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 September 30, 2022

☐ 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 ☒

198,940,884 shares of the registrant's common stock were outstanding as of October 31, 2022.

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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:

- The impact of COVID-19 on our business, financial position, results of operations, liquidity and capital resources, and overall business operations.
- Sustained periods of low interest rates.
- 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.
- 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.
- 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.
- 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.
- 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.
- Ineffectiveness of our derivatives hedging programs due to changes in the economic environment, counterparty risk, ratings downgrades, capital market volatility, changes in interest rates, and/or regulation.
- 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, 2021.

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

Unum Group and Subsidiaries

	September 30 2022	December 31 2021
	(in millions of dollars)	
	(Unaudited)	
Assets		
Investments		
Fixed Maturity Securities - at fair value (amortized cost of $37,721.4; $37,386.7; allowance for credit losses of $4.6; $—)	$ 34,148.2	$ 43,336.0
Mortgage Loans (net of allowance for credit losses of $8.7; $8.3)	2,476.4	2,560.4
Policy Loans	3,640.8	3,662.9
Other Long-term Investments	1,430.4	1,203.0
Short-term Investments	1,183.2	1,388.0
Total Investments	42,879.0	52,150.3
Other Assets		
Cash and Bank Deposits	143.3	75.0
Accounts and Premiums Receivable (net of allowance for credit losses of $31.4; $34.2)	1,475.4	1,519.9
Reinsurance Recoverable (net of allowance for credit losses of $2.3; $2.3)	10,289.7	10,919.3
Accrued Investment Income	717.2	602.7
Deferred Acquisition Costs	2,254.6	2,207.9
Goodwill	344.4	352.2
Property and Equipment	442.4	462.7
Deferred Income Tax	523.1	—
Other Assets	1,797.6	1,825.6
Total Assets	$ 60,866.7	$ 70,115.6

See notes to consolidated financial statements.

CONSOLIDATED BALANCE SHEETS - Continued

Unum Group and Subsidiaries

	September 30 2022	December 31 2021
	(in millions of dollars)	
	(Unaudited)	
Liabilities and Stockholders' Equity		
Liabilities		
Policy and Contract Benefits	$ 1,771.4	$ 1,907.7
Reserves for Future Policy and Contract Benefits	42,108.7	48,007.5
Unearned Premiums	394.0	347.5
Other Policyholders' Funds	1,756.0	1,790.9
Income Tax Payable	212.2	159.1
Deferred Income Tax	6.5	458.4
Long-term Debt	3,429.2	3,442.2
Other Liabilities	2,529.2	2,585.9
Total Liabilities	52,207.2	58,699.2
Commitments and Contingent Liabilities - Note 11		
Stockholders' Equity		
Common Stock, $0.10 par		
Authorized: 725,000,000 shares		
Issued: 308,189,371 and 307,334,853 shares	30.8	30.7
Additional Paid-in Capital	2,432.3	2,408.1
Accumulated Other Comprehensive Income (Loss)	(3,134.7)	354.1
Retained Earnings	12,698.3	11,853.2
Treasury Stock - at cost: 109,064,105 and 104,820,670 shares	(3,367.2)	(3,229.7)
Total Stockholders' Equity	8,659.5	11,416.4
Total Liabilities and Stockholders' Equity	$ 60,866.7	$ 70,115.6

See notes to consolidated financial statements.

CONSOLIDATED STATEMENTS OF INCOME (UNAUDITED)

Unum Group and Subsidiaries

	Three Months Ended September 30		Nine Months Ended September 30	
	2022	2021	2022	2021
	(in millions of dollars, except share data)			
Revenue				
Premium Income	$ 2,391.7	$ 2,353.7	$ 7,212.3	$ 7,106.4
Net Investment Income	511.6	550.2	1,597.8	1,662.4
Net Investment Gain (Loss)	(4.4)	(0.1)	(22.3)	85.4
Other Income	63.0	65.9	197.5	180.5
Total Revenue	2,961.9	2,969.7	8,985.3	9,034.7
Benefits and Expenses				
Benefits and Change in Reserves for Future Benefits	1,579.3	1,753.9	5,181.3	5,659.2
Commissions	271.5	258.3	819.1	777.9
Interest and Debt Expense	47.0	44.7	141.3	134.4
Cost Related to Early Retirement of Debt	4.2	—	4.2	67.3
Deferral of Acquisition Costs	(139.4)	(128.6)	(419.1)	(388.9)
Amortization of Deferred Acquisition Costs	150.8	138.4	449.5	440.8
Compensation Expense	285.9	241.6	794.1	725.9
Other Expenses	247.3	251.5	744.4	746.8
Total Benefits and Expenses	2,446.6	2,559.8	7,714.8	8,163.4
Income Before Income Tax	515.3	409.9	1,270.5	871.3
Income Tax Expense (Benefit)				
Current	156.9	46.5	383.8	164.4
Deferred	(52.3)	34.8	(147.9)	42.4
Total Income Tax Expense	104.6	81.3	235.9	206.8
Net Income	$ 410.7	$ 328.6	$ 1,034.6	$ 664.5
Net Income Per Common Share				
Basic	$ 2.05	$ 1.61	$ 5.14	$ 3.25
Assuming Dilution	$ 2.04	$ 1.60	$ 5.11	$ 3.24

See notes to consolidated financial statements.

CONSOLIDATED STATEMENTS OF COMPREHENSIVE INCOME (LOSS) (UNAUDITED)

Unum Group and Subsidiaries

	Three Months Ended September 30		Nine Months Ended September 30	
	2022	2021	2022	2021
	(in millions of dollars)			
Net Income	$ 410.7	$ 328.6	$ 1,034.6	$ 664.5
Other Comprehensive Loss				
Change in Net Unrealized Gain (Loss) on Securities Before Adjustment (net of tax benefit of $(520.8); $(69.0); $(2,017.2); $(276.3))	(1,925.8)	(260.8)	(7,500.7)	(1,048.0)
Change in Adjustment to Deferred Acquisition Costs and Reserves for Future Policy and Contract Benefits, Net of Reinsurance (net of tax expense of $184.3; $49.5; $1,141.7; $215.5)	661.4	185.4	4,209.2	816.3
Change in Net Gain on Hedges (net of tax benefit of $8.1; $2.2; $12.6; $7.6)	(32.9)	(8.0)	(48.3)	(28.3)
Change in Foreign Currency Translation Adjustment (net of tax expense of $5.4; $1.8; $11.5; $3.4)	(71.1)	(30.5)	(164.1)	(13.9)
Change in Unrecognized Pension and Postretirement Benefit Costs (net of tax expense of $1.1; $1.8; $4.0; $4.2)	5.9	5.7	15.1	13.6
Total Other Comprehensive Loss	(1,362.5)	(108.2)	(3,488.8)	(260.3)
Comprehensive Income (Loss)	$ (951.8)	$ 220.4	$ (2,454.2)	$ 404.2

See notes to consolidated financial statements.

CONSOLIDATED STATEMENTS OF STOCKHOLDERS' EQUITY (UNAUDITED)

Unum Group and Subsidiaries

	Three Months Ended September 30		Nine Months Ended September 30	
	2022	2021	2022	2021
	(in millions of dollars)			
Common Stock				
Balance at Beginning of Period	$ 30.8	$ 30.7	$ 30.7	$ 30.7
Common Stock Activity	—	—	0.1	—
Balance at End of Period	30.8	30.7	30.8	30.7
Additional Paid-in Capital				
Balance at Beginning of Period	2,417.4	2,386.8	2,408.1	2,376.2
Common Stock Activity	14.9	11.7	24.2	22.3
Balance at End of Period	2,432.3	2,398.5	2,432.3	2,398.5
Accumulated Other Comprehensive Income (Loss)				
Balance at Beginning of Period	(1,772.2)	222.1	354.1	374.2
Other Comprehensive Loss	(1,362.5)	(108.2)	(3,488.8)	(260.3)
Balance at End of Period	(3,134.7)	113.9	(3,134.7)	113.9
Retained Earnings				
Balance at Beginning of Period	12,353.7	11,487.6	11,853.2	11,269.6
Net Income	410.7	328.6	1,034.6	664.5
Dividends to Stockholders (per common share: $0.330; $0.300; $0.930; $0.870)	(66.1)	(61.4)	(189.5)	(179.3)
Balance at End of Period	12,698.3	11,754.8	12,698.3	11,754.8
Treasury Stock				
Balance at Beginning of Period	(3,324.6)	(3,179.7)	(3,229.7)	(3,179.7)
Repurchases of Treasury Stock	(42.6)	—	(137.5)	—
Balance at End of Period	(3,367.2)	(3,179.7)	(3,367.2)	(3,179.7)
Total Stockholders' Equity at End of Period	$ 8,659.5	$ 11,118.2	$ 8,659.5	$ 11,118.2

See notes to consolidated financial statements.

CONSOLIDATED STATEMENTS OF CASH FLOWS (UNAUDITED)

Unum Group and Subsidiaries

	Nine Months Ended September 30	
	2022	2021
	(in millions of dollars)	
Cash Flows from Operating Activities		
Net Income	$ 1,034.6	$ 664.5
Adjustments to Reconcile Net Income to Net Cash Provided by Operating Activities		
Change in Receivables	437.8	427.2
Change in Deferred Acquisition Costs	30.4	51.9
Change in Insurance Reserves and Liabilities	(125.5)	131.8
Change in Income Taxes	(21.6)	205.0
Change in Other Accrued Liabilities	(135.0)	(64.2)
Non-cash Components of Net Investment Income	(293.0)	(175.8)
Net Investment (Gain) Loss	22.3	(85.4)
Depreciation	83.5	90.0
Cash Related to Reinsurance Transaction	—	(456.8)
Amortization of the Cost of Reinsurance	48.5	59.4
Other, Net	(20.2)	59.8
Net Cash Provided by Operating Activities	1,061.8	907.4
Cash Flows from Investing Activities		
Proceeds from Sales of Fixed Maturity Securities	453.4	322.3
Proceeds from Maturities of Fixed Maturity Securities	1,125.6	1,976.6
Proceeds from Sales and Maturities of Other Investments	306.4	273.8
Purchases of Fixed Maturity Securities	(2,380.5)	(3,123.5)
Purchases of Other Investments	(342.7)	(389.3)
Net Sales of Short-term Investments	204.9	67.1
Net Increase in Payables for Collateral on Investments	12.5	50.0
Net Purchases of Property and Equipment	(70.8)	(82.4)
Other, Net	—	(0.4)
Net Cash Used by Investing Activities	(691.2)	(905.8)
Cash Flows from Financing Activities		
Issuance of Long-term Debt	349.2	588.1
Long-term Debt Repayment	(364.0)	(500.0)
Cost Related to Early Retirement of Debt	(3.6)	(62.8)
Issuance of Common Stock	2.7	2.3
Repurchase of Common Stock	(136.1)	—
Dividends Paid to Stockholders	(188.4)	(178.0)
Proceeds from Policyholder Account Deposits	90.9	97.5
Payments for Policyholder Account Withdrawals	(55.6)	(62.7)
Cash Received Related to Active Life Volatility Cover Agreement	5.2	40.4
Other, Net	(2.6)	(1.7)
Net Cash Used by Financing Activities	(302.3)	(76.9)
Net Increase (Decrease) in Cash and Bank Deposits	68.3	(75.3)
Cash and Bank Deposits at Beginning of Year	75.0	197.0
Cash and Bank Deposits at End of Period	$ 143.3	$ 121.7

Certain prior year amounts were reclassified to conform to current year presentation. 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, 2021.

In 2021, we changed the presentation of policyholder account deposits and withdrawals related to our universal life products to present the activity on a gross basis within the financing activities section of the Consolidated Statements of Cash Flows. As a result of this change, we determined that certain historical adjustments related to the cost of insurance, policy administration expenses and surrender charges for these products were incorrectly presented as a component of net cash used by financing activities rather than as a component of net cash provided by operating activities. We determined that the impact of the error to the previously issued Consolidated Statements of Cash Flows was not material and we have corrected the error. The impact of this correction for the nine months ended September 30, 2021 was a decrease to the change in insurance reserves and liabilities within net cash used by operating activities of $91.9 million, with a corresponding decrease to net cash used by financing activities. Within net cash used by financing activities, the other, net line item was adjusted as a result of the error correction to separately present proceeds from policyholder account deposits and payments for policyholder account withdrawals. The error had no impact on our financial position or our results of operations.

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, particularly when considering the risks and uncertainties associated with the coronavirus disease 2019 (COVID-19) and the impacts it may have on our financial position, results of operations, liquidity and capital resources, and overall business operations.

Note 2 - Accounting Developments

Accounting Updates Adopted in 2022:

Standard	Description	Date of Adoption	Effect on Financial Statements
Accounting Standards Update (ASU) 2020-06, *Debt—Debt with Conversion and Other Options (Subtopic 470-20) and Derivatives and Hedging—Contracts in Entity's Own Equity (Subtopic 815-40): Accounting for Convertible Instruments and Contracts in an Entity's Own Equity*	The amendments in this update simplified the accounting for convertible instruments by removing certain separation models in the guidance related to convertible instruments and expanded related disclosure requirements. The amendments also revised the requirements for a contract or embedded derivative that is potentially settled in an entity's own stock to be classified as equity and also amended certain guidance related to the computations of earnings per share for convertible instruments and contracts in an entity's own stock. This guidance was applied in the period of adoption.	January 1, 2022	The adoption of this update did not have an effect on our financial position or results of operations, and did not expand our disclosures.

Note 2 - Accounting Developments - Continued

Accounting Updates Outstanding:

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

The amendment 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, 2022, 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.

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

This update significantly amends the accounting and disclosure requirements for long-duration insurance contracts. These changes include 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 will be 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 result in the elimination of the provision for risk of adverse deviation and premium deficiency (or loss recognition) testing. The update also requires 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 simplifies 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 will also be required, which include disaggregated rollforwards of certain liability balances and the disclosure of qualitative and quantitative information about expected cash flows, estimates, and assumptions. The application of this guidance will vary based upon the specific requirements of the update but will generally result in either a modified retrospective or full retrospective approach with changes applied as of the beginning of the earliest period presented. Early adoption is permitted. The update is effective for periods beginning January 1, 2023.

