, group life, and supplemental lines of business, which includes dental, individual disability, and critical illness products. Our Unum Poland products include insurance for individual and group life with accident and health riders. Unum International's products are sold primarily through field sales personnel and independent brokers and consultants.

Operating Results

Shown below are financial results and key performance indicators for the Unum International segment.

(in millions of dollars, except ratios)

	Three Months Ended March 31		
	2023	% Change	2022
Adjusted Operating Revenue			
Premium Income			
Unum UK			
Group Long-term Disability	$ 91.7	(11.3)%	$ 103.4
Group Life	39.2	21.7	32.2
Supplemental	31.8	9.7	29.0
Unum Poland	25.9	11.6	23.2
Total Premium Income	188.6	0.4	187.8
Net Investment Income	30.9	(10.4)	34.5
Other Income	0.4	100.0	0.2
Total	219.9	(1.2)	222.5
Benefits and Expenses			
Policy Benefits	131.9	(2.8)	135.7
Policy Benefits - Remeasurement Loss (Gain)	(4.4)	(134.4)	12.8
Commissions	16.6	11.4	14.9
Deferral of Acquisition Costs	(3.5)	—	(3.5)
Amortization of Deferred Acquisition Costs	1.8	(14.3)	2.1
Other Expenses	39.1	13.0	34.6
Total	181.5	(7.7)	196.6
Adjusted Operating Income	$ 38.4	48.3	$ 25.9

Foreign Currency Translation

The functional currencies of Unum UK and Unum Poland are the British pound sterling and Polish zloty, respectively. Premium income, net investment income, claims, and expenses are received or paid in the functional currency, and we hold functional currency-denominated assets to support functional currency-denominated policy liabilities. We translate functional currency-denominated financial statement items into dollars for our consolidated financial reporting. We translate income statement items using an average exchange rate for the reporting period, and we translate balance sheet items using the exchange rate at the end of the period. We report unrealized foreign currency translation gains and losses in accumulated other comprehensive income in our consolidated balance sheets.

Fluctuations in exchange rates impact Unum International's reported financial results and our consolidated financial results. In periods when the functional currency strengthens relative to the preceding period, translation increases current period results relative to the prior period. In periods when the functional currency weakens, translation decreases current period results relative to the prior period.

Unum UK Operating Results

Shown below are financial results and key performance indicators for the Unum UK product lines in functional currency.

(in millions of pounds, except ratios)

	Three Months Ended March 31		
	2023	% Change	2022
Adjusted Operating Revenue			
Premium Income			
Group Long-term Disability	£ 75.5	(2.1)%	£ 77.1
Group Life	32.3	34.6	24.0
Supplemental	26.1	20.8	21.6
Total Premium Income	133.9	9.1	122.7
Net Investment Income	23.7	(2.1)	24.2
Other Income	—	(100.0)	0.1
Total	157.6	7.2	147.0
Benefits and Expenses			
Policy Benefits	95.5	6.2	89.9
Policy Benefits - Remeasurement Loss (Gain)	(3.8)	(139.2)	9.7
Commissions	8.9	8.5	8.2
Deferral of Acquisition Costs	(1.0)	(16.7)	(1.2)
Amortization of Deferred Acquisition Costs	1.1	(8.3)	1.2
Other Expenses	25.9	25.7	20.6
Total	126.6	(1.4)	128.4
Adjusted Operating Income	£ 31.0	66.7	£ 18.6
Weighted Average Pound/Dollar Exchange Rate	1.213		1.339
Operating Ratios (% of Premium Income):			
Benefit Ratio	68.5 %		81.2 %
Other Expense Ratio	19.3 %		16.8 %
Adjusted Operating Income Ratio	23.2 %		15.2 %
Persistency:			
Group Long-term Disability	90.1 %		88.1 %
Group Life	81.5 %		88.0 %
Supplemental	88.9 %		90.4 %

Premium income was higher in the first quarter of 2023 compared to the same period of 2022 due to in-force block growth and higher sales.

Net investment income was lower in the first quarter of 2023 relative to the same period of 2022 due to lower investment income from inflation index-linked bonds. Our investments in inflation index-linked bonds support the claim liabilities associated with certain group policies that provide for inflation-linked increases in policy benefits. The change in net investment income attributable to these index-linked bonds is partially offset by a change in policy benefits related to the inflation index-linked group long-term disability and group life policies.

The benefit ratio was favorable in the first quarter of 2023 relative to the same period of 2022 due to favorable claim resolutions driven by higher mortality in the group long-term disability product line, higher discount rates on new claims, and lower inflation-linked experience in benefits, partially offset by higher mortality in the group life product line.

Commissions were higher in the first quarter of 2023 relative to the same prior year period due primarily to in-force block growth and higher sales. The deferral of acquisition costs and the amortization of deferred acquisition costs during the first quarter of 2023 were generally consistent with the same prior year period. The other expense ratio was higher in the first quarter of 2023 relative to the same prior year period due to an increase in operational investments in the business.

Sales

(in millions of dollars and pounds)

	Three Months Ended March 31		
	2023	% Change	2022
Unum International Sales by Product			
Unum UK			
Group Long-term Disability	$ 9.2	(41.0)%	$ 15.6
Group Life	16.2	95.2	8.3
Supplemental	11.9	101.7	5.9
Unum Poland	8.5	93.2	4.4
Total Sales	$ 45.8	33.9	$ 34.2
Unum International Sales by Market Sector			
Unum UK			
Group Long-term Disability and Group Life			
Core Market (< 500 employees)	$ 12.5	3.3 %	$ 12.1
Large Case Market	12.9	9.3	11.8
Subtotal	25.4	6.3	23.9
Supplemental	11.9	101.7	5.9
Unum Poland	8.5	93.2	4.4
Total Sales	$ 45.8	33.9	$ 34.2
Unum UK Sales by Product			
Group Long-term Disability	£ 7.5	(35.3)%	£ 11.6
Group Life	13.3	114.5	6.2
Supplemental	9.8	122.7	4.4
Total Sales	£ 30.6	37.8	£ 22.2
Unum UK Sales by Market Sector			
Group Long-term Disability and Group Life			
Core Market (< 500 employees)	£ 10.2	14.6 %	£ 8.9
Large Case Market	10.6	19.1	8.9
Subtotal	20.8	16.9	17.8
Supplemental	9.8	122.7	4.4
Total Sales	£ 30.6	37.8	£ 22.2

The following discussion of sales results relates only to our Unum UK product lines and is based on functional currency.

Group long-term disability sales decreased in the first quarter of 2023 compared to the same period of 2022, driven by lower sales to new and existing customers in the large case market, which we define as employee groups with greater than 500 employees, partially offset by higher sales to new and existing customers in the core market.

Group life sales increased in the first quarter of 2023 compared to the same period of 2022 driven by higher sales to new and existing customers in both the core and large case markets.

Supplemental sales increased in the first quarter of 2023 compared to the same period of 2022 due to higher sales in our group critical illness and dental product lines.

Segment Outlook

We are committed to driving growth in the Unum International segment and will build on the capabilities that we believe will generate growth and profitability in our businesses over the long term. In 2023, we will focus on scaling our business and broadening our international portfolio. For our Unum UK line of business, achieving growth remains a priority, and we will continue to focus on delivering a best in class health and wellbeing service to improve retention of our key customers and drive growth in small case business. We will also accelerate premium growth by focusing on both the broker experience and customer engagement, while maintaining our disciplined approach to pricing. Within our Unum Poland line of business, we will drive growth by expanding our distribution and the new direct channel. We will also continue to invest in digital capabilities, technology, and product enhancements which we believe will drive sustainable growth over the long term.

In 2023, we expect sales and premium growth to continue, alongside improving claim experience. We recognize that 2022 earnings benefited from inflation linked income that we expect to trend towards a more normalized level in 2023 and could pressure earnings growth. As inflation begins to moderate, we will likely continue to experience higher net investment income and fluctuations in our benefit ratio. We continuously monitor key indicators to assess our risks and adjust our business plans accordingly.

Colonial Life Segment

The Colonial Life segment includes insurance for accident, sickness, and disability products, which includes our dental and vision products, life products, and cancer and critical illness products issued primarily by Colonial Life & Accident Insurance Company and marketed to employees, on both a group and an individual basis, at the workplace through an independent contractor agent sales force and brokers.