We will adopt this update effective January 1, 2023 using the modified retrospective approach with changes applied as of the beginning of the earliest period presented or January 1, 2021, also referred to as the transition date. We are continuing to evaluate the effects of implementing this update. We expect that the most significant impact at the transition date will be the requirement to update the discount rate assumption to reflect an upper-medium grade fixed-income instrument, which will be generally equivalent to a single-A interest rate matched to the duration of our insurance liabilities and will result in a decrease to accumulated other comprehensive income (loss) (AOCI) within our total stockholders' equity balance of approximately $6.5 billion to $7 billion. After the transition date, we will be required to update the discount rate each subsequent reporting period with changes recorded in OCI and expect that this could have a material impact on OCI.

Note 2 - Accounting Developments - Continued

We expect that the recast of our net income for 2021 will result in a net favorable impact due primarily to the following changes:

- Updating the lifetime cohort net premium ratios (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. We expect this to result in an unfavorable impact to income for 2021.

- 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. We expect this to result in a net favorable impact to income for 2021.

- 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. We expect this to result in a favorable impact to income for 2021.

- 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. We expect this to result in an unfavorable impact to income for 2021.

- Updating cash flow assumptions. We expect this to result in a favorable impact to income for 2021.

- Applying non-contemporaneous reinsurance accounting to the second phase of our Closed Block individual disability reinsurance transaction which was completed in the first quarter of 2021. The primary impacts of this change are.

    - Reversing the increase in benefits and change in reserves for future benefits resulting from the realization of previously unrealized investment gains and losses previously recorded in AOCI that will be removed as of the transition date which will have a favorable impact on income for 2021.

    - Remeasuring the ceded reserves as a separate cohort of reserves at interest rates prescribed by the update and the resulting change to the cost of reinsurance. We expect the differential in the discount rate applied to the direct and ceded cohorts of business will result in an unfavorable impact to income for 2021 partially offset by a decrease in the amortization of the cost of reinsurance as a result of a lower cost of reinsurance.

This update will also significantly expand our disclosures. We do not have products with market risk benefits.

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

The amendments in this update eliminate the troubled debt restructuring recognition and measurement guidance and instead require that an entity evaluate whether the modification represents a new loan or the continuation of an existing loan. The amendments also enhance the disclosure requirements related to certain modifications of receivables made to borrowers experiencing financial difficulty. In addition, the amendments in this update require 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 should be applied prospectively, except for the transition method related to the recognition and measurement of troubled debt restructurings, for which an entity has the option to apply a modified retrospective transition method, resulting in a cumulative-effect adjustment to retained earnings in the period of adoption.

This update is effective for periods beginning January 1, 2023, and we do not anticipate that the adoption of this update will have an effect on our financial position or results of operations but will expand our disclosures.

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 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 pricing vendors to ensure we are in agreement with their current methodologies. When markets are less active, brokers may

Note 3 - Fair Value of Financial Instruments - Continued

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 2022, 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 2021.

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	
	Security creditor ratings/maturity/capital structure/optionality	

Note 3 - Fair Value of Financial Instruments - Continued

Instrument	Level 2 Observable Inputs	Level 3 Unobservable Inputs
All Other Corporate Bonds - Continued		
	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.

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

Note 3 - Fair Value of Financial Instruments - Continued

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 September 30, 2022, approximately 26.6 percent of our fixed maturity securities were valued using active trades from TRACE pricing or 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 73.4 percent of our fixed maturity securities were valued based on non-binding quotes or other observable and unobservable inputs, as discussed below:

- 57.0 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.

- 15.2 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.

- 1.2 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 September 30, 2022 or December 31, 2021.

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.

Note 3 - Fair Value of Financial Instruments - Continued

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.

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

		September 30, 2022		
Investment Category		Fair Value	Redemption Term / Redemption Notice	Unfunded Commitments
		(in millions of dollars)		(in millions of dollars)
Private Credit	(a)	$ 238.5	Not redeemable	$ 98.8
		36.9	Initial 2 year lock on each new investment / Quarterly after 2 year lock with 90 days notice	11.1
Total Private Credit		275.4		109.9
Private Equity	(b)	417.6	Not redeemable	387.8
		29.3	Initial 5.5 year lock on each new investment / Quarterly after 5.5 year lock with 90 days notice	42.5
Total Private Equity		446.9		430.3
Real Assets	(c)	342.5	Not redeemable	266.0
		59.8	Quarterly / 90 days notice	—
Total Real Assets		402.3		266.0
Total Partnerships		$ 1,124.6		$ 806.2

Note 3 - Fair Value of Financial Instruments - Continued

		December 31, 2021		
Investment Category		Fair Value	Redemption Term / Redemption Notice	Unfunded Commitments
		(in millions of dollars)		(in millions of dollars)
Private Credit	(a)	$ 240.6	Not redeemable	$ 143.7
		38.8	Initial 2 year lock on each new investment / Quarterly after 2 year lock with 90 days notice	6.8
Total Private Credit		279.4		150.5
Private Equity	(b)	365.8	Not redeemable	274.3
		18.8	Initial 5.5 year lock on each new investment / Quarterly after 5.5 year lock with 90 days notice	50.3
Total Private Equity		384.6		324.6
Real Assets	(c)	256.2	Not redeemable	278.1
		58.4	Quarterly / 90 days notice	—
Total Real Assets		314.6		278.1
Total Partnerships		$ 978.6		$ 753.2

(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 September 30, 2022, the estimated remaining life of the investments that do not allow for redemptions is approximately 57 percent in the next 3 years, 33 percent during the period from 3 to 5 years, 8 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 September 30, 2022, the estimated remaining life of the investments that do not allow for redemptions is approximately 39 percent in the next 3 years, 17 percent during the period from 3 to 5 years, 42 percent during the period from 5 to 10 years, and 2 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 September 30, 2022, the estimated remaining life of the investments that do not allow for redemptions is approximately 24 percent in the next 3 years, 30 percent during period from 3 to 5 years, and 46 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.

	September 30, 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	$ 81.5	$ 384.8	$ —	$ —	$ 466.3
States, Municipalities, and Political Subdivisions	18.7	3,616.6	0.2	—	3,635.5
Foreign Governments	—	789.1	20.0	—	809.1
Public Utilities	593.7	4,304.0	13.2	—	4,910.9
Mortgage/Asset-Backed Securities	—	519.1	11.2	—	530.3
All Other Corporate Bonds	8,413.6	15,255.6	123.4	—	23,792.6
Redeemable Preferred Stocks	—	3.5	—	—	3.5
Total Fixed Maturity Securities	9,107.5	24,872.7	168.0	—	34,148.2
Other Long-term Investments					
Derivatives					
Forwards	—	7.3	—	—	7.3
Foreign Exchange Contracts	—	120.8	—	—	120.8
Total Derivatives	—	128.1	—	—	128.1
Perpetual Preferred and Equity Securities	17.8	8.9	13.5	—	40.2
Private Equity Partnerships	—	—	—	1,124.6	1,124.6
Total Other Long-term Investments	17.8	137.0	13.5	1,124.6	1,292.9
Total Financial Instrument Assets Carried at Fair Value	$ 9,125.3	$ 25,009.7	$ 181.5	$ 1,124.6	$ 35,441.1
Liabilities					
Other Liabilities					
Derivatives					
Forwards	$ —	$ 29.0	$ —	$ —	$ 29.0
Foreign Exchange Contracts	—	27.4	—	—	27.4
Embedded Derivative in Modified Coinsurance Arrangement	—	—	19.4	—	19.4
Total Derivatives	—	56.4	19.4	—	75.8
Total Financial Instrument Liabilities Carried at Fair Value	$ —	$ 56.4	$ 19.4	$ —	$ 75.8

Note 3 - Fair Value of Financial Instruments - Continued

	December 31, 2021				
	Level 1	Level 2	Level 3	NAV	Total
	(in millions of dollars)				
Assets					
Fixed Maturity Securities					
United States Government and Government Agencies and Authorities	$ —	$ 580.1	$ —	$ —	$ 580.1
States, Municipalities, and Political Subdivisions	—	4,714.1	13.4	—	4,727.5
Foreign Governments	—	1,125.8	20.8	—	1,146.6
Public Utilities	230.8	6,140.7	44.5	—	6,416.0
Mortgage/Asset-Backed Securities	—	451.1	187.2	—	638.3
All Other Corporate Bonds	3,288.7	25,673.2	861.5	—	29,823.4
Redeemable Preferred Stocks	—	4.1	—	—	4.1
Total Fixed Maturity Securities	3,519.5	38,689.1	1,127.4	—	43,336.0
Other Long-term Investments					
Derivatives					
Foreign Exchange Contracts	—	39.5	—	—	39.5
Total Derivatives	—	39.5	—	—	39.5
Perpetual Preferred and Equity Securities		27.9	5.8	—	33.7
Private Equity Partnerships	—	—	—	978.6	978.6
Total Other Long-term Investments	—	67.4	5.8	978.6	1,051.8
Total Financial Instrument Assets Carried at Fair Value	$ 3,519.5	$ 38,756.5	$ 1,133.2	$ 978.6	$ 44,387.8
Liabilities					
Other Liabilities					
Derivatives					
Foreign Exchange Contracts	$ —	$ 35.0	$ —	$ —	$ 35.0
Embedded Derivative in Modified Coinsurance Arrangement	—	—	30.1	—	30.1
Total Derivatives	—	35.0	30.1	—	65.1
Total Financial Instrument Liabilities Carried at Fair Value	$ —	$ 35.0	$ 30.1	$ —	$ 65.1

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 September 30, 2022									
	Fair Value Beginning of Period	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	$ —	$ —	$ (0.1)	$ —	$ —	$ 0.3	$ —	$ 0.2	$ (0.1)	$ —
Foreign Governments	20.2	—	(0.2)	—	—	—	—	20.0	(0.2)	—
Public Utilities	13.6	(0.4)	—	—	—	—	—	13.2	—	(0.4)
Mortgage/ Asset-Backed Securities	11.6	—	0.6	—	(0.3)	0.2	(0.9)	11.2	0.6	—
All Other Corporate Bonds	103.5	—	(5.4)	1.3	(13.0)	57.9	(20.9)	123.4	(5.4)	—
Total Fixed Maturity Securities	148.9	(0.4)	(5.1)	1.3	(13.3)	58.4	(21.8)	168.0	(5.1)	(0.4)
Perpetual Preferred and Equity Securities	10.9	(0.1)	—	2.7	—	—	—	13.5	—	(0.1)
Embedded Derivative in Modified Coinsurance Arrangement	(34.3)	14.9	—	—	—	—	—	(19.4)	—	14.9

Note 3 - Fair Value of Financial Instruments - Continued

	Three Months Ended September 30, 2021									
	Fair Value Beginning of Period	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										
Foreign Governments	$ 21.5	$ —	$ (0.4)	$ —	$ —	$ —	$ —	$ 21.1	$ (0.3)	$ —
Public Utilities	104.5	—	(0.4)	—	—	—	(59.5)	44.6	(0.4)	—
Mortgage/ Asset-Backed Securities	14.9	—	(17.1)	—	(2.0)	48.3	(10.2)	33.9	(17.1)	—
All Other Corporate Bonds	401.0	—	(6.0)	50.0	(4.4)	256.0	(82.0)	614.6	(6.0)	—
Total Fixed Maturity Securities	541.9	—	(23.9)	50.0	(6.4)	304.3	(151.7)	714.2	(23.8)	—
Perpetual Preferred and Equity Securities	5.5	0.1	—	—	—	—	—	5.6	—	0.1
Embedded Derivative in Modified Coinsurance Arrangement	(21.2)	2.6	—	—	—	—	—	(18.6)	—	2.6

Note 3 - Fair Value of Financial Instruments - Continued

	Nine Months Ended September 30, 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	$ —	$ (0.1)	$ 0.3	$ —	$ —	$(13.4)	$ 0.2	$ (0.1)	$ —
Foreign Governments	20.8	—	(0.8)	—	—	—	—	20.0	(0.8)	—
Public Utilities	44.5	(4.6)	2.2	—	(10.8)	15.6	(33.7)	13.2	2.2	(4.6)
Mortgage/ Asset-Backed Securities	187.2	—	(1.2)	9.9	(9.5)	—	(175.2)	11.2	(1.2)	—
All Other Corporate Bonds	861.5	—	(29.5)	8.8	(20.9)	18.3	(714.8)	123.4	(29.5)	—
Total Fixed Maturity Securities	1,127.4	(4.6)	(29.4)	19.0	(41.2)	33.9	(937.1)	168.0	(29.4)	(4.6)
Perpetual Preferred and Equity Securities	5.8	2.7	—	5.0	—	—	—	13.5	—	2.7
Embedded Derivative in Modified Coinsurance Arrangement	(30.1)	10.7	—	—	—	—	—	(19.4)	—	10.7

Note 3 - Fair Value of Financial Instruments - Continued

	Nine Months Ended September 30, 2021									
	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	$ 15.5	$ —	$ —	$ —	$ —	$ —	$ (15.5)	$ —	$ —	$ —
Foreign Governments	21.8	—	(0.7)	—	—	—	—	21.1	(0.7)	—
Public Utilities	185.7	—	(2.3)	—	(21.3)	36.0	(153.5)	44.6	(2.3)	—
Mortgage/ Asset-Backed Securities	81.3	—	(37.2)	—	(62.0)	62.1	(10.3)	33.9	(37.2)	—
All Other Corporate Bonds	943.1	—	(19.7)	133.9	(17.4)	47.5	(472.8)	614.6	(19.7)	—
Total Fixed Maturity Securities	1,247.4	—	(59.9)	133.9	(100.7)	145.6	(652.1)	714.2	(59.9)	—
Perpetual Preferred and Equity Securities	4.7	0.1	—	0.8	—	—	—	5.6	—	0.1
Embedded Derivative in Modified Coinsurance Arrangement	(39.8)	21.2	—	—	—	—	—	(18.6)	—	21.2

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.

	September 30, 2022			
	Fair Value	Valuation Method	Unobservable Input	Range/Weighted Average
	(in millions of dollars)			
Fixed Maturity Securities				
Public Utilities	$ 13.2	Discounted Cash Flows	Projected Liability Cash Flows	(a) Investment Analyst Assumptions
Mortgage/Asset-Backed Securities - Private	9.7	Market Approach	Market Convention	(b) Comparability Approach
All Other Corporate Bonds - Private	15.9	Market Approach	Volatility of Credit Market Convention	(d) 4.61% - 4.61% / 4.61% (e) Priced at Par Value
Perpetual Preferred and Equity Securities	13.5	Market Approach	Market Convention	(e) Priced at Cost, Owner's Equity, or Most Recent Round
Embedded Derivative in Modified Coinsurance Arrangement	(19.4)	Discounted Cash Flows	Projected Liability Cash Flows Weighted Spread of Swap Curve	(f) Actuarial Assumptions 0.7%

	December 31, 2021			
	Fair Value	Valuation Method	Unobservable Input	Range/Weighted Average
	(in millions of dollars)			
Fixed Maturity Securities				
All Other Corporate Bonds - Private	$ 111.8	Market Approach	Lack of Marketability Volatility of Credit	(c) 0.14% - 0.73% / 0.51% (d) 6.30% - 6.30% / 6.30%
Perpetual Preferred and Equity Securities	5.8	Market Approach	Market Convention	(e) Priced at Cost or Owner's Equity
Embedded Derivative in Modified Coinsurance Arrangement	(30.1)	Discounted Cash Flows	Projected Liability Cash Flows Weighted Spread of Swap Curve	(f) Actuarial Assumptions 0.7%

(a) Represents a decision to price based on discounted expected future cash flows
(b) Represents a decision to price based on comparable underlying assets
(c) Represents basis point adjustments to apply a discount due to the illiquidity of an investment
(d) Represents basis point adjustments for credit-specific factors
(e) 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
(f) 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

Note 3 - Fair Value of Financial Instruments - Continued

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.

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 $3,354.6 million and $3,373.7 million as of September 30, 2022 and December 31, 2021, 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:

	September 30, 2022				
	Estimated Fair Value				
	Level 1	Level 2	Level 3	Total	Carrying Value
	(in millions of dollars)				
Assets					
Mortgage Loans	$ —	$ 2,210.4	$ —	$ 2,210.4	$ 2,476.4
Policy Loans	—	—	3,714.6	3,714.6	3,640.8
Other Long-term Investments					
Miscellaneous Long-term Investments	—	17.3	3.3	20.6	20.6
Total Financial Instrument Assets Not Carried at Fair Value	$ —	$ 2,227.7	$ 3,717.9	$ 5,945.6	$ 6,137.8
Liabilities					
Long-term Debt	$ 2,487.0	$ 552.2	$ —	$ 3,039.2	$ 3,429.2
Other Liabilities					
Unfunded Commitments	—	0.7	—	0.7	0.7
Payable for Collateral on FHLB Funding Agreements	—	118.5	—	118.5	118.5
Total Financial Instrument Liabilities Not Carried at Fair Value	$ 2,487.0	$ 671.4	$ —	$ 3,158.4	$ 3,548.4

Note 3 - Fair Value of Financial Instruments - Continued

	December 31, 2021				
	Estimated Fair Value				
	Level 1	Level 2	Level 3	Total	Carrying Value
	(in millions of dollars)				
Assets					
Mortgage Loans	$ —	$ 2,677.8	$ —	$ 2,677.8	$ 2,560.4
Policy Loans	—	—	3,807.1	3,807.1	3,662.9
Other Long-term Investments					
Miscellaneous Long-term Investments	—	22.1	9.5	31.6	31.6
Total Financial Instrument Assets Not Carried at Fair Value	$ —	$ 2,699.9	$ 3,816.6	$ 6,516.5	$ 6,254.9
Liabilities					
Long-term Debt	$ 2,237.3	$ 1,641.8	$ —	$ 3,879.1	$ 3,442.2
Other Liabilities					
Unfunded Commitments	—	0.7	—	0.7	0.7
Payable for Collateral on FHLB Funding Agreements	—	160.9	—	160.9	160.9
Total Financial Instrument Liabilities Not Carried at Fair Value	$ 2,237.3	$ 1,642.5	$ —	$ 3,879.8	$ 3,442.9

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 September 30, 2022 and December 31, 2021, 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:

	September 30, 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	$ 466.2	$ —	$ 23.1	$ 23.0	$ 466.3
States, Municipalities, and Political Subdivisions	4,286.9	—	80.4	731.8	3,635.5
Foreign Governments	872.6	—	36.3	99.8	809.1
Public Utilities	5,175.4	4.6	126.7	386.6	4,910.9
Mortgage/Asset-Backed Securities	555.0	—	7.4	32.1	530.3
All Other Corporate Bonds	26,361.3	—	364.6	2,933.3	23,792.6
Redeemable Preferred Stocks	4.0	—	—	0.5	3.5
Total Fixed Maturity Securities	$ 37,721.4	$ 4.6	$ 638.5	$ 4,207.1	$ 34,148.2

	December 31, 2021				
	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	$ 460.1	$ —	$ 120.1	$ 0.1	$ 580.1
States, Municipalities, and Political Subdivisions	4,150.2	—	584.2	6.9	4,727.5
Foreign Governments	952.0	—	215.3	20.7	1,146.6
Public Utilities	5,266.4	—	1,159.4	9.8	6,416.0
Mortgage/Asset-Backed Securities	587.9	—	50.4	—	638.3
All Other Corporate Bonds	25,966.1	—	3,919.9	62.6	29,823.4
Redeemable Preferred Stocks	4.0	—	0.1	—	4.1
Total Fixed Maturity Securities	$ 37,386.7	$ —	$ 6,049.4	$ 100.1	$ 43,336.0

[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.

	September 30, 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	$ 204.7	$ 22.5	$ 4.5	$ 0.5
States, Municipalities, and Political Subdivisions	2,420.8	713.7	35.0	18.1
Foreign Governments	218.4	74.3	45.4	25.5
Public Utilities	2,640.6	340.6	104.0	46.0
Mortgage/Asset-Backed Securities	399.5	32.1	0.1	—
All Other Corporate Bonds	17,240.4	2,606.5	850.8	326.8
Redeemable Preferred Stocks	3.5	0.5	—	—
Total Fixed Maturity Securities	$ 23,127.9	$ 3,790.2	$ 1,039.8	$ 416.9

	December 31, 2021			
	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	$ 9.3	$ 0.1	$ —	$ —
States, Municipalities, and Political Subdivisions	326.4	6.9	0.4	—
Foreign Governments	234.4	18.9	10.7	1.8
Public Utilities	263.3	9.1	17.6	0.7
Mortgage/Asset-Backed Securities	29.2	—	0.1	—
All Other Corporate Bonds	2,146.3	51.6	199.4	11.0
Total Fixed Maturity Securities	$ 3,008.9	$ 86.6	$ 228.2	$ 13.5

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.

	September 30, 2022				
	Amortized Cost, Net of ACL	Unrealized Gain Position		Unrealized Loss Position	
		Gross Gain	Fair Value	Gross Loss	Fair Value
	(in millions of dollars)				
1 year or less	$ 1,155.4	$ 3.8	$ 481.5	$ 9.2	$ 668.5
Over 1 year through 5 years	6,680.4	74.8	1,671.1	268.2	4,815.9
Over 5 years through 10 years	10,456.2	267.7	3,537.7	1,013.3	6,172.9
Over 10 years	18,869.8	284.8	4,159.5	2,884.3	12,110.8
	37,161.8	631.1	9,849.8	4,175.0	23,768.1
Mortgage/Asset-Backed Securities	555.0	7.4	130.7	32.1	399.6
Total Fixed Maturity Securities	$ 37,716.8	$ 638.5	$ 9,980.5	$ 4,207.1	$ 24,167.7

Note 4 - Investments - Continued

	December 31, 2021				
	Amortized Cost, Net of ACL	Unrealized Gain Position		Unrealized Loss Position	
		Gross Gain	Fair Value	Gross Loss	Fair Value
	(in millions of dollars)				
1 year or less	$ 767.3	$ 17.6	$ 756.0	$ 0.1	$ 28.9
Over 1 year through 5 years	6,613.2	540.2	7,050.5	6.0	96.9
Over 5 years through 10 years	10,614.3	1,453.3	10,905.0	26.0	1,136.6
Over 10 years	18,804.0	3,987.9	20,778.4	68.0	1,945.4
	36,798.8	5,999.0	39,489.9	100.1	3,207.8
Mortgage/Asset-Backed Securities	587.9	50.4	609.0	—	29.3
Total Fixed Maturity Securities	$ 37,386.7	$ 6,049.4	$ 40,098.9	$ 100.1	$ 3,237.1

The following chart depicts an analysis of our fixed maturity security portfolio between investment-grade and below-investment-grade categories as of September 30, 2022:

			Gross Unrealized Loss	
	Fair Value	Gross Unrealized Gain	Amount	Percent of Total Gross Unrealized Loss
	(in millions of dollars)			
Investment-Grade	$ 32,134.9	$ 633.6	$ 3,973.5	94.4 %
Below-Investment-Grade	2,013.3	4.9	233.6	5.6
Total Fixed Maturity Securities	$ 34,148.2	$ 638.5	$ 4,207.1	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 September 30, 2022, 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.

As of September 30, 2022, we held 892 individual investment-grade fixed maturity securities and 118 individual below-investment-grade fixed maturity securities that were in an unrealized loss position, of which 114 investment-grade fixed maturity securities and 11 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

Note 4 - Investments - Continued

- 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 problem 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. As of September 30, 2022, with respect to the fixed maturity securities for which the allowance for credit losses was recognized, we do not intend to sell these securities, and it is not more likely than not that we will be required to sell these securities before recovery of our estimated value.

The following tables present a rollforward of the allowance for credit losses on available-for-sale fixed maturity securities, which were classified as "public utilities" during the three and nine months ended September 30, 2022 and "all other corporate bonds" during the nine months ended September 30, 2021, respectively.

	Three Months Ended September 30	
	2022	2021
	(in millions of dollars)	
Balance, beginning of period	$ 4.1	$ —
Change in allowance on securities with allowance recorded in previous period	0.5	—
Balance, end of period	$ 4.6	$ —

	Nine Months Ended September 30	
	2022	2021
	(in millions of dollars)	
Balance, beginning of period	$ —	$ 6.8
Credit losses on securities for which credit losses were not previously recorded	4.6	—
Change in allowance on securities with allowance recorded in previous period	—	0.5
Change in allowance on securities sold during the period	—	(7.3)
Balance, end of period	$ 4.6	$ —

At September 30, 2022, we had commitments of $30.5 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 include tax credit partnerships, private equity partnerships, and special purpose entities. For those 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.

Note 4 - Investments - Continued

As of September 30, 2022, the carrying amount of our variable interest entity investments that are not consolidated in our financial statements was $1,127.6 million, comprised of $3.0 million of tax credit partnerships and $1,124.6 million of private equity partnerships. At December 31, 2021, the carrying amount of our variable interest entity investments that are not consolidated in our financial statements was $987.9 million, comprised of $9.3 million of tax credit partnerships and $978.6 million of private equity partnerships. These variable interest entity investments are reported as other long-term investments in our consolidated balance sheets.

The Company invests in tax credit partnerships primarily for the receipt of income tax credits and tax benefits derived from passive losses on the investments. Amounts recognized in the consolidated statements of income are as follows:

	Three Months Ended September 30		Nine Months Ended September 30	
	2022	2021	2022	2021
	(in millions of dollars)			
Income Tax Credits	$ 1.9	$ 5.1	$ 6.0	$ 15.9
Amortization, Net of Tax	(1.4)	(4.0)	(4.4)	(11.4)
Income Tax Benefit	$ 0.5	$ 1.1	$ 1.6	$ 4.5

Contractually, we are a limited partner in these tax credit partnerships, and our maximum exposure to loss is limited to the carrying value of our investment, which includes $0.7 million of unfunded unconditional commitments at September 30, 2022. See Note 3 for commitments to fund private equity partnerships.

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 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 $2,485.1 million and $2,568.7 million at September 30, 2022 and December 31, 2021, respectively. The allowance for expected credit losses was $8.7 million and $8.3 million at September 30, 2022 and December 31, 2021, 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 $7.7 million and $8.1 million at September 30, 2022 and December 31, 2021, respectively.

Note 4 - Investments - Continued

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

	September 30, 2022		December 31, 2021	
	(in millions of dollars)			
	Carrying Amount	Percent of Total	Carrying Amount	Percent of Total
Property Type				
Apartment	$ 693.1	28.0 %	$ 780.0	30.5 %
Industrial	741.3	29.9	734.4	28.7
Office	450.0	18.2	467.2	18.2
Retail	547.7	22.1	533.3	20.8
Other	44.3	1.8	45.5	1.8
Total	$ 2,476.4	100.0 %	$ 2,560.4	100.0 %
Region				
New England	$ 53.1	2.1 %	$ 54.9	2.1 %
Mid-Atlantic	194.5	7.9	214.7	8.4
East North Central	315.2	12.7	298.4	11.7
West North Central	183.1	7.4	193.1	7.5
South Atlantic	571.1	23.1	582.1	22.7
East South Central	102.7	4.1	120.7	4.7
West South Central	214.7	8.7	243.2	9.6
Mountain	294.7	11.9	290.6	11.3
Pacific	547.3	22.1	562.7	22.0
Total	$ 2,476.4	100.0 %	$ 2,560.4	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 appraisal of 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:

	September 30, 2022		December 31, 2021	
	(in millions of dollars)			
	Carrying Amount	Percent of Total	Carrying Amount	Percent of Total
Internal Mortgage Rating				
AA	$ 30.1	1.2 %	$ 27.3	1.1 %
A	695.5	28.1	709.6	27.7
BBB	1,730.6	69.9	1,802.6	70.4
BB	20.2	0.8	20.9	0.8
Total	$ 2,476.4	100.0 %	$ 2,560.4	100.0 %
Loan-to-Value Ratio[(1)]				
<= 65%	$ 1,317.6	53.3 %	$ 1,346.1	52.6 %
> 65% <= 75%	1,043.3	42.1	1,076.8	42.0
> 75% <= 85%	109.9	4.4	114.9	4.5
> 85%	5.6	0.2	22.6	0.9
Total	$ 2,476.4	100.0 %	$ 2,560.4	100.0 %

[(1)]Loan-to Value Ratio utilizes the most recent internal appraisal of the property