Operating Results

Shown below are financial results and key performance indicators for the Colonial Life segment.

(in millions of dollars, except ratios)

	Three Months Ended March 31		
	2023	% Change	2022
Adjusted Operating Revenue			
Premium Income			
Accident, Sickness, and Disability	$ 235.7	(1.7)%	$ 239.7
Life	105.3	3.5	101.7
Cancer and Critical Illness	88.5	(0.9)	89.3
Total Premium Income	429.5	(0.3)	430.7
Net Investment Income	37.3	(2.1)	38.1
Other Income	0.2	(33.3)	0.3
Total	467.0	(0.4)	469.1
Benefits and Expenses			
Policy Benefits	220.9	(8.1)	240.5
Policy Benefits - Remeasurement Loss (Gain)	6.8	160.7	(11.2)
Commissions	89.3	4.3	85.6
Deferral of Acquisition Costs	(75.2)	7.4	(70.0)
Amortization of Deferred Acquisition Costs	48.3	8.3	44.6
Other Expenses	83.0	8.2	76.7
Total	373.1	1.9	366.2
Adjusted Operating Income	$ 93.9	(8.7)	$ 102.9
Operating Ratios (% of Premium Income):			
Benefit Ratio	53.0 %		53.2 %
Other Expense Ratio	19.3 %		17.8 %
Adjusted Operating Income Ratio	21.9 %		23.9 %
Persistency:			
Accident, Sickness, and Disability	72.5 %		74.5 %
Life	84.1 %		85.4 %
Cancer and Critical Illness	81.7 %		82.2 %

Premium income decreased slightly in the first quarter of 2023 compared to the same period of 2022 due to lower persistency, partially offset by higher prior period sales. Net investment income was lower in the first quarter of 2023 compared to the same period of 2022 due to lower miscellaneous investment income, partially offset by an increase in the level of invested assets.

The benefit ratio in the first quarter of 2023 was slightly favorable relative to the same period of 2022 primarily driven by favorable mortality experience in the life product line resulting from lessening impacts of COVID-19 on our insured population, partially offset by unfavorable benefits experience in the cancer and critical illness product line.

Commissions and the deferral of acquisition costs were higher in the first quarter of 2023 relative to the same period of 2022 due to higher sales in prior periods. The amortization of deferred acquisition costs in the first quarter of 2023 was higher relative to the same period of 2022 due to growth in the level of the deferred asset. The other expense ratio was higher in the first quarter of 2023 relative to the same period of 2022 due primarily to an increase in employee-related costs and an increase in operational investments in our business.

Sales

(in millions of dollars)

	Three Months Ended March 31		
	2023	% Change	2022
Sales by Product			
Accident, Sickness, and Disability	$ 66.5	1.4 %	$ 65.6
Life	26.2	10.1	23.8
Cancer and Critical Illness	14.1	(3.4)	14.6
Total Sales	$ 106.8	2.7	$ 104.0
Sales by Market Sector			
Commercial			
Core Market (< 1,000 employees)	$ 73.4	1.0 %	$ 72.7
Large Case Market	10.1	(16.5)	12.1
Subtotal	83.5	(1.5)	84.8
Public Sector	23.3	21.4	19.2
Total Sales	$ 106.8	2.7	$ 104.0

Commercial market sales decreased during the first quarter of 2023 compared to the same period of 2022 due to lower sales to existing customers in the large case market and to new customers in the core market, which we define as accounts with fewer than 1,000 employees. Public sector market sales increased in the first quarter of 2023 compared to the same period of 2022 due to higher sales to existing customers, partially offset by lower sales to new customers. The number of new accounts increased 0.8 percent in the first quarter of 2023 compared to the same period of 2022. The average new case size decreased 7.9 percent in the first quarter of 2023 compared to the same period of 2022.

Segment Outlook

We remain committed to providing employees and their families with simple, modern, and personal benefit solutions. During 2023, we will continue to utilize our strong distribution system of independent agents, benefit counselors and broker partnerships. We will also continue to invest in new solutions and digital capabilities to expand our reach and effectiveness, driving growth and improving productivity while enhancing the customer experience. In 2023, we will continue to bring an enhanced engagement and enrollment platform to market enabling deeper connections with employees through the enrollment process as well as maintaining stronger relationships throughout the customer lifecycle. We believe our distribution system, customer service capabilities, digital and virtual tools, and ability to serve all market sizes position us well for future growth.

In 2023, we expect positive adjusted operating income growth with sales growth and full year premium income growing from the prior year, but at a rate that is below pre-pandemic levels. We expect stable claim experience in 2023, but could continue to experience some level of claims volatility. While we believe our underlying profitability will remain strong, current economic conditions and increasing competition in the voluntary workplace market are risks to achievement of our business plans. We continuously monitor key indicators to assess our risks and adjust our business plans accordingly.

Closed Block Segment

The Closed Block segment consists of group and individual long-term care and other insurance products no longer actively marketed. We discontinued offering individual long-term care in 2009 and group long-term care in 2012. Other insurance products include individual disability, group pension, individual life and corporate-owned life insurance, reinsurance pools and management operations, and other miscellaneous product lines.

Operating Results

Shown below are financial results and key performance indicators for the Closed Block segment.

(in millions of dollars, except ratios)

	Three Months Ended March 31		
	2023	% Change	2022
Adjusted Operating Revenue			
Premium Income			
Long-term Care	$ 175.1	0.2 %	$ 174.8
All Other	56.5	(13.2)	65.1
Total Premium Income	231.6	(3.5)	239.9
Net Investment Income	257.2	(6.4)	274.8
Other Income	13.5	(15.6)	16.0
Total	502.3	(5.4)	530.7
Benefits and Expenses			
Policy Benefits	399.9	(5.3)	422.5
Policy Benefits - Remeasurement Loss (Gain)	2.9	158.0	(5.0)
Commissions	19.1	(2.1)	19.5
Other Expenses	40.5	(1.0)	40.9
Total	462.4	(3.2)	477.9
Income Before Income Tax and Net Investment Gains and Losses	39.9	(24.4)	52.8
Amortization of the Cost of Reinsurance	11.0	(17.9)	13.4
Non-Contemporaneous Reinsurance	7.3	(41.1)	12.4
Adjusted Operating Income	$ 58.2	(26.0)	$ 78.6
Interest Adjusted Loss Ratios:			
Long-term Care	86.6 %		82.2 %
Operating Ratios (% of Premium Income):			
Other Expense Ratio [1]	12.7 %		11.5 %
Income Ratio	17.2 %		22.0 %
Adjusted Operating Income Ratio	25.1 %		32.8 %
Persistency:			
Long-term Care	95.4 %		95.4 %

[1]Excludes amortization of the cost of reinsurance.

Premium income for long-term care in the first quarter of 2023 was generally consistent with the same period of 2022. Premium income for our "All Other" product line continues to decline as expected due to policyholder lapses.

Net investment income was lower during the first quarter of 2023 relative to the same period of 2022 primarily due to lower miscellaneous investment income, primarily related to smaller increases in the net asset value (NAV) on our private equity partnerships, partially offset by an increase in the level of invested assets.

Other income primarily includes the underlying results and associated net investment income of certain assumed blocks of business.

The interest adjusted loss ratio for long-term care was less favorable during the first quarter of 2023 relative to the same period of 2022 driven primarily by higher claim incidence. The interest adjusted loss ratio for long-term care for the rolling twelve months was 84.7 percent.

The other expense ratio, excluding the amortization of the cost of reinsurance related to the Closed Block individual disability reinsurance transaction, was higher in the first quarter of 2023 relative to the same period of 2022 due primarily to a decline in the expense allowance related to the ceded block of individual disability business and an increase in employee-related costs.