The following tables present the amortized cost of our mortgage loans by year of origination and internal quality indicators at September 30, 2022 and December 31, 2021, respectively:

	September 30, 2022						
	Prior to 2018	2018	2019	2020	2021	2022	Total
	(in millions of dollars)						
Internal Mortgage Rating							
AA	$ 6.1	$ 24.0	$ —	$ —	$ —	$ —	$ 30.1
A	453.3	78.0	43.2	17.3	80.8	24.2	696.8
BBB	676.6	270.7	303.6	153.6	277.4	55.7	1,737.6
BB	14.7	5.9	—	—	—	—	20.6
Total Amortized Cost	1,150.7	378.6	346.8	170.9	358.2	79.9	2,485.1
Allowance for credit losses	(4.0)	(1.6)	(1.4)	(0.5)	(0.8)	(0.4)	(8.7)
Carrying Amount	$ 1,146.7	$ 377.0	$ 345.4	$ 170.4	$ 357.4	$ 79.5	$ 2,476.4
Loan-to-Value Ratio[(1)]							
<=65%	$ 812.7	$ 190.0	$ 102.3	$ 68.4	$ 129.7	$ 17.0	$ 1,320.1
>65<=75%	227.4	182.7	244.5	102.5	228.5	62.9	1,048.5
>75%<=85%	110.6	—	—	—	—	—	110.6
>85%	—	5.9	—	—	—	—	5.9
Total Amortized Cost	1,150.7	378.6	346.8	170.9	358.2	79.9	2,485.1
Allowance for credit losses	(4.0)	(1.6)	(1.4)	(0.5)	(0.8)	(0.4)	(8.7)
Carrying Amount	$ 1,146.7	$ 377.0	$ 345.4	$ 170.4	$ 357.4	$ 79.5	$ 2,476.4

[(1)]Loan-to Value Ratio utilizes the most recent internal appraisal of the property

Note 4 - Investments - Continued

	December 31, 2021						
	Prior to 2017	2017	2018	2019	2020	2021	Total
	(in millions of dollars)						
Internal Mortgage Rating							
AA	$ 3.3	$ —	$ 24.0	$ —	$ —	$ —	$ 27.3
A	414.6	68.0	71.1	28.9	17.6	110.6	710.8
BBB	561.2	227.3	283.3	331.9	163.1	242.6	1,809.4
BB	5.0	10.2	6.0	—	—	—	21.2
Total Amortized Cost	984.1	305.5	384.4	360.8	180.7	353.2	2,568.7
Allowance for credit losses	(2.6)	(1.4)	(1.4)	(1.4)	(0.7)	(0.8)	(8.3)
Carrying Amount	$ 981.5	$ 304.1	$ 383.0	$ 359.4	$ 180.0	$ 352.4	$ 2,560.4
Loan-to-Value Ratio[(1)]							
<=65%	$ 779.1	$ 146.9	$ 163.0	$ 80.7	$ 54.3	$ 124.7	$ 1,348.7
>65<=75%	115.7	115.4	215.4	280.1	126.4	228.5	1,081.5
>75%<=85%	89.3	26.3	—	—	—	—	115.6
>85%	—	16.9	6.0	—	—	—	22.9
Total Amortized Cost	984.1	305.5	384.4	360.8	180.7	353.2	2,568.7
Allowance for credit losses	(2.6)	(1.4)	(1.4)	(1.4)	(0.7)	(0.8)	(8.3)
Carrying Amount	$ 981.5	$ 304.1	$ 383.0	$ 359.4	$ 180.0	$ 352.4	$ 2,560.4

[(1)]Loan-to Value Ratio utilizes the most recent internal appraisal of the property

Note 4 - Investments - Continued

The following table presents a roll-forward of the allowance for expected credit losses by loan-to-value ratio for the three and nine months ended September 30, 2022 and 2021:

	Three Months Ended September 30, 2022				
	Beginning of Period	Current Period Provisions	Write-Offs	Recoveries	End of Period
	(in millions of dollars)				
Loan-to-Value Ratio[1]					
<=65%	$ 2.3	$ 0.2	$ —	$ —	$ 2.5
>65<=75%	4.8	0.4	—	—	5.2
>75%<=85%	0.9	(0.2)	—	—	0.7
>85%	0.4	(0.1)	—	—	0.3
Total	$ 8.4	$ 0.3	$ —	$ —	$ 8.7

	Three Months Ended September 30, 2021				
	Beginning of Period	Current Period Provisions	Write-Offs	Recoveries	End of Period
	(in millions of dollars)				
Loan-to-Value Ratio[1]					
<=65%	$ 3.2	$ —	$ —	$ —	$ 3.2
>65<=75%	6.2	—	—	—	6.2
>75%<=85%	1.5	(0.1)	—	—	1.4
>85%	0.5	—	—	—	0.5
Total	$ 11.4	$ (0.1)	$ —	$ —	$ 11.3

	Nine Months Ended September 30, 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	$ (0.1)	$ —	$ —	$ 2.5
>65<=75%	4.7	0.5	—	—	5.2
>75%<=85%	0.7	—	—	—	0.7
>85%	0.3	—	—	—	0.3
Total	$ 8.3	$ 0.4	$ —	$ —	$ 8.7

	Nine Months Ended September 30, 2021				
	Beginning of Year	Current Period Provisions	Write-Offs	Recoveries	End of Period
	(in millions of dollars)				
Loan-to-Value Ratio[1]					
<=65%	$ 3.4	$ (0.2)	$ —	$ —	$ 3.2
>65<=75%	7.3	(1.1)	—	—	6.2
>75%<=85%	1.3	0.1	—	—	1.4
>85%	1.1	(0.6)	—	—	0.5
Total	$ 13.1	$ (1.8)	$ —	$ —	$ 11.3

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

Note 4 - Investments - Continued

The marginal increase in our estimate of expected losses during the third quarter and first nine months of 2022 is primarily driven by heightened uncertainty surrounding the future macroeconomic outlook and reflects market conditions as of September 30, 2022.

There were no troubled debt restructurings during the three and nine months ended September 30, 2022 and 2021. At September 30, 2022 and December 31, 2021, 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 and nine months ended September 30, 2022 or 2021.

We had no impaired mortgage loans during three and nine months ended September 30, 2022 or 2021, nor did we recognize any interest income on mortgage loans subsequent to impairment.

At September 30, 2022, we had commitments of $9.0 million to fund certain 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 both September 30, 2022 and December 31, 2021 we had $0.1 million of expected credit losses related to unfunded commitments on our consolidated balance sheets.

Investment Real Estate

During the first quarter of 2022, we reclassified one property previously held for the production of income to property held for sale. The carrying value of the property was $40.1 million and $40.9 million as of September 30, 2022 and December 31, 2021, respectively, and is primarily recorded within our Corporate segment. The estimated fair value less cost to sell is above the carrying value of the property, and we expect to close the sale of the property in 2022.

During the third quarter of 2022, we reclassified two additional properties previously held for the production of income to property held for sale. The properties had a combined carrying value of $4.2 million and $4.1 million as of September 30, 2022 and December 31, 2021, respectively, and are recorded within our Corporate segment. The estimated fair value less cost to sell is above the carrying value of each property, and we expect to close the sale of both properties within the next twelve months.

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 September 30, 2022, the carrying amount of fixed maturity securities loaned to third parties under our securities lending program was $231.0 million, for which we received collateral in the form of cash and securities of $100.1 million and $139.1 million, respectively. As of December 31, 2021, the carrying amount of fixed maturity securities loaned to third parties under our securities lending program was $283.7 million, for which we received collateral in the form of cash and securities of $94.8 million and $198.6 million, respectively. We had no outstanding repurchase agreements at September 30, 2022 or December 31, 2021.

Note 4 - Investments - Continued

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

	September 30, 2022	December 31, 2021
	Overnight and Continuous	
	(in millions of dollars)	
Borrowings		
United States Government and Government Agencies and Authorities	$ —	$ 0.1
States, Municipalities, and Political Subdivisions	3.4	0.1
Public Utilities	8.6	3.1
All Other Corporate Bonds	88.1	91.5
Total Borrowings	$ 100.1	$ 94.8
Gross Amount of Recognized Liability for Securities Lending Transactions	100.1	94.8
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 short-term investments or 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:

	September 30, 2022	December 31, 2021
	(in millions of dollars)	
Carrying Value of FHLB Common Stock	$ 17.3	$ 22.1
Advances from FHLB	118.5	160.9
Carrying Value of Collateral Posted to FHLB		
Fixed Maturity Securities	$ 546.8	$ 786.1
Commercial Mortgage Loans	808.4	930.0
Total Carrying Value of Collateral Posted to FHLB	$ 1,355.2	$ 1,716.1

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.

	September 30, 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	$ 128.1	$ —	$ 128.1	$ (45.5)	$ (80.9)	$ 1.7
Securities Lending	231.0	—	231.0	(130.9)	(100.1)	—
Total	$ 359.1	$ —	$ 359.1	$ (176.4)	$ (181.0)	$ 1.7
Financial Liabilities:						
Derivatives	$ 56.4	$ —	$ 56.4	$ (54.6)	$ —	$ 1.8
Securities Lending	100.1	—	100.1	(100.1)	—	—
Total	$ 156.5	$ —	$ 156.5	$ (154.7)	$ —	$ 1.8

	December 31, 2021					
	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	$ 39.5	$ —	$ 39.5	$ (9.8)	$ (28.4)	$ 1.3
Securities Lending	283.7	—	283.7	(188.9)	(94.8)	—
Total	$ 323.2	$ —	$ 323.2	$ (198.7)	$ (123.2)	$ 1.3
Financial Liabilities:						
Derivatives	$ 35.0	$ —	$ 35.0	$ (34.0)	$ —	$ 1.0
Securities Lending	94.8	—	94.8	(94.8)	—	—
Total	$ 129.8	$ —	$ 129.8	$ (128.8)	$ —	$ 1.0

Note 4 - Investments - Continued

Net Investment Income

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

	Three Months Ended September 30		Nine Months Ended September 30	
	2022	2021	2022	2021
	(in millions of dollars)			
Fixed Maturity Securities	$ 456.7	$ 478.5	$ 1,379.9	$ 1,419.7
Derivatives	14.9	15.2	45.1	49.1
Mortgage Loans	24.7	26.5	77.6	77.5
Policy Loans	5.1	4.9	14.8	14.7
Other Long-term Investments				
Perpetual Preferred Securities[1]	1.1	0.4	3.2	6.0
Private Equity Partnerships	12.6	38.3	98.6	126.1
Other	3.6	0.3	7.4	3.7
Short-term Investments	5.9	0.2	9.2	1.1
Gross Investment Income	524.6	564.3	1,635.8	1,697.9
Less Investment Expenses	10.0	10.8	29.1	26.1
Less Investment Income on Participation Fund Account Assets	3.0	3.3	8.9	9.4
Net Investment Income	$ 511.6	$ 550.2	$ 1,597.8	$ 1,662.4

[1] The net unrealized gain recognized in net investment income for the three and nine months ended September 30, 2022 related to perpetual preferred securities still held at September 30, 2022 was $0.5 million and $1.5 million, respectively. The net unrealized gain (loss) recognized in net investment income for the three and nine months ended September 30, 2021 related to perpetual preferred securities still held at September 30, 2021 was $(0.2) million and $4.0 million, respectively.

Note 4 - Investments - Continued

Investment Gain and Loss

Investment gains and losses are as follows:

	Three Months Ended September 30		Nine Months Ended September 30	
	2022	2021	2022	2021
	(in millions of dollars)			
Fixed Maturity Securities				
Gross Gains on Sales[1]	$ —	$ 1.3	$ 0.8	$ 74.9
Gross Losses on Sales	(13.4)	(5.4)	(26.4)	(9.0)
Credit Losses	(0.5)	—	(4.6)	(9.3)
Mortgage Loans and Other Invested Assets				
Gross Gains on Sales	—	1.5	1.4	5.0
Change in Allowance for Credit Losses	(0.4)	—	(0.3)	1.6
Embedded Derivative in Modified Coinsurance Arrangement	14.9	2.6	10.7	21.2
All Other Derivatives	(0.9)	0.7	4.6	2.3
Foreign Currency Transactions	(4.1)	(0.8)	(8.5)	(1.3)
Net Investment Gain (Loss)	$ (4.4)	$ (0.1)	$ (22.3)	$ 85.4

[1]Gross gains on sales of fixed maturity securities for the nine months ended September 30, 2021 includes gains of $67.6 million as a result of the second phase of the reinsurance transaction that we completed during the first quarter of 2021. See Note 12 for further discussion.

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, and credit 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, and credit default 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 fair value hedges and previously used to reduce our exposure to interest rate and duration risk included:

- *Interest rate swaps* were used to effectively convert certain fixed rate, long-term debt into floating rate long-term debt. Under these swap agreements, we received a fixed rate of interest and paid a variable rate of interest.

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. As of September 30, 2022 and December 31, 2021, we had $1.7 million and $1.3 million credit exposure on derivatives, respectively. The table below summarizes the nature and amount of collateral received from and posted to our derivative counterparties.

	September 30, 2022	December 31, 2021
	(in millions of dollars)	
Carrying Value of Collateral Received from Counterparties		
Cash	$ 81.7	$ 32.0
Fixed Maturity Securities	13.7	—
	$ 95.4	$ 32.0
Carrying Value of Collateral Posted to Counterparties		
Cash	$ 6.1	$ —
Fixed Maturity Securities	20.7	27.6
	$ 26.8	$ 27.6

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 $56.4 million and $35.0 million at September 30, 2022 and December 31, 2021, respectively.

Cash Flow Hedges

As of September 30, 2022 and December 31, 2021, we had $178.0 million and $181.3 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.

During the third quarter and first nine months of 2022, we entered into $500.0 million and $679.0 million, respectively, of notional forward benchmark interest rate locks in order to hedge the anticipated purchase of fixed maturity securities. As of September 30, 2022, we had $664.0 million notional amount of forward benchmark interest rate locks.

During the second quarter of 2021, we entered into a $250.0 million notional forward benchmark interest rate lock in order to hedge the interest rate risk associated with the cash flows related to the early redemption of certain of our debt securities. We terminated the interest rate lock in the second quarter of 2021 and recognized a loss of $1.2 million that was reported as a cost related to the early retirement of debt in our income statement.

During the first quarter of 2021, in connection with the Closed Block individual disability reinsurance transaction, we reclassified $0.6 million of deferred gains from accumulated other comprehensive income (loss) into earnings included in the net investment gain (loss) line item on our income statement. The deferred gains were related to previously terminated interest

Note 5 - Derivative Financial Instruments - Continued

rate swaps designated as hedging instruments of fixed maturity securities in the Closed Block individual disability product line. See Note 12 for further discussion.

As of September 30, 2022, we expect to amortize approximately $39.2 million of net deferred gains on derivative instruments during the next twelve months. This amount will be reclassified from accumulated other comprehensive income (loss) 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 (loss) into earnings to offset the earnings impact of foreign currency translation of hedged items are not estimable.

As of September 30, 2022, we are hedging the variability of future cash flows associated with forecasted transactions through the year 2052.

Fair Value Hedges

As of September 30, 2022 and December 31, 2021, we had $558.2 million and $498.5 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.

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	
	September 30, 2022	December 31, 2021	September 30, 2022	December 31, 2021
	(in millions of dollars)			
Fixed maturity securities:				
Receive fixed functional currency interest, pay fixed foreign currency interest	$ 346.6	$ 466.3	$ (60.6)	$ 2.0

For the three and nine months ended September 30, 2022, $0.2 million and $13.9 million, respectively, of the derivative instruments' gain was excluded from the assessment of hedge effectiveness. For the three and nine months ended September 30, 2021, $0.4 million and $10.6 million, respectively, of the derivative instruments' gain 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

At both September 30, 2022 and December 31, 2021, we held $148.2 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 September 30, 2022, we held no single name credit default swaps. As of December 31, 2021, we held $11.6 million notional amount of single name credit default swaps. We entered into these swaps in order to mitigate the credit risk associated with specific securities owned.

As of September 30, 2022 and December 31, 2021, we held $54.3 million and $41.7 million, respectively, notional amount of foreign currency forwards to mitigate the foreign currency risk associated with specific securities owned.

As of September 30, 2022 and December 31, 2021, we held $70.2 million and $89.2 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

Note 5 - Derivative Financial Instruments - Continued

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.

	September 30, 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	$ 664.0	$ —	$ 29.0
Foreign Currency Interest Rate Swaps	178.0	22.4	2.2
Total Cash Flow Hedges	842.0	22.4	31.2
Fair Value Hedges			
Foreign Currency Interest Rate Swaps	558.2	98.4	5.8
Total Designated as Hedging Instruments	$ 1,400.2	$ 120.8	$ 37.0
Not Designated as Hedging Instruments			
Foreign Currency Forwards	$ 54.3	$ 7.3	$ —
Foreign Currency Interest Rate Swaps	148.2	—	19.4
Total Return Swaps	70.2	—	—
Embedded Derivative in Modified Coinsurance Arrangement	—	—	19.4
Total Not Designated as Hedging Instruments	$ 272.7	$ 7.3	$ 38.8
Total Derivatives	$ 1,672.9	$ 128.1	$ 75.8

Note 5 - Derivative Financial Instruments - Continued

	December 31, 2021		
		Derivative Assets	Derivative Liabilities
	Notional Amount	Fair Value	Fair Value
	(in millions of dollars)		
Designated as Hedging Instruments			
Cash Flow Hedges			
Foreign Currency Interest Rate Swaps	$ 181.3	$ 16.2	$ 7.0
Fair Value Hedges			
Foreign Currency Interest Rate Swaps	498.5	21.9	5.7
Total Designated as Hedging Instruments	$ 679.8	$ 38.1	$ 12.7
Not Designated as Hedging Instruments			
Credit Default Swaps	$ 11.6	$ —	$ —
Foreign Currency Forwards	41.7	—	—
Foreign Currency Interest Rate Swaps	148.2	1.4	22.3
Total Return Swaps	89.2	—	—
Embedded Derivative in Modified Coinsurance Arrangement	—	—	30.1
Total Not Designated as Hedging Instruments	$ 290.7	$ 1.4	$ 52.4
Total Derivatives	$ 970.5	$ 39.5	$ 65.1

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 September 30					
	2022			2021		
	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	$ 511.6	$ (4.4)	$ 47.0	$ 550.2	$ (0.1)	$ 44.7
Gain (Loss) on Cash Flow Hedging Relationships						
Interest Rate Swaps:						
Hedged items	50.2	—	0.7	63.4	0.3	7.3
Derivatives Designated as Hedging Instruments	14.1	—	—	14.6	0.2	0.1
Foreign Exchange Contracts:		—				
Hedged items	2.7	(0.5)	—	2.9	—	—
Derivatives Designated as Hedging Instruments	(1.5)	—	—	0.3	(0.1)	—
Forward Benchmark Interest Rate Locks:						
Hedged items	0.2	—	—	—	—	—
Derivatives Designated as Hedging Instruments	—	—	—	—	—	—
Gain (Loss) on Fair Value Hedging Relationships						
Foreign Exchange Contracts						
Hedged items	2.9	(29.6)	—	2.5	(10.4)	—
Derivatives Designated as Hedging Instruments	1.0	29.6	—	0.9	10.4	—

Note 5 - Derivative Financial Instruments - Continued

	Nine Months Ended September 30					
	2022			2021		
	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	$ 1,597.8	$ (22.3)	$ 141.3	$ 1,662.4	$ 85.4	$ 134.4
Gain (Loss) on Cash Flow Hedging Relationships						
Interest Rate Swaps:						
Hedged items	150.9	—	2.1	170.2	2.7	21.9
Derivatives Designated as Hedging Instruments	40.5	—	—	46.6	2.0	0.3
Foreign Exchange Contracts:						
Hedged items	8.3	(0.5)	—	10.1	—	—
Derivatives Designated as Hedging Instruments	(0.9)	—	—	1.2	(0.1)	—
Forward Benchmark Interest Rate Locks:						
Hedged items	0.2	—	—	—	—	—
Derivatives Designated as Hedging Instruments	—	—	—	—	—	—
Gain (Loss) on Fair Value Hedging Relationships						
Foreign Exchange Contracts						
Hedged items	8.7	(62.5)	—	7.2	(18.8)	—
Derivatives Designated as Hedging Instruments	5.1	62.5	—	3.1	18.8	—

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 September 30		Nine Months Ended September 30	
	2022	2021	2022	2021
	(in millions of dollars)			
Gain (Loss) Recognized in Other Comprehensive Income (Loss) on Derivatives				
Forwards	$ (34.3)	$ (0.2)	$ (32.0)	$ (0.2)
Foreign Exchange Contracts	7.1	4.6	11.4	3.5
Total	$ (27.2)	$ 4.4	$ (20.6)	$ 3.3

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 September 30		Nine Months Ended September 30	
	2022	2021	2022	2021
	(in millions of dollars)			
Net Investment Gain (Loss)				
Credit Default Swaps	$ —	$ (0.1)	$ —	$ (0.3)
Foreign Exchange Contracts	(0.9)	0.8	4.6	2.6
Embedded Derivative in Modified Coinsurance Arrangement	14.9	2.6	10.7	21.2
Total	$ 14.0	$ 3.3	$ 15.3	$ 23.5
Other Expenses				
(Gain) Loss on Total Return Swaps	$ 4.3	$ 0.6	$ 23.0	$ (3.1)

Note 6 - Accumulated Other Comprehensive Income (Loss)

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

	Net Unrealized Gain (Loss) on Securities	Net Gain on Hedges	Foreign Currency Translation Adjustment	Unrecognized Pension and Postretirement Benefit Costs	Total
	(in millions of dollars)				
Balance at June 30, 2022	$ (1,064.9)	$ 46.4	$ (366.9)	$ (386.8)	$ (1,772.2)
Other Comprehensive Income (Loss) Before Reclassifications	(1,275.5)	(23.0)	(71.1)	2.8	(1,366.8)
Amounts Reclassified from Accumulated Other Comprehensive Income or Loss	11.1	(9.9)	—	3.1	4.3
Net Other Comprehensive Income (Loss)	(1,264.4)	(32.9)	(71.1)	5.9	(1,362.5)
Balance at September 30, 2022	$ (2,329.3)	$ 13.5	$ (438.0)	$ (380.9)	$ (3,134.7)
Balance at June 30, 2021	$ 911.4	$ 77.5	$ (244.7)	$ (522.1)	$ 222.1
Other Comprehensive Income (Loss) Before Reclassifications	(79.3)	3.9	(30.5)	1.4	(104.5)
Amounts Reclassified from Accumulated Other Comprehensive Income or Loss	3.9	(11.9)	—	4.3	(3.7)
Net Other Comprehensive Income (Loss)	(75.4)	(8.0)	(30.5)	5.7	(108.2)
Balance at September 30, 2021	$ 836.0	$ 69.5	$ (275.2)	$ (516.4)	$ 113.9
Balance at December 31, 2021	$ 962.2	$ 61.8	$ (273.9)	$ (396.0)	$ 354.1
Other Comprehensive Income (Loss) Before Reclassifications	(3,315.4)	(17.1)	(164.1)	5.9	(3,490.7)
Amounts Reclassified from Accumulated Other Comprehensive Income or Loss	23.9	(31.2)	—	9.2	1.9
Net Other Comprehensive Income (Loss)	(3,291.5)	(48.3)	(164.1)	15.1	(3,488.8)
Balance at September 30, 2022	$ (2,329.3)	$ 13.5	$ (438.0)	$ (380.9)	$ (3,134.7)
Balance at December 31, 2020	$ 1,067.7	$ 97.8	$ (261.3)	$ (530.0)	$ 374.2
Other Comprehensive Income (Loss) Before Reclassifications	(295.1)	10.8	(13.9)	0.4	(297.8)
Amounts Reclassified from Accumulated Other Comprehensive Income or Loss	63.4	(39.1)	—	13.2	37.5
Net Other Comprehensive Income (Loss)	(231.7)	(28.3)	(13.9)	13.6	(260.3)
Balance at September 30, 2021	$ 836.0	$ 69.5	$ (275.2)	$ (516.4)	$ 113.9

Note 6 - Accumulated Other Comprehensive Income (Loss) - Continued

The net unrealized gain (loss) on securities consists of the following components:

				Change at September 30, 2022	
	September 30 2022	June 30 2022	December 31 2021	Three Months Ended	Nine Months Ended
	(in millions of dollars)				
Fixed Maturity Securities	$ (3,568.6)	$ (1,122.0)	$ 5,949.3	$ (2,446.6)	$ (9,517.9)
Deferred Acquisition Costs	13.5	(8.1)	(70.4)	21.6	83.9
Reserves for Future Policy and Contract Benefits	764.3	(104.2)	(4,659.5)	868.5	5,423.8
Reinsurance Recoverable	(24.7)	19.7	132.1	(44.4)	(156.8)
Income Tax	486.2	149.7	(389.3)	336.5	875.5
Total	$ (2,329.3)	$ (1,064.9)	$ 962.2	$ (1,264.4)	$ (3,291.5)

				Change at September 30, 2021	
	September 30 2021	June 30 2021	December 31 2020	Three Months Ended	Nine Months Ended
	(in millions of dollars)				
Fixed Maturity Securities	$ 6,273.3	$ 6,603.1	$ 7,597.6	$ (329.8)	$ (1,324.3)
Deferred Acquisition Costs	(73.0)	(79.8)	(85.1)	6.8	12.1
Reserves for Future Policy and Contract Benefits	(5,143.9)	(5,386.6)	(6,225.6)	242.7	1,081.7
Reinsurance Recoverable	138.2	152.8	200.2	(14.6)	(62.0)
Income Tax	(358.6)	(378.1)	(419.4)	19.5	60.8
Total	$ 836.0	$ 911.4	$ 1,067.7	$ (75.4)	$ (231.7)

Note 6 - Accumulated Other Comprehensive Income (Loss) - Continued

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

	Three Months Ended September 30		Nine Months Ended September 30	
	2022	2021	2022	2021
	(in millions of dollars)			
Net Unrealized Loss on Securities				
Net Investment Gain (Loss)				
Gain (Loss) on Sales of Securities	$ (13.4)	$ (4.9)	$ (25.6)	$ 62.8
Credit Losses on Fixed Maturity Securities	(0.5)	—	(4.6)	(9.3)
Loss on Benefits and Change in Reserves for Future Benefits	—	—	—	(133.1)
	(13.9)	(4.9)	(30.2)	(79.6)
Income Tax Benefit	(2.8)	(1.0)	(6.3)	(16.2)
Total	$ (11.1)	$ (3.9)	$ (23.9)	$ (63.4)
Net Gain on Hedges				
Net Investment Income				
Gain on Interest Rate Swaps and Forwards	$ 14.1	$ 14.5	$ 40.5	$ 46.2
Gain (Loss) on Foreign Exchange Contracts	(1.5)	0.3	(1.0)	1.2
Net Investment Gain				
Gain on Interest Rate Swaps	—	0.2	—	2.0
Gain on Foreign Exchange Contracts	—	0.1	—	0.1
	12.6	15.1	39.5	49.5
Income Tax Expense	2.7	3.2	8.3	10.4
Total	$ 9.9	$ 11.9	$ 31.2	$ 39.1
Unrecognized Pension and Postretirement Benefit Costs				
Other Expenses				
Amortization of Net Actuarial Loss	$ (4.0)	$ (5.5)	$ (11.8)	$ (16.9)
Amortization of Prior Service Credit	0.1	0.1	0.2	0.2
	(3.9)	(5.4)	(11.6)	(16.7)
Income Tax Benefit	(0.8)	(1.1)	(2.4)	(3.5)
Total	$ (3.1)	$ (4.3)	$ (9.2)	$ (13.2)

Note 7 - Liability for Unpaid Claims and Claim Adjustment Expenses

Changes in the liability for unpaid claims and claim adjustment expenses are as follows:

	2022	2021
	(in millions of dollars)	
Balance at January 1	$ 23,664.7	$ 24,180.2
Less Reinsurance Recoverable	8,697.8	8,378.9
Net Balance at January 1	14,966.9	15,801.3
Incurred Related to		
Current Year	5,130.1	5,471.1
Prior Years		
Interest	460.5	525.3
All Other Incurred	(601.4)	(613.3)
Foreign Currency	(388.3)	(32.6)
Total Incurred	4,600.9	5,350.5
Paid Related to		
Current Year	(2,118.6)	(2,225.3)
Prior Years	(3,051.2)	(3,021.8)
Total Paid	(5,169.8)	(5,247.1)
Reserves Ceded Pursuant to Reinsurance Transaction	—	(990.0)
Net Balance at September 30	14,398.0	14,914.7
Plus Reinsurance Recoverable	8,401.4	8,854.8
Balance at September 30	$ 22,799.4	$ 23,769.5

Certain prior year amounts were reclassified to conform to current year presentation.