Individual Disability Reinsurance Transaction

As shown in the chart above, we exclude from income before income tax and net investment gains and losses, the amortization of the cost of reinsurance and the impact of non-contemporaneous reinsurance related to the Closed Block individual disability reinsurance transaction, where we ceded a significant portion of this business. As a result of the execution of the second phase of the reinsurance transaction occurring after January 1, 2021, the transition date of ASU 2018-12, in accordance with the provisions of the ASU related to non-contemporaneous reinsurance, we were required to establish the ceded reserves using an upper-medium grade fixed-income instrument as of the reinsurance transaction date in March 2021 which resulted in higher ceded reserves compared to that which was reported historically. However, the direct reserves for the block reinsured in the second phase were calculated using the original discount rate utilized as of the transition date. Both the direct and ceded reserves are then remeasured at each reporting period using a current discount rate reflective of an upper-medium grade fixed-income instrument, with the changes recognized in OCI. While the total equity impact is neutral, the different original discount rates utilized for direct and ceded reserves result in disproportionate earnings impacts. The impact of non-contemporaneous reinsurance will fluctuate depending on the magnitude of reserve changes during the period. The decrease in the effects of non-contemporaneous reinsurance treatment in the first quarter of 2023 compared to the first quarter of 2022 is due to less favorable experience in this block in the first quarter of 2023 which resulted in a smaller net change in reserves in the first quarter of 2023 as compared to the first quarter of 2022.

Due to the increase in ceded reserves for the second phase of the reinsurance transaction as part of our adoption of ASU 2018-12, the cost of reinsurance decreased which results in a decrease in the amortization of the cost of reinsurance. The cost of reinsurance continues to be amortized over a period of approximately 25 years, on a declining trajectory generally consistent with the expected run-off pattern of the ceded reserves.

Segment Outlook

We will continue to execute on our well-defined strategy of implementing long-term care premium rate increases, efficient capital management, improved financial analysis, and operational effectiveness. We will continue to explore structural options to enhance financial flexibility. We continue to file requests with various state insurance departments for premium rate increases on certain of our individual and group long-term care policies which reflect assumptions as of the date of filings. In states for which a rate increase is submitted and approved, we routinely provide customers options for coverage changes or other approaches that might fit their current financial and insurance needs. Despite continued anticipated premium rate increases in our long-term care business, we expect overall premium income and adjusted operating revenue to decline over time as these closed blocks of business wind down. We will likely experience volatility in net investment income due to fluctuations of miscellaneous investment income, driven by bond calls and the increased allocation towards alternative assets, primarily private equity partnership investments, in the long-term care product line portfolio. We record changes in our share of the NAV of the partnerships in net investment income. We receive financial information related to our investments in partnerships and generally record investment income on a one-quarter lag in accordance with our accounting policy. As these net asset values are volatile and can fluctuate materially with changes in market economic conditions, there may possibly be significant movements up or down in future periods as conditions change. We continuously monitor key indicators to assess our risks and adjust our business plans, including utilization of derivative financial instruments to manage interest rate risk.

Profitability of our long-tailed products is affected by claims experience related to mortality and morbidity, resolutions, investment returns, premium rate increases, and persistency. We believe that the interest adjusted loss ratio for long-term care will be relatively flat over the long term, but may continue to experience quarterly volatility, particularly in the near term as our

claim block matures and as we continue the implementation of premium rate increases. Specific to our long-term care line of business, we expect the long term interest adjusted loss ratio to remain consistent with prior guidance, which was in the 85 to 90 percent range with some quarterly volatility. Claim resolution rates which reflect the probability that a disability or long-term care claim will close due to recovery or death of the insureds, are very sensitive to operational and external factors and can be volatile. Our claim resolution rate assumption used in determining reserves is our expectation of the resolution rate we will experience over the life of the block of business and will vary from actual experience in any one period. It is possible that variability in any of our reserve assumptions, including, but not limited to, mortality, morbidity, claim resolutions, premium rate increases, and lapses, could result in a material impact to our reserves. We continuously monitor key indicators to assess our risks and adjust our business plans accordingly.

As a result of the execution of the reinsurance transaction related to our Closed Block individual disability line of business, we have fully ceded a significant portion of this business. We expect that earnings will continue to be impacted by the amortization of the cost of reinsurance and the impacts of non-contemporaneous reinsurance.

For further discussion of ASU 2018-12, see Note 2 of the "Notes to the Consolidated Financial Statements" contained herein in Item 8.

Corporate Segment

The Corporate segment includes investment income on corporate assets not specifically allocated to a line of business, interest expense on corporate debt, and certain other corporate income and expenses not allocated to a line of business.

Operating Results

(in millions of dollars)

	Three Months Ended March 31		
	2023	% Change	2022
Adjusted Operating Revenue			
Net Investment Income	$ 26.1	196.6 %	$ 8.8
Other Income	0.2	(90.9)	2.2
Total	26.3	139.1	11.0
Interest and Other Expenses	59.8	16.3	51.4
Adjusted Operating Loss	$ (33.5)	17.1	$ (40.4)

Adjusted operating loss decreased in the first quarter of 2023 relative to the same period of 2022 due primarily to increased net investment income, which was caused by an increase in yield on invested assets, partially offset by higher pension expenses.

Segment Outlook

We expect to continue to generate excess capital on an annual basis through the statutory earnings in our insurance subsidiaries and believe we are well positioned with flexibility to preserve our capital strength while also returning capital to our shareholders. We may experience volatility in net investment income based on both the composition and level of invested assets that we allocate to our products from period to period.

Investments

Overview

Investment activities are an integral part of our business, and profitability is significantly affected by investment results. We segment our invested assets into portfolios that support our various product lines. Generally, our investment strategy for our portfolios is to match the effective asset cash flows and durations with related expected liability cash flows and durations to consistently meet the liability funding requirements of our businesses. We seek to earn investment income while assuming credit risk in a prudent and selective manner, subject to constraints of quality, liquidity, diversification, and regulatory considerations. Our overall investment philosophy is to invest in a portfolio of high quality assets that provide investment returns consistent with that assumed in the pricing of our insurance products. Assets are invested predominantly in fixed maturity securities.

We manage our asset and liability cash flow match and our asset and liability duration match to manage interest rate risk. We may redistribute investments among our different lines of business, when necessary, to adjust the cash flow and/or duration of the asset portfolios to better match the cash flow and duration of the liability portfolios. Asset and liability portfolio modeling is updated on a quarterly basis and is used as part of the overall interest rate risk management strategy. Cash flows from the in-force asset and liability portfolios are projected at current interest rate levels and at levels reflecting an increase and a decrease in interest rates to obtain a range of projected cash flows under the different interest rate scenarios. These results enable us to assess the impact of projected changes in cash flows and duration resulting from potential changes in interest rates. Testing the asset and liability portfolios under various interest rate scenarios enables us to choose what we believe to be the most appropriate investment strategy, as well as to limit the risk of disadvantageous outcomes. Although we test the asset and liability portfolios under various interest rate scenarios as part of our modeling, the majority of our liabilities related to insurance contracts are not interest rate sensitive, and we therefore have minimal exposure to policy withdrawal risk. Our determination of investment strategy relies on long-term measures such as asset adequacy analysis and the relationship between the portfolio yields supporting our various product lines and the aggregate discount rate assumptions embedded in the reserves.

We also use this analysis in determining hedging strategies and utilizing derivative financial instruments for managing interest rate risk and the risk related to matching duration for our assets and liabilities. We do not use derivative financial instruments for speculative purposes.

Our investment portfolio is well diversified by type of investment and industry sector. We have established an investment strategy that we believe will provide for adequate cash flows from operations and allow us to hold our securities through periods where significant decreases in fair value occur. We believe our emphasis on risk management in our investment portfolio has positioned us well and generally reduced the volatility in our results.

Economic Environment

The recent capital market turmoil has caused volatility for certain asset classes. The fair value of our financial institution securities has remained stable during the first three months of 2023. Our direct exposure to bank credit is less than four percent of our total portfolio on an amortized cost basis and is heavily weighted to Global Systemically Important Banks (G-SIBs). Our mortgage/asset-backed securities primarily include highly rated residential mortgage-backed securities, with commercial mortgage-backed securities making up less than $10 million on an amortized cost basis. We continue to monitor capital market activity on a regular basis and to the extent that there is continued volatility and ratings downgrades related to the issuers of our fixed maturity securities, we could experience credit losses, an increase in defaults, and the need for additional capital in our insurance subsidiaries. However, we remain confident in the overall strength and credit quality of our investment portfolio. For further discussion, see "Fixed Maturity Securities" contained herein this Item 2.

With respect to our limited partnership investments, we have not experienced, nor do we expect to experience, any material impact on the net asset values or distributions as a result of the recent turmoil in the banking sector. We do not expect any material impacts and remain confident in the strength of our commercial mortgage loan portfolio. For further discussion, see "Mortgage Loans" and "Private Equity Partnerships" contained herein in Item 2.

Fixed Maturity Securities

The fair values and associated unrealized gains and losses of our fixed maturity securities portfolio, by industry classification, are as follows:

Fixed Maturity Securities - By Industry Classification
As of March 31, 2023

(in millions of dollars)

Classification	Fair Value	Net Unrealized Gain (Loss)	Fair Value with Gross Unrealized Loss	Gross Unrealized Loss	Fair Value with Gross Unrealized Gain	Gross Unrealized Gain
Basic Industry	$ 2,633.9	$ (140.5)	$ 1,881.2	$ 194.6	$ 752.7	$ 54.1
Capital Goods	3,277.4	(132.2)	2,060.8	227.6	1,216.6	95.4
Communications	2,361.2	(88.4)	1,289.7	197.4	1,071.5	109.0
Consumer Cyclical	1,443.1	(90.3)	1,102.7	116.8	340.4	26.5
Consumer Non-Cyclical	5,950.4	(357.5)	3,836.5	526.4	2,113.9	168.9
Energy	2,779.0	(6.6)	1,301.1	120.9	1,477.9	114.3
Financial Institutions	3,593.5	(374.8)	3,117.6	404.2	475.9	29.4
Mortgage/Asset-Backed	576.3	(10.4)	393.3	20.3	183.0	9.9
Sovereigns	876.0	(59.1)	337.6	105.5	538.4	46.4
Technology	1,596.0	(141.2)	1,415.1	152.5	180.9	11.3
Transportation	1,646.5	(124.0)	1,198.3	155.0	448.2	31.0
U.S. Government Agencies and Municipalities	4,182.5	(359.5)	2,464.8	520.4	1,717.7	160.9
Public Utilities	5,244.4	(57.1)	2,149.2	285.0	3,095.2	227.9
Total	$ 36,160.2	$ (1,941.6)	$ 22,547.9	$ 3,026.6	$ 13,612.3	$ 1,085.0

The following two tables show the length of time our investment-grade and below-investment-grade fixed maturity securities portfolios had been in a gross unrealized loss position as of March 31, 2023 and at the end of the prior four quarters. The relationships of the current fair value to amortized cost are not necessarily indicative of the fair value to amortized cost relationships for the securities throughout the entire time that the securities have been in an unrealized loss position nor are they necessarily indicative of the relationships after March 31, 2023. The decrease in the unrealized loss on fixed maturity securities during the first quarter of 2023 was due primarily to a decrease in U.S. Treasury rates.

Unrealized Loss on Investment-Grade Fixed Maturity Securities
Length of Time in Unrealized Loss Position

(in millions of dollars)

	2023	2022			
	March 31	December 31	September 30	June 30	March 31
Fair Value < 100% >= 70% of Amortized Cost					
<= 90 days	$ 38.2	$ 63.0	$ 523.7	$ 514.7	$ 491.6
> 90 <= 180 days	14.2	316.6	879.0	1,177.1	199.5
> 180 <= 270 days	169.2	614.5	945.4	268.9	109.1
> 270 days <= 1 year	461.9	1,126.6	218.6	147.1	1.1
> 1 year <= 2 years	1,678.1	484.0	195.0	66.5	67.2
> 2 years <= 3 years	64.8	19.2	2.9	6.5	1.7
> 3 years	1.9	—	—	—	—
Sub-total	2,428.3	2,623.9	2,764.6	2,180.8	870.2
Fair Value < 70% >= 40% of Amortized Cost					
<= 90 days	—	10.6	—	10.3	—
> 90 <= 180 days	5.5	—	22.3	37.8	3.1
> 180 <= 270 days	—	28.5	564.2	80.6	3.7
> 270 days <= 1 year	24.1	320.2	427.4	39.4	—
> 1 year <= 2 years	367.1	532.7	176.5	39.8	1.9
> 2 years <= 3 years	51.7	29.6	18.5	—	—
Sub-total	448.4	921.6	1,208.9	207.9	8.7
Total	$ 2,876.7	$ 3,545.5	$ 3,973.5	$ 2,388.7	$ 878.9

Unrealized Loss on Below-Investment-Grade Fixed Maturity Securities
Length of Time in Unrealized Loss Position

(in millions of dollars)

	2023	2022			
	March 31	December 31	September 30	June 30	March 31
Fair Value < 100% >= 70% of Amortized Cost					
<= 90 days	$ 1.5	$ 1.8	$ 27.1	$ 73.4	$ 24.8
> 90 <= 180 days	—	12.6	58.5	92.8	5.9
> 180 <= 270 days	6.3	39.1	103.8	13.5	1.9
> 270 days <= 1 year	31.8	84.7	15.2	3.3	—
> 1 year <= 2 years	82.9	17.5	3.8	0.2	1.8
> 2 years <= 3 years	—	0.5	0.7	1.4	3.7
> 3 years	2.5	2.7	3.4	2.9	7.9
Sub-total	125.0	158.9	212.5	187.5	46.0
Fair Value < 70% >= 40% of Amortized Cost					
> 90 <= 180 days	—	—	—	6.1	—
> 180 <= 270 days	—	—	5.0	3.4	—
> 270 days <= 1 year	—	7.6	—	1.4	—
> 1 year <= 2 years	—	1.3	—	—	—
> 2 years <= 3 years	—	5.1	6.2	5.4	—
> 3 years	13.7	9.6	9.9	9.1	—
Sub-total	13.7	23.6	21.1	25.4	—
Fair Value < 40% of Amortized Cost					
> 1 year <= 2 years	11.2	—	—	—	—
Sub-total	11.2	—	—	—	—
Total	$ 149.9	$ 182.5	$ 233.6	$ 212.9	$ 46.0

At March 31, 2023, we held 43 investment-grade fixed maturity securities with a gross unrealized loss of $10.0 million or greater as shown in the chart below.

Gross Unrealized Losses $10 Million or Greater on Investment-Grade Fixed Maturity Securities
As of March 31, 2023

(in millions of dollars)

Classification	Fair Value	Gross Unrealized Loss	Numbers of Issuers
Basic Industry	$ 231.7	$ (49.2)	4
Capital Goods	108.1	(24.3)	2
Communications	314.1	(65.0)	5
Consumer Cyclical	111.5	(32.0)	2
Consumer Non-Cyclical	250.7	(53.0)	4
Energy	92.4	(13.5)	1
Financial Institutions	749.8	(101.9)	8
Mortgage/Asset-Backed	356.9	(19.2)	1
Sovereigns	309.1	(95.2)	2
Technology	308.3	(57.5)	5
Transportation	135.9	(33.4)	3
U.S. Government Agencies and Municipalities	37.0	(10.7)	1
Public Utilities	284.8	(71.4)	5
Total	$ 3,290.3	$ (626.3)	43

At March 31, 2023, we held two below investment-grade fixed maturity securities with a gross unrealized loss greater than $10.0 million. The first security is a communications company and had a fair value of $3.8 million and a gross unrealized loss of $11.2 million. The second security is a pharmaceutical company and had a fair value of $39.5 million and a gross unrealized loss of $10.7 million.

The unrealized losses on investment-grade fixed maturity securities principally relate to changes in interest rates or changes in market or sector credit spreads which occurred subsequent to the acquisition of the securities. Below-investment-grade fixed maturity securities are generally more likely to develop credit concerns than investment-grade securities. At March 31, 2023, the unrealized losses in our below-investment-grade fixed maturity securities were generally due to credit spreads in certain industries or sectors and, to a lesser extent, credit concerns related to specific securities. For each specific security in an unrealized loss position, we believe that there are positive factors which mitigate credit concerns and that the securities for which we have not recorded a credit loss will recover in value. We have the ability and intent to continue to hold these securities to recovery of amortized cost and believe that no credit losses have occurred.

We had no individual net investment losses of $10.0 million or greater from credit losses or sales of fixed maturity securities during the first quarter of 2023 or 2022.