The majority of the net balances are related to disability claims with long-tail payouts on which interest earned on assets backing liabilities is an integral part of pricing and reserving. Interest accrued on prior year reserves has been calculated on the opening reserve balance less one-half of the period's claim payments relative to prior years at our average reserve discount rate for the respective periods.

"Incurred Related to Prior Years - All Other Incurred" shown in the preceding chart reflects the current year development of the prior year unpaid claims and claim adjustment expenses. For both 2022 and 2021 this line item includes reserve assumption updates as discussed in the following paragraphs. For 2021, this amount includes the increase in benefits and change in reserves for future benefits resulting from the realization of previously unrealized investment gains and losses as a result of the Closed Block individual disability reinsurance transaction. Excluding the reserve assumption updates and impacts from the reinsurance transaction, the variability exhibited year over year is primarily caused by the level of claim resolutions in the period relative to the long-term expectations reflected in the reserves, primarily in our Unum US group long-term disability and Closed Block long-term care product lines. 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, both favorably and unfavorably.

Note 7 - Liability for Unpaid Claims and Claim Adjustment Expenses - Continued

2022 Reserve Assumption Updates

During the third quarter of 2022, we completed our annual review of policy and claim reserve adequacy, which incorporated our most recent experience and included a review of all material assumptions. Based on our analysis, during the third quarter of 2022, we updated our reserve assumptions to reflect our current estimate of future benefits obligations and determined that our claim reserves in our Unum US group long-term disability product line and our waiver of premium reserves for our Unum US group life product line should be reduced by $121.0 million and $34.0 million, 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. As a result, a reduction of approximately $155.0 million, which can be primarily attributed to prior year incurred claims, impacts the results shown in the preceding chart.

We also increased our claim reserves for the reinsured portion of our Closed Block individual disability product line by $193.9 million resulting primarily from updates to mortality assumptions for the advanced age portion of our claimant population. This increase is entirely related to the block that was ceded as a part of the Closed Block individual disability reinsurance transaction with Commonwealth Annuity and Life Insurance Company (Commonwealth). As a result, the increase in the Closed Block individual disability claim reserves had no impact on the net activity shown in the preceding chart.

2021 Reserve Assumption Updates

During the third quarter of 2021, we completed our annual review of policy and claim reserve adequacy, which incorporated our most recent experience and included a review of all material assumptions. Based on our analysis, during the third quarter of 2021, we updated our reserve assumptions and determined that our claim reserves should be reduced by $215.0 million in our Unum US group long-term disability product line due primarily to sustained improvement in claim recovery trends since our last assumption update. We also increased our claim reserves for our Closed Block long-term care and individual disability product lines by $2.1 million and $6.4 million, respectively, to reflect our current estimate of future benefit obligations. As a result, a net reduction of $206.5 million, which can be primarily attributed to prior year incurred claims, impacts the results shown in the preceding chart. We increased policy reserves in our Closed Block group pension product line by $25.1 million as a result of this review which did not affect the results shown in the preceding chart.

Closed Block Individual Disability Reinsurance Transaction

In connection with the second phase of the Closed Block individual disability reinsurance transaction that closed in March 2021, we recorded a reinsurance recoverable of $990.0 million representing the ceded reserves related to the cohort of policies on claim status as of January 1, 2021 and an increase in benefits and change in reserves for future benefits of $133.1 million resulting from the realization of previously unrealized investment gains and losses recorded in accumulated other comprehensive income (loss). These impacts are reflected in the chart shown above and the reconciliation shown below. See Note 12 for further discussion regarding the total impacts of the Closed Block individual disability reinsurance transaction.

Note 7 - Liability for Unpaid Claims and Claim Adjustment Expenses - Continued

Reconciliation

A reconciliation of policy and contract benefits and reserves for future policy and contract benefits as reported in our consolidated balance sheets to the liability for unpaid claims and claim adjustment expenses is as follows:

	September 30	
	2022	2021
	(in millions of dollars)	
Policy and Contract Benefits	$ 1,771.4	$ 1,920.4
Reserves for Future Policy and Contract Benefits	42,108.7	48,475.7
Total	43,880.1	50,396.1
Less:		
Life Reserves for Future Policy and Contract Benefits	8,489.8	8,465.8
Accident and Health Active Life Reserves	13,355.2	13,016.9
Adjustment Related to Unrealized Investment Gains and Losses	(764.3)	5,143.9
Liability for Unpaid Claims and Claim Adjustment Expenses	$ 22,799.4	$ 23,769.5

The adjustment related to unrealized investment gains and losses reflects the changes that would be necessary to policyholder liabilities if the unrealized investment gains and losses related to the corresponding available-for-sale securities had been realized. Changes in this adjustment are reported as a component of other comprehensive income (loss).

Note 8 - 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 as follows:

	Three Months Ended September 30		Nine Months Ended September 30	
	2022	2021	2022	2021
	(in millions of dollars)			
Premium Income				
Unum US				
Group Disability				
Group Long-term Disability	$ 480.9	$ 451.4	$ 1,419.2	$ 1,367.7
Group Short-term Disability	232.2	212.4	685.9	641.2
Group Life and Accidental Death & Dismemberment				
Group Life	417.7	404.2	1,249.9	1,228.8
Accidental Death & Dismemberment	43.8	39.6	129.7	123.0
Supplemental and Voluntary				
Voluntary Benefits	199.0	209.6	635.2	640.4
Individual Disability	118.9	115.7	350.3	345.0
Dental and Vision	67.1	67.9	206.6	202.6
	1,559.6	1,500.8	4,676.8	4,548.7
Unum International				
Unum UK				
Group Long-term Disability	89.8	101.6	287.5	303.8
Group Life	35.0	29.1	100.5	84.4
Supplemental	27.4	28.3	85.8	84.2
Unum Poland	21.1	22.6	66.7	67.1
	173.3	181.6	540.5	539.5
Colonial Life				
Accident, Sickness, and Disability	236.1	238.0	714.0	715.1
Life	100.2	94.6	303.2	287.3
Cancer and Critical Illness	87.0	88.2	264.4	264.5
	423.3	420.8	1,281.6	1,266.9
Closed Block				
Long-term Care	174.5	176.1	523.0	528.4
Individual Disability	59.5	72.3	185.3	216.8
All Other	1.5	2.1	5.1	6.1
	235.5	250.5	713.4	751.3
Total Premium Income	$ 2,391.7	$ 2,353.7	$ 7,212.3	$ 7,106.4

Note 8 - Segment Information - Continued

	Unum US	Unum International	Colonial Life	Closed Block	Corporate	Total
			(in millions of dollars)			
Three Months Ended September 30, 2022						
Premium Income	$ 1,559.6	$ 173.3	$ 423.3	$ 235.5	$ —	$ 2,391.7
Net Investment Income	170.6	37.0	38.6	251.4	14.0	511.6
Other Income	49.0	0.2	0.3	13.1	0.4	63.0
Adjusted Operating Revenue	$ 1,779.2	$ 210.5	$ 462.2	$ 500.0	$ 14.4	$ 2,966.3
Adjusted Operating Income (Loss)	$ 275.0	$ 29.9	$ 90.4	$ 34.1	$ (49.5)	$ 379.9
Three Months Ended September 30, 2021						
Premium Income	$ 1,500.8	$ 181.6	$ 420.8	$ 250.5	$ —	$ 2,353.7
Net Investment Income	176.2	33.1	51.8	284.6	4.5	550.2
Other Income	43.5	0.4	0.3	19.3	2.4	65.9
Adjusted Operating Revenue	$ 1,720.5	$ 215.1	$ 472.9	$ 554.4	$ 6.9	$ 2,969.8
Adjusted Operating Income (Loss)	$ 88.5	$ 27.4	$ 80.1	$ 109.8	$ (45.4)	$ 260.4

	Unum US	Unum International	Colonial Life	Closed Block	Corporate	Total
			(in millions of dollars)			
Nine Months Ended September 30, 2022						
Premium Income	$ 4,676.8	$ 540.5	$ 1,281.6	$ 713.4	$ —	$ 7,212.3
Net Investment Income	509.4	122.3	115.4	817.7	33.0	1,597.8
Other Income	146.8	0.7	0.8	45.6	3.6	197.5
Adjusted Operating Revenue	$ 5,333.0	$ 663.5	$ 1,397.8	$ 1,576.7	$ 36.6	$ 9,007.6
Adjusted Operating Income (Loss)	$ 742.0	$ 82.0	$ 281.6	$ 207.5	$ (126.8)	$ 1,186.3
Nine Months Ended September 30, 2021						
Premium Income	$ 4,548.7	$ 539.5	$ 1,266.9	$ 751.3	$ —	$ 7,106.4
Net Investment Income	539.5	94.8	131.1	876.5	20.5	1,662.4
Other Income	125.2	0.6	0.8	49.8	4.1	180.5
Adjusted Operating Revenue	$ 5,213.4	$ 634.9	$ 1,398.8	$ 1,677.6	$ 24.6	$ 8,949.3
Adjusted Operating Income (Loss)	$ 383.5	$ 78.6	$ 249.2	$ 318.0	$ (132.8)	$ 896.5

Note 8 - Segment Information - Continued

	September 30 2022	December 31 2021
	(in millions of dollars)	
Assets		
Unum US	$ 16,183.0	$ 18,696.3
Unum International	2,910.5	4,086.5
Colonial Life	4,412.5	4,895.9
Closed Block	33,876.8	38,287.9
Corporate	3,483.9	4,149.0
Total Assets	$ 60,866.7	$ 70,115.6

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 and the amortization of the cost of reinsurance as well as certain other items 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.

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 was recognized as a result of the exit of the business related to the DLR cohort of policies. We believe that the exclusion of the amortization of the cost of reinsurance provides a better view of our results from our ongoing businesses. See Note 12 for further discussion regarding the total impacts of the Closed Block individual disability reinsurance transaction and the amortization of the cost of reinsurance.

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.

Note 8 - Segment Information - Continued

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

	Three Months Ended September 30		Nine Months Ended September 30	
	2022	2021	2022	2021
	(in millions of dollars)			
Total Revenue	$ 2,961.9	$ 2,969.7	$ 8,985.3	$ 9,034.7
Excluding:				
Net Investment Gain (Loss)	(4.4)	(0.1)	(22.3)	85.4
Adjusted Operating Revenue	$ 2,966.3	$ 2,969.8	$ 9,007.6	$ 8,949.3
Income Before Income Tax	$ 515.3	$ 409.9	$ 1,270.5	$ 871.3
Excluding:				
Net Investment Gains and Losses				
Net Realized Investment Gain Related to Reinsurance Transaction	—	—	—	67.6
Net Investment Gain (Loss), Other	(4.4)	(0.1)	(22.3)	17.8
Total Net Investment Gain (Loss)	(4.4)	(0.1)	(22.3)	85.4
Items Related to Closed Block Individual Disability Reinsurance Transaction				
Change in Benefit Reserves and Transaction Costs	—	—	—	(139.3)
Amortization of the Cost of Reinsurance	(15.2)	(19.7)	(48.5)	(59.4)
Total Items Related to Closed Block Individual Disability Reinsurance Transaction	(15.2)	(19.7)	(48.5)	(198.7)
Net Reserve Decrease Related to Reserve Assumption Updates	155.0	181.4	155.0	181.4
Impairment Loss on Internal-Use Software	—	(12.1)	—	(12.1)
Cost Related to Early Retirement of Debt	—	—	—	(67.3)
Impairment Loss on ROU Asset	—	—	—	(13.9)
Adjusted Operating Income	$ 379.9	$ 260.4	$ 1,186.3	$ 896.5

Note 9 - 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.

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

	Three Months Ended September 30					
	Pension Benefits					
	U.S. Plans		U.K. Plan		OPEB	
	2022	2021	2022	2021	2022	2021
	(in millions of dollars)					
Service Cost	$ 1.9	$ 2.4	$ —	$ —	$ —	$ —
Interest Cost	16.8	16.3	1.2	1.1	0.8	0.8
Expected Return on Plan Assets	(26.5)	(25.2)	(2.6)	(2.4)	(0.2)	(0.1)
Amortization of:						
Net Actuarial (Gain) Loss	4.1	5.3	0.1	0.2	(0.2)	—
Prior Service Credit	—	—	—	—	(0.1)	(0.1)
Total Net Periodic Benefit Cost (Credit)	$ (3.7)	$ (1.2)	$ (1.3)	$ (1.1)	$ 0.3	$ 0.6

	Nine Months Ended September 30					
	Pension Benefits					
	U.S. Plans		U.K. Plan		OPEB	
	2022	2021	2022	2021	2022	2021
	(in millions of dollars)					
Service Cost	$ 5.8	$ 7.2	$ —	$ —	$ —	$ —
Interest Cost	50.4	48.7	3.8	3.2	2.3	2.3
Expected Return on Plan Assets	(79.5)	(75.5)	(8.3)	(7.4)	(0.4)	(0.4)
Amortization of:						
Net Actuarial (Gain) Loss	12.2	16.0	0.3	0.9	(0.7)	—
Prior Service Credit	—	—	—	—	(0.2)	(0.2)
Total Net Periodic Benefit Cost (Credit)	$ (11.1)	$ (3.6)	$ (4.2)	$ (3.3)	$ 1.0	$ 1.7

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 10 - Stockholders' Equity and Earnings Per Common Share

Earnings Per Common Share

Net income per common share is determined as follows:

	Three Months Ended September 30		Nine Months Ended September 30	
	2022	2021	2022	2021
	(in millions of dollars, except share data)			
Numerator				
Net Income	$ 410.7	$ 328.6	$ 1,034.6	$ 664.5
Denominator (000s)				
Weighted Average Common Shares - Basic	200,035.3	204,645.8	201,262.3	204,429.6
Dilution for Assumed Exercises of Stock Options and Nonvested Stock Awards	1,614.9	496.5	1,256.7	623.3
Weighted Average Common Shares - Assuming Dilution	201,650.2	205,142.3	202,519.0	205,052.9
Net Income Per Common Share				
Basic	$ 2.05	$ 1.61	$ 5.14	$ 3.25
Assuming Dilution	$ 2.04	$ 1.60	$ 5.11	$ 3.24

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 outstanding stock options, 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 stock options, 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 exercise price of the stock options and 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 $12.45 to $39.82. There were no outstanding stock options as of September 30, 2022. Potential common shares from performance based share units will have a dilutive effect as the attainment of performance conditions is progressively achieved during the vesting period. Potential common shares not included in the computation of diluted earnings per share because the impact would be antidilutive were de minimis and 0.1 million for the three and nine months ended September 30, 2022, respectively. There were approximately 1.3 million and 1.1 million potential common shares that were antidilutive for the three and nine months ended September 30, 2021, respectively.