As of March 31, 2023, the amortized cost net of allowance for credit losses and fair value of our below-investment-grade fixed maturity securities was $2,101.4 million and $1,966.0 million, respectively, and our below-investment-grade fixed maturity securities as a percentage of our total investment portfolio decreased from 4.6 percent at December 31, 2022 to 4.4 percent at March 31, 2023 on a fair value basis. Below-investment-grade securities are inherently riskier than investment-grade securities since the risk of default by the issuer, by definition and as exhibited by bond rating, is higher. Also, the secondary market for certain below-investment-grade issues can be highly illiquid. Additional downgrades may occur, but we do not anticipate any liquidity problems resulting from our investments in below-investment-grade securities, nor do we expect these investments to adversely affect our ability to hold our other investments to maturity.

Fixed Maturity Securities - Foreign Exposure

Our investments in issuers in foreign countries are chosen for specific portfolio management purposes, including asset and liability management and portfolio diversification across geographic lines and sectors to minimize non-market risks. In our approach to investing in fixed maturity securities, specific investments within approved countries and industry sectors are evaluated for their market position and specific strengths and potential weaknesses. For each security, we consider the political,

legal, and financial environment of the sovereign entity in which an issuer is domiciled and operates. The country of domicile is based on consideration of the issuer's headquarters, in addition to location of the assets and the country in which the majority of sales and earnings are derived. We do not have exposure to foreign currency risk, as the cash flows from these investments are either denominated in currencies or hedged into currencies to match the related liabilities. We continually evaluate our foreign investment risk exposure.

Mortgage Loans

The carrying value of our mortgage loan portfolio was $2,390.0 million and $2,435.4 million at March 31, 2023 and December 31, 2022, respectively. Our investments in mortgage loans are carried at amortized cost less an allowance for expected credit losses which was $10.0 million and $9.3 million at March 31, 2023 and December 31, 2022, respectively. Our mortgage loan portfolio is comprised entirely of commercial mortgage loans. Our mortgage loan portfolio is well diversified geographically and among property types. Due to conservative underwriting, the incidence of problem mortgage loans and foreclosure activity continues to be low. Other than our allowance for expected credit losses, we held no specifically identified impaired mortgage loans at March 31, 2023 or December 31, 2022. See Note 4 in the "Notes to Consolidated Financial Statements" contained herein in Item 1 for further discussion of our mortgage loan portfolio and the allowance for expected credit losses.

Private Equity Partnerships

The carrying value of our investments in private equity partnerships was $1,228.8 million and $1,194.3 million at March 31, 2023 and December 31, 2022, respectively. These partnerships are passive in nature and represent funds that are primarily invested in private credit, private equity, and real assets. The carrying value of the partnerships is based on our share of the partnership's NAV and changes in the carrying value are recorded as a component of net investment income. We receive financial information related to our investments in partnerships and generally record investment income on a one-quarter lag in accordance with our accounting policy. We recorded net investment income totaling $14.3 million for the partnerships in the first quarter of 2023 reflecting the market conditions of the fourth quarter of 2022. The majority of our investments in partnerships are not redeemable. Distributions received from the funds arise from income generated by the underlying investments as well as the liquidation of the underlying investments. There is generally not a public market for these investments. We had $772.2 million of commitments for additional investments in the partnerships at March 31, 2023 which may or may not be funded. See Note 3 in the "Notes to Consolidated Financial Statements" contained herein in Item 1 for further discussion of our private equity partnerships.

Derivative Financial Instruments

We use derivative financial instruments primarily to manage interest rate risk, risk related to matching duration for our assets and liabilities, foreign currency risk, credit risk, and equity risk. Historically, we have utilized current and forward interest rate swaps, current and forward currency swaps, forward benchmark interest rate locks, currency forward contracts, forward contracts on specific fixed income securities, credit default swaps, and total return swaps. During the first quarter of 2023, we entered into $400.0 million of notional forward U.S. Treasury interest rate locks in our long-term care product line to manage our reinvestment risk. As of March 31, 2023, we had a total notional of $1,114.0 million of forward benchmark interest rate locks supporting our long-term care product line. Credit exposure on derivatives is limited to the value of those contracts in a net gain position, including accrued interest receivable less collateral held. Our credit exposure was $7.9 million at March 31, 2023. We held $52.0 million of net cash collateral from our counterparties at March 31, 2023. The carrying value of fixed maturity securities posted as collateral to our counterparties was $18.4 million at March 31, 2023. We believe that our credit risk is mitigated by our use of multiple counterparties, all of which have an investment-grade credit rating, and by our use of cross-collateralization agreements. See Note 5 in the "Notes to Consolidated Financial Statements" contained herein in Item 1 for further discussion of our derivatives.

For further information see "Investments" in Part I, Item 1 and "Critical Accounting Estimates" and "Investments" in Part II, Item 7 of our annual report on Form 10-K for the year ended December 31, 2022, and Notes 3, 4, and 5 of the "Notes to Consolidated Financial Statements" contained herein in Item 1.

Liquidity and Capital Resources

Overview

Our liquidity requirements are met primarily by cash flows provided from operations, principally in our insurance subsidiaries. Premium and investment income, as well as maturities and sales of invested assets, provide the primary sources of cash. Debt and/or securities offerings provide additional sources of liquidity. Cash is applied to the payment of policy benefits, costs of acquiring new business (principally commissions), operating expenses, and taxes, as well as purchases of new investments.

We have established an investment strategy that we believe will provide for adequate cash flows from operations. We attempt to match our asset cash flows and durations with expected liability cash flows and durations to meet the funding requirements of our business. However, deterioration in the credit market may delay our ability to sell our positions in certain of our fixed maturity securities in a timely manner and adversely impact the price we receive for such securities, which may negatively impact our cash flows. Furthermore, if we experience defaults on securities held in the investment portfolios of our insurance subsidiaries, this will negatively impact statutory capital, which could reduce our insurance subsidiaries' capacity to pay dividends to our holding companies. A reduction in dividends to our holding companies could force us to seek external financing to avoid impairing our ability to pay dividends to our stockholders or meet our debt and other payment obligations.

Our policy benefits are primarily in the form of claim payments, and we have minimal exposure to the policy withdrawal risk associated with deposit products such as individual life policies or annuities. A decrease in demand for our insurance products or an increase in the incidence of new claims or the duration of existing claims could negatively impact our cash flows from operations. However, our historical pattern of benefits paid to revenues is generally consistent, even during cycles of economic downturns, which serves to minimize liquidity risk.

The liquidity requirements of the holding company Unum Group include common stock dividends, interest and debt service, and ongoing investments in our businesses. Unum Group's liquidity requirements are met by assets held by Unum Group and our intermediate holding companies, dividends from primarily our insurance subsidiaries, and issuance of common stock, debt, or other capital securities and borrowings from our existing credit facility, as needed. As of March 31, 2023, Unum Group and our intermediate holding companies had available holding company liquidity of $1,343 million that was held primarily in bank deposits, commercial paper, money market funds, corporate bonds, municipal bonds, and asset backed securities. No significant restrictions exist on our ability to use or access funds in any of our U.S. or foreign intermediate holding companies. Dividends repatriated from our foreign subsidiaries are eligible for 100 percent exemption from U.S. income tax but may be subject to withholding tax and/or tax on foreign currency gain or loss.

As part of our capital deployment strategy, we may repurchase shares of Unum Group's common stock, as authorized by our board of directors. In December 2022, our board of directors authorized the repurchase of up to $200.0 million of Unum Group's outstanding common stock beginning January 1, 2023. In February 2023, our board of directors authorized an increase to the share repurchase program such that we are now authorized to repurchase up to $250.0 million of Unum Group's outstanding common stock. This share repurchase program has an expiration date of December 31, 2023, with the timing and amount of repurchase activity to be based on market conditions and other considerations, including the level of available cash, alternative uses for cash, and our stock price. During the first three months of 2023, we repurchased 1.3 million shares at a cost of $53.6 million. As of March 31, 2023, the remaining repurchase amount under the current share repurchase program was $196.6 million. See Note 11 of the "Notes to Consolidated Financial Statements" contained herein in Item 1.