Note 10 - Stockholders' Equity and Earnings Per Common Share - Continued

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 the first nine months of 2021, we did not have an open share repurchase program and did not repurchase any shares. During October 2021, our board of directors authorized the repurchase of up to $250.0 million of Unum Group's outstanding common stock through December 31, 2022, 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.

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 September 30		Nine Months Ended September 30	
	2022	2021	2022	2021
	(in millions of dollars, except share data)			
Shares Repurchased (000s)	1,164.8	—	4,243.4	—
Cost of Shares Repurchased[1]	$ 42.6	$ —	$ 137.5	$ —

[1]Includes a de minimis amount and $0.1 million of commissions for the three and nine months ended September 30, 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. In total, we repurchased 1.7 million shares pursuant to the February 2022 accelerated share repurchase agreement. During the three and nine months ended September 30, 2022, we repurchased 1.2 million and 2.5 million shares, respectively, in open market transactions at a cost of $42.6 million and $87.5 million, respectively. As of September 30, 2022, the remaining repurchase amount under the current share repurchase program was $62.5 million.

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 11 - Commitments and Contingent Liabilities

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

Note 11 - Commitments and Contingent Liabilities - Continued

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.

Claims 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 12 - Debt and Other

Debt, Term Loan Facility, and Credit Facility Renewal

In September 2022, pursuant to privately negotiated transactions, we purchased, and the Provident Financing Trust I (the Trust) retired, $14.0 million aggregate liquidation amount of the Trust's 7.405% capital securities due 2038, which resulted in the reduction of a corresponding principal amount of our 7.405% junior subordinated debt securities due 2038 then held by the Trust. We incurred costs of $1.2 million related to the early retirement of the junior subordinated debt securities.

In August 2022, we entered into a five-year $350.0 million senior unsecured delayed draw term loan facility with a syndicate of lenders. Also in August 2022, we drew the entire amount of the term loan facility, which is scheduled to mature in August 2027. Amounts due under the term loan facility incur interest based on the prime rate, the federal funds rate or the Secured Overnight Financing Rate (SOFR). The proceeds from the term loan facility were used to redeem $350.0 million aggregate principal amount of our 4.000% senior notes due 2024. We incurred costs of $3.0 million related to the early retirement of these unsecured senior notes.

In April 2022, we amended and restated our existing credit agreement providing for a five-year $500 million senior unsecured revolving credit facility with a syndicate of lenders. The credit facility, which was previously set to expire in April 2024, was extended through April 2027. We may request that the lenders’ aggregate commitments of $500 million under the facility be increased by up to an additional $200 million. Certain of our traditional U.S. life insurance subsidiaries, Unum Life Insurance Company of America, Provident Life and Accident Insurance Company, and Colonial Life & Accident Insurance Company, joined the agreement and may borrow under the credit facility, and we can elect to add additional insurance subsidiaries to the facility at any later date. Any obligation of a subsidiary under the credit facility is several only and not joint and is subject to an unconditional guarantee by Unum Group. We may also request, on up to two occasions, that the lenders' commitment termination dates be extended by one year. The credit facility provides for borrowings at an interest rate based on the prime rate, the federal funds rate or the SOFR. The credit facility also provides for the issuance of letters of credit subject to certain

terms and limitations. At September 30, 2022, there were no borrowed amounts outstanding under the credit facility and letters of credit totaling $0.4 million had been issued.

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

In June 2021, we issued $600.0 million of 4.125% senior notes due 2051. The notes are callable at or above par and rank equally in the right of payment with all of our other unsecured and unsubordinated debt.

Also in June 2021, we redeemed $500.0 million aggregate principal amount of our 4.500% senior notes due 2025, for which we incurred costs of $67.3 million related to the early retirement of debt.

Income Tax

In June 2021, the Finance Bill 2021 was enacted, resulting in a U.K. tax rate increase from 19 percent to 25 percent, effective April 1, 2023, which resulted in $24.2 million of additional tax expense in operating earnings for the revaluation of our deferred tax assets and liabilities in the second quarter of 2021.

Allowance for Expected Credit Losses on Premiums Receivable

At September 30, 2022, June 30, 2022, and December 31, 2021, the allowance for expected credit losses on premiums receivable was $31.4 million, $34.3 million, and $34.2 million, respectively, on gross premiums receivable of $561.1 million, $593.4 million, and $530.7 million, respectively. The decrease in the allowance of $2.9 million and $2.8 million during the three and nine months ended September 30, 2022, respectively, was driven primarily by an improvement in the age of premiums due to be collected and a decline in the gross receivable balance.

At September 30, 2021, June 30, 2021, and December 31, 2020, the allowance for expected credit losses on premiums receivable was $32.6 million, $31.0 million, and $38.8 million, respectively, on gross premiums receivable of $575.8 million, $576.3 million, and $525.8 million, respectively. The increase in the allowance of $1.6 million during the three months ended September 30, 2021 was driven primarily by increases in the age of premiums due to be collected. The decrease of $6.2 million during the nine months ended September 30, 2021, was driven primarily by improvements in the age of premiums due to be collected and improvements in unemployment levels.

Impairment Loss on Internal-Use Software

During the third quarter of 2021, we recognized an impairment loss of $12.1 million for previously capitalized internal-use software that we no longer plan to utilize. We determined that this internal-use software would no longer be developed in order to focus our efforts on the development of software that better supports our long-term strategic goals. The impairment loss reduced the carrying value of the internal-use software to zero and has been recorded within other expenses in the consolidated statement of income and is included within our Corporate segment.

Impairment Loss on Right-of-Use Asset

During the second quarter of 2021, we recognized an impairment loss of $13.9 million on the right-of-use (ROU) asset related to one of our operating leases for office space that we do not plan to continue using to support our general operations. The impairment loss was recorded as a result of a decrease in the fair value of the ROU asset compared to its carrying value. The fair value of the ROU asset was determined based on a discounted cash flow model utilizing estimated market rates for sub-lease rentals. The impairment loss is recorded within other expenses in the consolidated statement of income and is included within our Corporate segment.

Note 12 - Debt and Other - Continued

Reinsurance

In December 2020, we completed the first phase of a reinsurance transaction, pursuant to which Provident Life and Accident Insurance Company, The Paul Revere Life Insurance Company, and Unum Life Insurance Company of America, wholly-owned domestic insurance subsidiaries of Unum Group, and collectively referred to as "the ceding companies", each entered into separate reinsurance agreements with Commonwealth, to reinsure on a coinsurance basis effective as of July 1, 2020, approximately 75 percent of the Closed Block individual disability business, primarily direct business written by the ceding companies. On March 31, 2021, we completed the second phase of the reinsurance transaction, pursuant to which the ceding companies and Commonwealth amended and restated their respective reinsurance agreements to reinsure on a coinsurance and modified coinsurance basis effective as of January 1, 2021, a substantial portion of the remaining Closed Block individual disability business that was not ceded in December 2020, primarily business previously assumed by the ceding companies. Commonwealth established and will maintain collateralized trust accounts for the benefit of the ceding companies to secure its obligations under the reinsurance agreements.

In December 2020, Provident Life and Casualty Insurance Company (PLC), also a wholly-owned domestic insurance subsidiary of Unum Group, entered into an agreement with Commonwealth whereby PLC will provide a 12-year volatility cover to Commonwealth for the active life cohort (ALR cohort). On March 31, 2021, PLC and Commonwealth amended and restated this agreement to incorporate the ALR cohort related to the additional business that was reinsured between the ceding companies and Commonwealth as part of the second phase of the transaction. As part of the amended and restated volatility cover, PLC received a payment from Commonwealth of approximately $18 million. At the end of the 12-year coverage period, Commonwealth will retain the remaining incidence and claims risk on the ALR cohort of the ceded business.

In connection with the second phase of the reinsurance transaction, Commonwealth paid a total ceding commission to the ceding companies of $18.2 million. The ceding companies transferred assets of $767.0 million, which consisted primarily of cash and fixed maturity securities. In addition, we recognized the following in the first quarter of 2021 related to the second phase:

- Net realized investment gains totaling $67.6 million related to the transfer of investments.
- Increase in benefits and change in reserves for future benefits of $133.1 million resulting from the realization of previously unrealized investment gains and losses recorded in accumulated other comprehensive income (loss).
- Transaction costs totaling $6.2 million.
- Reinsurance recoverable of $990.0 million related to the policies on claim status.
- Payable of $307.2 million related to the portfolio of invested assets associated with the business ceded on a modified coinsurance basis.
- Cost of reinsurance, or prepaid reinsurance premium, of $43.1 million related to the DLR cohort. The total cost of reinsurance recognized on a combined basis for the first and second phases was $854.8 million for which we amortized $15.2 million and $48.5 million during the three and nine months ended September 30, 2022, respectively, and $19.7 million and $59.4 million during the three and nine month periods ended September 30, 2021, respectively.
- Deposit asset of $5.0 million related to the ALR cohort. The total deposit asset recognized on a combined basis for the first and second phases was $91.8 million.

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 (Paul Revere), Colonial Life & Accident Insurance Company (Colonial Life), 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. As a leading provider of employee benefits, we offer a broad portfolio of products and services through the workplace.

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 a stronger workforce 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 services and products. 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 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, 2021.

Operating Performance and Capital Management

For the third quarter of 2022, we reported net income of $410.7 million, or $2.04 per diluted common share, compared to net income of $328.6 million, or $1.60 per diluted common share, in the third quarter of 2021. For the first nine months of 2022, we reported net income of $1,034.6 million, or $5.11 per diluted common share, compared to net income of $664.5 million, or $3.24 per diluted common share in the same period of 2021.

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

- A net investment loss on the Company's investment portfolio of $4.4 million before tax and $3.4 million after tax, or $0.02 per diluted common share;
- Amortization of the cost of reinsurance of $15.2 million before tax and $12.1 million after tax, or $0.06 per diluted common share; and,
- A reserve decrease related to assumption updates of $155.0 million before tax and $122.5 million after tax, or $0.61 per diluted common share.

Included in our results for the first nine months of 2022 are:

- A net investment loss of $22.3 million before tax and $17.1 million after tax, or $0.09 per diluted common share;
- Amortization of the cost of reinsurance of $48.5 million before tax and $38.4 million after tax, or $0.19 per diluted common share; and,
- A reserve decrease related to assumption updates of $155.0 million before tax and $122.5 million after tax, or $0.61 per diluted common share.

Included in our results for the third quarter of 2021 are:

- A net investment loss of $0.1 million before tax and $0.1 million after tax, or a de minimis impact on earnings per diluted common share;
- Amortization of the cost of reinsurance of $19.7 million before tax and $15.5 million after tax or $0.08 per diluted common share;
- A net reserve decrease related to assumption updates of $181.4 million before tax and $143.3 million after tax, or $0.70 per diluted common share; and,
- An impairment loss on internal-use software of $12.1 million before tax and $9.6 million after tax, or $0.05 per diluted common share.

Included in our results for the first nine months of 2021 are:

- A net investment gain, excluding the net realized investment gain related to the Closed Block individual disability reinsurance transaction, of $17.8 million before tax and $14.0 million after tax, or $0.07 per diluted common share;
- Amortization of the cost of reinsurance of $59.4 million before tax and $46.8 million after tax, or $0.24 per diluted common share;
- A net reserve decrease related to assumption updates of $181.4 million before tax and $143.3 million after tax, or $0.70 per diluted common share;
- An impairment loss on internal-use software of $12.1 million before tax and $9.6 million after tax, or $0.05 per diluted common share;
- Cost related to the early retirement of debt of $67.3 million before tax and $53.2 million after tax, or $0.26 per diluted common share;
- An impairment loss on the right-of-use (ROU) asset of $13.9 million before tax and $11.0 million after tax, or $0.05 per diluted common share;
- Tax expense related to a U.K. tax rate increase of $24.2 million, or $0.12 per diluted common share; and,
- The impact from the second phase of the Closed Block individual disability reinsurance transaction that closed in the first quarter of 2021, which resulted in a net loss of $71.7 million before tax and $56.7 million after tax, or $0.27 per diluted common share.

Excluding these items, after-tax adjusted operating income for the third quarter of 2022 was $303.7 million, or $1.51 per diluted common share compared to $210.5 million, or $1.03 per diluted common share, for the same period of 2021. After-tax adjusted operating income was $967.6 million, or $4.78 per diluted common share, in the first nine months of 2022, compared to $708.7 million, or $3.46 per diluted common share, in the first nine months of 2021. See "Reconciliation of Non-GAAP and Other Financial Measures" contained herein in this Item 2 for a reconciliation of these items.

Our Unum US segment reported income before income tax and net investment gains and losses of $430.0 million and $897.0 million in the third quarter and first nine months of 2022, respectively, compared to $303.5 million and $598.5 million in the third quarter and first nine months of 2021, respectively, which includes the reserve decreases related to the assumption updates during the third quarter of 2022 and 2021. Excluding these items, our Unum US segment reported adjusted operating income of $275.0 million and $742.0 million in the third quarter and first nine months of 2022, respectively, compared to $88.5 million and $383.5 million in the third quarter and first nine months of 2021, respectively. The increase in adjusted operating income in the third quarter and first nine months of 2022 compared to the same periods of 2021 is primarily due to favorable benefits experience in our group product lines, and an increase in premium income, partially offset by higher operating expenses and lower net investment income. The benefit ratio, excluding the reserve decreases in the third quarters of 2022 and 2021, for our Unum US segment was 63.4 percent and 65.6 percent in the third quarter and first nine months of 2022, respectively, compared to 77.6 percent and 74.5 percent in third quarter and first nine months of 2021, respectively. Unum US sales increased 11.0 percent and 14.9 percent in the third quarter and first nine months of 2022, respectively, compared to the same periods of 2021. See "2022 Reserve Assumption Updates" and "2021 Reserve Assumption Updates" contained herein for further discussion.