Cash Available from Subsidiaries

Unum Group and certain of its intermediate holding company subsidiaries depend on payments from subsidiaries to pay dividends to stockholders, to pay debt obligations, and/or to pay expenses. These payments by our insurance and non-insurance subsidiaries may take the form of dividends, operating and investment management fees, and/or interest payments on loans from the parent to a subsidiary.

Restrictions under applicable state insurance laws limit the amount of dividends that can be paid to a parent company from its insurance subsidiaries in any 12-month period without prior approval by regulatory authorities. For life insurance companies domiciled in the U.S., that limitation generally equals, depending on the state of domicile, either ten percent of an insurer's statutory surplus with respect to policyholders as of the preceding year end or the statutory net gain from operations, excluding realized capital gains and losses, of the preceding year. The payment of dividends to a parent company from a life insurance subsidiary is generally further limited to the amount of unassigned funds.

In connection with a financial examination of Unum America, which closed at the end of the second quarter of 2020, the Maine Bureau of Insurance (MBOI) concluded that Unum America's long-term care statutory reserves were deficient by $2,100 million as of December 31, 2018, the financial statement date of the examination period. The amount reserves are deficient by may increase or decrease over time based on changes in assumed reinvestment rates, policyholder inventories, premium rate increase activity, and the underlying growth in the locked in statutory reserve basis as well as updates to other long term actuarial assumptions. The MBOI granted permission to Unum America on May 1, 2020, to phase in the additional statutory reserves over seven years beginning with year-end 2020 and ending with year-end 2026. Additional information regarding the Unum America premium deficiency reserve is as follows:

		(in millions of dollars)
Premium Deficiency Reserve		
Gross Premium Deficiency Reserve as of December 31, 2022	$	2,851.0
Cumulative Gross Premium Deficiency Reserve Recognized through December 31, 2022		1,191.0
Remaining Premium Deficiency Reserve to be Recognized as of December 31, 2022		1,660.0
Gross Premium Deficiency Reserve Recognized during the three months ended March 31, 2023		53.5
Remaining Premium Deficiency Reserve to be Recognized as of March 31, 2023	$	1,606.5

The phase in amount during the first three months of 2023 was funded using cash flows from operations and capital contributions from Unum Group. This strengthening is incorporated by using explicitly agreed upon margins into our existing assumptions for annual statutory reserve adequacy testing. These actions add margin to Unum America's best estimate assumptions. Our long-term care reserves and financial results reported under generally accepted accounting principles are not affected by the MBOI's examination conclusion. We plan to fund the additional statutory reserves with expected cash flows and capital contributions from Unum Group.

Unum America cedes blocks of business to Fairwind Insurance Company (Fairwind), which is an affiliated captive reinsurance subsidiary domiciled in the United States. The ability of Fairwind to pay dividends to Unum Group will depend on its satisfaction of applicable regulatory requirements and on the performance of the business reinsured by Fairwind. Fairwind did not pay dividends in 2022 nor do we anticipate that Fairwind will pay dividends in 2023. During the first quarter of 2023, Unum Group made $200.0 million in capital contributions to Fairwind.

The ability of Unum Group and certain of its intermediate holding company subsidiaries to continue to receive dividends from their insurance subsidiaries also depends on additional factors such as RBC ratios and capital adequacy and/or solvency requirements, funding growth objectives at an affiliate level, and maintaining appropriate capital adequacy ratios to support desired ratings. The RBC ratios for our U.S. insurance subsidiaries at March 31, 2023 are in line with our expectations and are significantly above the level that would require state regulatory action.

Unum Group and/or certain of its intermediate holding company subsidiaries may also receive dividends from our U.K. subsidiaries, the payment of which may be subject to applicable insurance company regulations and capital guidance in the U.K. Unum Limited is subject to the requirements of Solvency II, a European Union (EU) directive that is part of retained UK law pursuant to the European Union (Withdrawal) Act 2018, which prescribes capital requirements and risk management standards for the European insurance industry. Our U.K. holding company is also subject to the Solvency II requirements relevant to insurance holding companies while, together with certain of its subsidiaries including Unum Limited, the group (the Unum UK Solvency II Group) is subject to group supervision under Solvency II. The Unum UK Solvency II Group received approval from the U.K. Prudential Regulation Authority to use its own internal model for calculating regulatory capital and also received approval for certain associated regulatory permissions including transitional relief as the Solvency II capital regime continues to be implemented. In connection with the U.K.'s exit from the EU, the U.K. government is reviewing the regulatory framework of financial services companies which may result in changes to U.K. regulatory capital or U.K. tax regulations. Recent economic conditions have caused volatility in our solvency ratios used to monitor capital adequacy.

The payment of dividends to the parent company from our subsidiaries also requires the approval of the individual subsidiary's board of directors.

During 2023, we intend to maintain a level of capital in our insurance subsidiaries above the applicable capital adequacy requirements and minimum solvency margins.

Insurance regulatory restrictions do not limit the amount of dividends available for distribution from non-insurance subsidiaries except where the non-insurance subsidiaries are held directly or indirectly by an insurance subsidiary and only indirectly by Unum Group, which does not apply to our current entity structure.

Funding for Employee Benefit Plans

During the three months ended March 31, 2023, we made contributions of $18.5 million and £1.1 million to our U.S. and U.K. defined contribution plans, respectively, and expect to make additional contributions of approximately $61 million and £3 million during the remainder of 2023. We had no regulatory contribution requirements for our U.S. and U.K. qualified defined benefit pension plans and made no voluntary contributions during the three months ended March 31, 2023. We do not expect to have regulatory contribution requirements for our U.S. and U.K. qualified defined benefit pension plans during the remainder of 2023, but we reserve the right to make voluntarily contributions during the remainder of 2023. We have met all minimum pension funding requirements set forth by the Employee Retirement Income Security Act. We have estimated our future funding requirements under the Pension Protection Act of 2006 and under applicable U.K. law and do not believe that any future funding requirements will cause a material adverse effect on our liquidity.

Debt, Term Loan Facility, Credit Facilities, and Other Sources of Liquidity

Our short-term debt balance at March 31, 2023 was $2.0 million and is comprised entirely of our 7.000% unsecured medium-term notes due in the fourth quarter of 2023.

Our long-term debt balance at March 31, 2023 was $3,428.5 million, net of deferred debt issuance costs of $32.5 million, and is comprised of our unsecured notes, which consist of our senior notes, medium-term notes, and term loan facility, and junior subordinated debt securities.

We have a five-year $500 million senior unsecured revolving credit facility with a syndicate of lenders which is currently scheduled to expire in April 2027. Certain of our traditional U.S. life insurance subsidiaries may also borrow under the credit facility. subject to an unconditional guarantee by Unum Group. At March 31, 2023, there were no borrowed amounts outstanding under the credit facility and letters of credit totaling $0.4 million had been issued.

We also have a five-year £75 million senior unsecured standby letter of credit facility with a different syndicate of lenders, pursuant to which a syndicated letter of credit was issued in favor of Unum Limited (as beneficiary), our U.K. insurance subsidiary, and is available for drawings up to £75 million until its scheduled expiration in July 2026. No amounts have been drawn on the letter of credit.

Borrowings under the term loan facility and the credit facilities are subject to financial covenants, negative covenants, and events of default that are customary. The term loan facility and each credit facility include financial covenants based on our leverage ratio and consolidated net worth. The term loan facility and the credit facilities are also subject to covenants that limit subsidiary indebtedness.

We also have a 20-year facility agreement with a Delaware trust that gives us the right to issue and to sell to the trust, on one or more occasions, up to $400.0 million of 4.046% senior notes in exchange for U.S. Treasury securities held by the trust. These senior notes will not be issued unless and until the issuance right is exercised. The exercise of the issuance right triggers recognition of the senior notes on our consolidated balance sheets. As the amount we receive upon exercise of the issuance right is contingent upon the value of the U.S. Treasury securities, a decline in the value of the U.S. Treasury securities reduces the amount we would receive upon exercise of the issuance right. We may also direct the trust to grant the right to exercise the issuance right with respect to all or a designated amount of the senior notes to one or more assignees (who are our consolidated subsidiaries or persons to whom we have an obligation).

There are no significant financial covenants associated with any of our outstanding notes or debt securities. We continually monitor our compliance with our term loan facility and credit facility covenants and remain in compliance. We have not observed any current trends that would cause a breach of any of our term loan facility and credit facility covenants.

See "Debt, Term Loan Facility, Credit Facilities and Other Sources of Liquidity" and Note 8 of the "Notes to Consolidated Financial Statements" contained in Part II, Items 7 and 8, respectively, of our annual report on Form 10-K for the year ended December 31, 2022 for further discussion.

Shelf Registration

We maintain a shelf registration with the Securities and Exchange Commission to issue various types of securities, including common stock, preferred stock, debt securities, depository shares, stock purchase contracts, units and warrants. The shelf registration enables us to raise funds from the offering of any securities covered by the shelf registration as well as any combination thereof, subject to market conditions and our capital needs.

Commitments

As of March 31, 2023, we had commitments of $47.1 million to fund certain investments in private placement fixed maturity securities and $772.2 million to fund certain private equity partnerships.

With respect to our commitments and off-balance sheet arrangements, see the discussion under "Commitments" in Part II, Item 7 of our annual report on Form 10-K for the year ended December 31, 2022. During the first three months of 2023, there were no substantive changes in our commitments, contractual obligations, or other off-balance sheet arrangements other than the changes noted herein.

Transfers of Financial Assets

Our investment policy permits us to lend fixed maturity securities to unaffiliated financial institutions in short-term securities lending agreements, which increases our investment income with minimal risk. We account for all of our securities lending agreements and repurchase agreements as secured borrowings. As of March 31, 2023, we held $56.6 million of cash collateral from securities lending agreements. The average cash collateral balance during the first three months of 2023 was $76.1 million, and the maximum amount outstanding at any month end was $87.0 million. As of March 31, 2023, we held $36.1 million of off-balance sheet securities lending agreements which were collateralized by securities that we were neither permitted to sell nor control. The average balance of these off-balance sheet transactions during the first three months of 2023 was $54.3 million, and the maximum amount outstanding at any month end was $65.5 million.

To manage our cash position more efficiently, we may enter into securities repurchase agreements with unaffiliated financial institutions. We generally use securities repurchase agreements as a means to finance the purchase of invested assets or for short-term general business purposes until projected cash flows become available from our operations or existing investments. We had no securities repurchase agreements outstanding at March 31, 2023, nor did we utilize any securities repurchase agreements during the first three months of 2023. Our use of securities repurchase agreements and securities lending agreements can fluctuate during any given period and will depend on our liquidity position, the availability of long-term investments that meet our purchasing criteria, and our general business needs.

Certain of our U.S. insurance subsidiaries are members of regional FHLBs. As of March 31, 2023, we owned $15.7 million of FHLB common stock and had outstanding advances of $68.0 million from the regional FHLBs which were used for the purpose of investing in fixed maturity securities. As of March 31, 2023, we have additional borrowing capacity of approximately $689.4 million from the FHLBs.

See Note 4 of the "Notes to Consolidated Financial Statements" contained herein in Item 1 for further information.

Consolidated Cash Flows

(in millions of dollars)

	Three Months Ended March 31	
	2023	2022
Net Cash Provided by Operating Activities	$ 150.6	$ 325.8
Net Cash Used by Investing Activities	(40.5)	(192.4)
Net Cash Used by Financing Activities	(106.2)	(101.8)
Net Change in Cash and Bank Deposits	$ 3.9	$ 31.6

Operating Cash Flows

Operating cash flows are primarily attributable to the receipt of premium and investment income, offset by payments of claims, commissions, expenses, and income taxes. Premium income growth is dependent not only on new sales, but on policy renewals and growth of existing business, renewal price increases, and persistency. Investment income growth is dependent on the growth in the underlying assets supporting our insurance reserves and capital and on the earned yield. The level of commissions and operating expenses is attributable to the level of sales and the first year acquisition expenses associated with new business as well as the maintenance of existing business. The level of paid claims is affected partially by the growth and aging of the block of business and also by the general economy, as previously discussed in the operating results by segment.

Investing Cash Flows

Investing cash inflows consist primarily of the proceeds from the sales and maturities of investments. Investing cash outflows consist primarily of payments for purchases of investments. Our investment strategy is to match the cash flows and durations of our assets with the cash flows and durations of our liabilities to meet the funding requirements of our business. When market opportunities arise, we may sell selected securities and reinvest the proceeds to improve the yield and credit quality of our portfolio. We may at times also sell selected securities and reinvest the proceeds to improve the duration matching of our assets and liabilities and/or re-balance our portfolio. As a result, sales before maturity may vary from period to period. The sale and purchase of short-term investments is influenced by proceeds received from FHLB funding advances, issuance of debt, our securities lending program, and by the amount of cash which is at times held in short-term investments to facilitate the availability of cash to fund the purchase of appropriate long-term investments, repay maturing debt, and/or to fund our capital deployment program.

See Note 4 of the "Notes to Consolidated Financial Statements" contained herein in Item 1 for further information.

Financing Cash Flows

Financing cash flows consist primarily of borrowings and repayments of debt, repurchase of common stock, dividends paid to stockholders, and policyholders' account deposits and withdrawals.

Cash used to repurchase shares of Unum Group's common stock during the first three months of 2023 and 2022 was $51.2 million and $50.0 million, respectively. During the first three months of 2023 and 2022, we paid dividends of $69.2 million and $62.0 million, respectively, to holders of Unum Group's common stock.

Ratings

AM Best, Fitch Ratings (Fitch), Moody's Investors Service (Moody's), and Standard & Poor's Rating Services (S&P) are among the third parties that assign issuer credit ratings to Unum Group and financial strength ratings to our insurance subsidiaries. Issuer credit ratings reflect an agency's opinion of the overall financial capacity of a company to meet its senior debt obligations. Financial strength ratings are specific to each individual insurance subsidiary and reflect each rating agency's view of the overall financial strength (capital levels, earnings, growth, investments, business mix, operating performance, and market position) of the insuring entity and its ability to meet its obligations to policyholders. Both the issuer credit ratings and financial strength ratings incorporate quantitative and qualitative analyses by rating agencies and are routinely reviewed and updated on an ongoing basis.

We compete based in part on the financial strength ratings provided by rating agencies. A downgrade of our financial strength ratings can be expected to adversely affect us and could potentially, among other things, adversely affect our relationships with distributors of our products and services and retention of our sales force, negatively impact persistency and new sales, particularly large case group sales and individual sales, and generally adversely affect our ability to compete. A downgrade in the issuer credit rating assigned to Unum Group can be expected to adversely affect our cost of capital or our ability to raise additional capital.

The table below reflects the outlook as well as the issuer credit ratings for Unum Group and the financial strength ratings for each of our traditional insurance subsidiaries as of the date of this filing.

	AM Best	Fitch	Moody's	S&P
Issuer Credit Ratings	bbb	BBB-	Baa3	BBB
Financial Strength Ratings				
Provident Life and Accident Insurance Company	A	A-	A3	A
Provident Life and Casualty Insurance Company	A	A-	NR	NR
Unum Life Insurance Company of America	A	A-	A3	A
First Unum Life Insurance Company	A	A-	A3	A
Colonial Life & Accident Insurance Company	A	A-	A3	A
The Paul Revere Life Insurance Company	A	A-	A3	A
Starmount Life Insurance Company	A	NR	NR	NR
Unum Insurance Company	A	A-	A3	NR
Unum Limited	NR	NR	NR	A-
Outlooks				
Issuer Credit Rating	Positive	Positive	Stable	Stable
Financial Strength Rating	Stable	Positive	Stable	Stable

NR = not rated

We maintain an ongoing dialogue with the four rating agencies that evaluate us in order to inform them of progress we are making regarding our strategic objectives and financial plans as well as other pertinent issues. A significant component of our communications involves our annual review meeting with each of the four agencies. We hold other meetings throughout the year regarding our business, including, but not limited to, quarterly updates.

There have been no changes in the rating agencies' outlooks or ratings during 2023 prior to the date of this filing.

Agency ratings are not directed toward the holders of our securities and are not recommendations to buy, sell, or hold our securities. Each rating is subject to revision or withdrawal at any time by the assigning rating organization, and each rating should be regarded as an independent assessment, not conditional on any other rating. Given the dynamic nature of the ratings process, changes by these or other rating agencies may or may not occur in the near-term. We have ongoing dialogue with the rating agencies concerning our insurance risk profile, our financial flexibility, our operating performance, and the quality of our investment portfolios. The rating agencies provide specific criteria and, depending on our performance relative to the criteria, will determine future negative or positive rating agency actions.

See our annual report on Form 10-K for the year ended December 31, 2022 for further information regarding our debt, issuer credit ratings and financial strength ratings and the risks associated with rating changes.

ITEM 3. QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK

The adoption of ASU 2018-12 required an update of the discount rate assumptions related to our liability for future policy benefits at each reporting date using a yield that is reflective of an upper-medium grade fixed-income instrument, which is generally equivalent to a single-A interest rate matched to the duration of certain of our insurance liabilities. As such, the value of certain of our insurance liabilities may be adversely affected by changes in the single-A interest rate environment which could impact the valuation of our liability for future policy benefits and reinsurance recoverable.

We measure the insurance liabilities' market risk related to changes in interest rates using a sensitivity analysis, which is based on a hypothetical immediate increase of 100 basis points in interest rates from December 31, 2022 levels. The selection of a 100 basis point immediate parallel change in interest rates should not be construed as our prediction of future market events, but only as an illustration of the potential effect of such an event. Our liability for future policy benefits and our reinsurance

recoverable of $38.6 billion and $9.6 billion, respectively, would decrease approximately $4.0 billion and $0.9 billion, respectively, with a 100 basis point increase in interest rates as of December 31, 2022.

Other than the aforementioned impact of the adoption of ASU 2018-12, during the first three months of 2023, there were no substantive changes to our market risk or the management of this risk. With respect to our exposure to market risk, see the discussion under "Investments" in Item 2 of this Form 10-Q and in Part II, Item 7A of our annual report on Form 10-K for the year ended December 31, 2022.

ITEM 4. CONTROLS AND PROCEDURES

Under the supervision and with the participation of our management, including our Chief Executive Officer and Chief Financial Officer, we have evaluated the effectiveness of our disclosure controls and procedures, as defined in Rule 13a-15(e) under the Securities Exchange Act of 1934, as amended, as of the end of the period covered by this report. We evaluated those controls based on the 2013 Internal Control - Integrated Framework from the Committee of Sponsoring Organizations of the Treadway Commission. Based on that evaluation, these officers concluded that our disclosure controls and procedures were effective as of March 31, 2023.

There have been no changes in our internal control over financial reporting, as defined in Rule 13a-15(f) under the Securities Exchange Act of 1934, as amended, during the quarter ended March 31, 2023 that have materially affected, or are reasonably likely to materially affect, our internal control over financial reporting.

PART II - OTHER INFORMATION

ITEM 1. LEGAL PROCEEDINGS

Refer to Part I, Item 1, Note 11 of the "Notes to Consolidated Financial Statements" for information on legal proceedings.

ITEM 1A. RISK FACTORS

There have been no material changes from the risk factors disclosed in our annual report on Form 10-K for the year ended December 31, 2022.

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

The following table provides information about our share repurchase activity for the first quarter of 2023.

	(a) Total Number of Shares Purchased	(b) Average Price Paid per Share (1)	(c) Total Number of Shares Purchased as Part of Publicly Announced Program (2)	(d) Approximate Dollar Value of Shares that May Yet Be Purchased Under the Program (1) (2)
January 1 - January 31, 2023	260,824	$ 40.87	260,824	$ 239,339,811
February 1 - February 28, 2023	403,716	42.76	403,716	222,076,126
March 1 - March 31, 2023	640,983	39.81	640,983	196,557,759
Total	1,305,523		1,305,523	

(1) Excludes the cost of commissions and excise taxes.

(2) In December 2022, our board of directors authorized the repurchase of up to $200.0 million of Unum Group's outstanding common stock beginning January 1, 2023. In February 2023, our board of directors authorized an increase to the share repurchase program such that we are now authorized to repurchase up to $250.0 million of Unum Group's outstanding common stock. This share repurchase program has an expiration date of December 31, 2023.

ITEM 6. EXHIBITS

Index to Exhibits

(3.1)	Amended and Restated Bylaws of Unum Group, effective March 4, 2023 (incorporated by reference to Exhibit 3.1 of Unum Group's 8-K filed on March 7, 2023).
(10.1)	Unum Group Approved Profit Share Scheme (Ireland) (incorporated by reference to Exhibit 99.1 of Unum Group's Registration Statement on Form S-8 (Registration No. 333-269981) filed on February 24, 2023).
(31.1)	Certification of Chief Executive Officer pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.
(31.2)	Certification of Chief Financial Officer pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.
(32.1)	Certification of Chief Executive Officer pursuant to 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)	The instance document does not appear in the interactive data file because its XBRL tags are embedded within the inline XBRL document.
(104)	Cover Page Interactive Data File (formatted as Inline XBRL and contained in Exhibit 101).

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.

Unum Group
(Registrant)

Date: May 3, 2023	By:	/s/ Steven A. Zabel
		Steven A. Zabel
		Executive Vice President, Chief Financial Officer
Date: May 3, 2023	By:	/s/ Walter L. Rice, Jr.
		Walter L. Rice, Jr.
		Senior Vice President, Chief Accounting Officer

EXHIBIT 31.1

CERTIFICATION

I, Richard P. McKenney, certify that:

1. I have reviewed this quarterly report on Form 10-Q of Unum Group;

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 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 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 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: May 3, 2023

/s/ Richard P. McKenney

Richard P. McKenney

President and Chief Executive Officer

A signed original of this written statement required by Section 302 of the Sarbanes-Oxley Act of 2002 has been provided to Unum Group and will be retained by Unum Group and furnished to the Securities and Exchange Commission or its staff upon request.

EXHIBIT 31.2

CERTIFICATION

I, Steven A. Zabel, certify that:

1. I have reviewed this quarterly report on Form 10-Q of Unum Group;

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 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 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 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: May 3, 2023

/s/ Steven A. Zabel

Steven A. Zabel

Executive Vice President, Chief Financial Officer

A signed original of this written statement required by Section 302 of the Sarbanes-Oxley Act of 2002 has been provided to Unum Group and will be retained by Unum Group and furnished to the Securities and Exchange Commission or its staff upon request.

EXHIBIT 32.1

STATEMENT OF CHIEF EXECUTIVE OFFICER
OF UNUM GROUP
PURSUANT TO 18 U.S.C. SECTION 1350,
AS ADOPTED PURSUANT TO
§ 906 OF THE SARBANES-OXLEY ACT OF 2002

In connection with the Quarterly Report of Unum Group (the Company) on Form 10-Q for the period ended March 31, 2023 as filed with the Securities and Exchange Commission on the date hereof (the Report), the undersigned, Richard P. McKenney, President and Chief Executive Officer of the Company, certifies, pursuant to 18 U.S.C. § 1350, as adopted pursuant to § 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: May 3, 2023

/s/ Richard P. McKenney
Richard P. McKenney
President and Chief Executive Officer

A signed original of this written statement required by Section 906 of the Sarbanes-Oxley Act of 2002 has been provided to Unum Group and will be retained by Unum Group and furnished to the Securities and Exchange Commission or its staff upon request.

EXHIBIT 32.2

STATEMENT OF CHIEF FINANCIAL OFFICER
OF UNUM GROUP
PURSUANT TO 18 U.S.C. SECTION 1350,
AS ADOPTED PURSUANT TO
§ 906 OF THE SARBANES-OXLEY ACT OF 2002

In connection with the Quarterly Report of Unum Group (the Company) on Form 10-Q for the period ended March 31, 2023 as filed with the Securities and Exchange Commission on the date hereof (the Report), the undersigned, Steven A. Zabel, Executive Vice President and Chief Financial Officer of the Company, certifies, pursuant to 18 U.S.C. § 1350, as adopted pursuant to § 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: May 3, 2023

/s/ Steven A. Zabel
Steven A. Zabel
Executive Vice President, Chief Financial Officer

A signed original of this written statement required by Section 906 of the Sarbanes-Oxley Act of 2002 has been provided to Unum Group and will be retained by Unum Group and furnished to the Securities and Exchange Commission or its staff upon request.