Our Unum International segment reported adjusted operating income, as measured in U.S. dollars, of $29.9 million and $82.0 million and in the third quarter and first nine months of 2022, respectively, compared to $27.4 million and $78.6 million in the third quarter and first nine months of 2021, respectively. As measured in local currency, our Unum UK line of business reported adjusted operating income of £23.6 million and £62.1 million in the third quarter and first nine months of 2022, respectively, compared to £18.4 million and £53.8 million in the third quarter and first nine months of 2021, respectively. As measured in local currency, the increase in adjusted operating income in the third quarter and first nine months of 2022 compared to the same periods of 2021 is primarily due to higher net investment income and premium income, partially offset by higher operating expenses. The benefit ratio for our Unum UK line of business was 78.6 percent and 82.9 percent in the third quarter and first nine months of 2022, respectively, compared to 79.2 percent and 79.1 percent in the same periods of 2021. Unum International sales, as measured in U.S. dollars, increased 66.4 percent and 36.9 percent in the third quarter and first nine months of 2022, respectively, compared to the same periods of 2021. Unum UK sales, as measured in local currency increased 106.0 percent and 55.6 percent in the third quarter and first nine months of 2022, respectively, relative to the same periods of 2021.

Our Colonial Life segment reported adjusted operating income of $90.4 million and $281.6 million in the third quarter and first nine months of 2022, respectively, compared to $80.1 million and $249.2 million in the third quarter and first nine months of 2021, respectively. The increase in adjusted operating income in the third quarter and first nine months of 2022 compared to the same periods of 2021 is primarily due to favorable benefits experience and premium income, partially offset by higher operating expenses and lower net investment income. The benefit ratio for Colonial Life was 46.8 percent and 47.9 percent in the third quarter and first nine months of 2022, respectively, compared to 55.9 percent and 54.3 percent in the same periods of 2021. Colonial Life sales increased 3.2 percent and 7.8 percent in the third quarter and first nine months of 2022, respectively, compared to the same periods of 2021.

Our Closed Block segment reported income before income tax and net investment gains and losses of $18.9 million and $159.0 million in the third quarter and first nine months of 2022, respectively, which includes the amortization of the cost of reinsurance related to the Closed Block individual disability reinsurance transaction, compared to income before income tax and net investment gains and losses of $56.5 million and $85.7 million in the same periods of 2021, which includes the reserve increases related to the assumption updates during the third quarter of 2021, impacts related to the second phase of the Closed Block individual disability reinsurance transaction during the first quarter of 2021, and the amortization of the cost of reinsurance. Excluding these items, our Closed Block segment reported adjusted operating income of $34.1 million and $207.5 million in the third quarter and first nine months of 2022, respectively, compared to $109.8 million and $318.0 million in the same periods of 2021. The long-term care interest adjusted loss ratio was less favorable in the third quarter and first nine months of 2022 relative to the same periods of 2021, which excludes the reserve increase related to the assumption update in the third quarter of 2021. The interest adjusted loss ratio for individual disability was less favorable during the third quarter and first nine months of 2022 relative to the same periods of 2021, which excludes the reserve increase related to the assumption update in the third quarter of 2021 and the reserve recognition impact from the reinsurance transaction during the first quarter of 2021. See "Closed Block Individual Disability Reinsurance Transaction" contained herein for further discussion.

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 September 30, 2022, 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 $3.6 billion at September 30, 2022, compared to a $5.9 billion net unrealized gain as of December 31, 2021, with the decrease due primarily to an increase in U.S. Treasury rates and credit spreads. The earned book yield on our investment portfolio was 4.59 percent for the first nine months of 2022 compared to a yield of 4.85 percent for full year 2021.

We believe our capital and financial positions are strong. At September 30, 2022, 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 415 percent. During the first nine months of 2022, we repurchased 4.2 million shares of Unum Group common stock under our share repurchase program, at a cost of approximately $138 million. Our weighted average common shares outstanding, assuming dilution, equaled 201.7 million and 205.1 million for the third quarters of 2022 and 2021, respectively, and 202.5 million and 205.1 million for the first nine months of 2022 and 2021, respectively. As of September 30, 2022, Unum Group and our intermediate holding companies had available holding company liquidity of $1,079 million that was held primarily in bank deposits, commercial paper, money market funds, corporate bonds, municipal bonds and asset backed securities. See Note 10 of the "Notes to Consolidated Financial Statements" contained herein in Item 1.

Coronavirus Disease 2019 (COVID-19)

COVID-19 continues to cause disruption to the global economy and has unfavorably impacted our company as well as the overall insurance industry. During the first nine months of 2022, we have experienced lower mortality in our life products lines, resulting primarily from lessening impacts of COVID-19 on our insured population compared to the same period of 2021. 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.

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. It 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 as early as 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. We continue to monitor the ongoing guidance issued by the United States Treasury. 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 would be recorded as part of the cost basis of treasury stock. We have not recorded any tax impact from the enactment of the IRA as of September 30, 2022.

2022 Reserve Assumption Updates

During the third quarter of 2022, we completed our annual review of policy and claim reserve adequacy, which incorporated our most recent experience and included a review of all material assumptions. Based on our analysis, during the third quarter of 2022, we updated our reserve assumptions to reflect our current estimate of future benefit obligations and determined that our claim reserves in our Unum US group long-term disability product line and our waiver of premium reserves for our Unum US group life product line should be reduced by $121.0 million and $34.0 million before tax, or $95.6 million and $26.9 million after tax, 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.

We also increased our claim reserves for the reinsured portion of our Closed Block individual disability product line by $193.9 million before tax, or $153.2 million after tax, resulting primarily from updates to mortality assumptions for the advanced age portion of our claimant population. This increase is entirely related to the block that was ceded as a part of the Closed Block individual disability reinsurance transaction with Commonwealth Annuity and Life Insurance Company (Commonwealth) and as a result, a corresponding increase was reported in our consolidated balance sheet as a reinsurance recoverable, however there was no net impact on our consolidated results of operations for the period. The amortization of the cost of reinsurance related to the Closed Block individual disability reinsurance transaction is based upon expected claim reserve patterns and as such there was a resulting change in the timing of the amortization of the cost of reinsurance.

2021 Reserve Assumption Updates

During the third quarter of 2021, we completed our annual review of policy and claim reserve adequacy, which incorporated our most recent experience and included a review of all material assumptions. Based on our analysis, during the third quarter of 2021, we updated our reserve assumptions to reflect our current estimate of future benefit obligations and determined that our claim reserves should be reduced by $215.0 million before tax, or $169.9 million after tax, in our Unum US group long-term disability product line due primarily to sustained improvement in claim recovery trends since our last assumption update. We also increased our claim reserves for our Closed Block long-term care and individual disability product lines by $2.1 million and $6.4 million before tax, or $1.7 million and $5.1 million after tax, respectively. We determined that our policy reserves should be increased by $25.1 million before tax, or $19.8 million after tax, in our Closed Block group pension product line to reflect updated discount rate assumptions.

Impairment Loss on Internal-Use Software

During the third quarter of 2021, we recognized an impairment loss of $12.1 million before tax, or $9.6 million after tax, for previously capitalized internal-use software that we no longer plan to utilize. We determined that this internal-use software would no longer be developed in order to focus our efforts on the development of software that better supports our long-term

strategic goals. For further information related to the impairment loss on internal-use software, see Note 12 of the "Notes to Consolidated Financial Statements" contained in Item 1.

Impairment Loss on ROU Asset

During the second quarter of 2021, we recognized an impairment loss of $13.9 million, or $11.0 million after tax, on the ROU asset related to one of our operating leases for office space that we do not plan to continue using to support our general operations. The impairment loss was recorded as a result of a decrease in the fair value of the ROU asset compared to its carrying value. For further information related to the impairment loss on the ROU asset, see Note 12 of the "Notes to Consolidated Financial Statements" contained in Item 1.

Closed Block Individual Disability Reinsurance Transaction

In December 2020, we completed the first phase of a reinsurance transaction, pursuant to which Provident, Paul Revere, and Unum America, wholly-owned domestic insurance subsidiaries of Unum Group, and collectively referred to as "the ceding companies", each entered into separate reinsurance agreements with Commonwealth, to reinsure on a coinsurance basis effective as of July 1, 2020, approximately 75 percent of the Closed Block individual disability business, primarily direct business written by the ceding companies. In March 2021, we completed the second phase of the reinsurance transaction, pursuant to which the ceding companies and Commonwealth amended and restated their respective reinsurance agreements to reinsure on a coinsurance and modified coinsurance basis effective as of January 1, 2021, a substantial portion of the remaining Closed Block individual disability business that was not ceded in December 2020, primarily business previously assumed by the ceding companies. Commonwealth established and will maintain collateralized trust accounts for the benefit of the ceding companies to secure its obligations under the reinsurance agreements.

In December 2020, Provident Life and Casualty Insurance Company (PLC), also a wholly-owned domestic insurance subsidiary of Unum Group, entered into an agreement with Commonwealth whereby PLC will provide a 12-year volatility cover to Commonwealth for the active life cohort (ALR cohort). As part of this agreement, PLC received a payment from Commonwealth of $62.1 million. On March 31, 2021, PLC and Commonwealth amended and restated this agreement to incorporate the ALR cohort related to the additional business that was reinsured between the ceding companies and Commonwealth as part of the second phase of the transaction. As part of the amended and restated volatility cover, PLC received a payment from Commonwealth of $17.9 million. At the end of the 12-year coverage period, Commonwealth will retain the remaining incidence and claims risk on the ALR cohort of the ceded business.

In connection with the second phase of the reinsurance transaction which occurred in March 2021, Commonwealth paid a ceding commission to the ceding companies of $18.2 million. The ceding companies transferred assets of $767.0 million, which consisted primarily of cash and fixed maturity securities. In addition, we recognized the following in the first quarter of 2021 related to the second phase:

- Net realized investment gains totaling $67.6 million, or $53.4 million after tax, related to the transfer of investments.
- Increase in benefits and change in reserves for future benefits of $133.1 million, or $105.1 million after tax, resulting from the realization of previously unrealized investment gains and losses recorded in accumulated other comprehensive income (loss).
- Transaction costs totaling $6.2 million, or $5.0 million after tax.
- Reinsurance recoverable of $990.0 million related to the policies on claim status (DLR cohort).
- Payable of $307.2 million related to the portfolio of invested assets associated with the business ceded on a modified coinsurance basis.
- Cost of reinsurance, or prepaid reinsurance premium, of $43.1 million related to the DLR cohort. The total cost of reinsurance recognized on a combined basis for the first and second phases was $854.8 million for which we amortized $15.2 million and $48.5 million, or $12.1 million after tax and $38.4 million after tax, during the three and nine month periods ended September 30, 2022, respectively, compared to $19.7 million and $59.4 million, or $15.5 million after tax and $46.8 million after tax, during the three and nine month periods ended September 30, 2021, respectively.
- Deposit asset of $5.0 million related to the ALR cohort. The total deposit asset recognized on a combined basis for the first and second phases was $91.8 million.

We released approximately $200 million of capital during the first quarter of 2021. See Note 12 of the "Notes to Consolidated Financial Statements" contained herein in Item 1 for further discussion on the impacts related to this reinsurance transaction.

U.K. Referendum

On January 31, 2020, an official bill was passed formalizing the withdrawal of the U.K. from the European Union (EU). A deal was reached on December 24, 2020 on the future trading relationship with the EU, which focused primarily on the trading of goods rather than the U.K.'s service sector. A memorandum of understanding on regulatory cooperation was signed by the U.K. and EU in March 2021, but no agreement on the equivalence of the regulatory regimes has yet been reached. The U.K. government is now reviewing the regulatory framework of financial services companies which may result in changes to U.K. regulatory capital or U.K. tax regulations. We do not expect that the underlying operations of our U.K. business, nor the Polish business which is in the EU, will be significantly impacted by the withdrawal, but it is possible that we may experience some short-term volatility in financial markets, which could impact the fair value of investments, our solvency ratios, or the British pound sterling to dollar exchange rate.

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, which resulted in $24.2 million of additional tax expense in operating earnings for the revaluation of our deferred tax assets and liabilities in the second quarter of 2021. The U.K. tax rate increase may cause volatility in our effective tax rate prior to the April 1, 2023 effective date as a result of changes in the deferred tax balance related to our Unum UK business.

Consolidated Company Outlook

We believe our strategy of providing financial protection products at the workplace puts us in a position of strength. The products and services we provide have never been more important to employers, employees and their families, especially given the COVID-19 pandemic. 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.

Our near-term results will be influenced by COVID trends, specifically the mortality rate in our insured population and the rate and severity of infections. As the pandemic impacts have lessened in the first nine months of 2022, we have experienced recovery in our core business earnings from the underlying strength of our business. We expect positive operating trends in our core businesses during 2022 in comparison to the prior year, with solid premium growth and improved claim experience.

The 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. We also may continue to experience further volatility in miscellaneous investment income primarily related to bond calls and changes in partnership net asset values.

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 capital, 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," "Consolidated Operating Results," "Segment Results," "Investments," and "Liquidity and Capital Resources" contained herein in this Item 2 and in the "Notes to Consolidated Financial Statements" contained herein in Item 1.

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 and the amortization of the cost of reinsurance as well as certain other items 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.

As previously discussed, 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 was recognized upon the exit of the business related to the DLR cohort of policies. We believe that the exclusion of the amortization of the cost of reinsurance 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. See "Executive Summary" contained herein in Item 2 and Notes 7 and 12 of the "Notes to Consolidated Financial Statements" contained herein in Item 1 for further discussion regarding the items specified in the reconciliations below.

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

	Three Months Ended September 30			
	2022		2021	
	(in millions)	per share *	(in millions)	per share *
Net Income	$ 410.7	$ 2.04	$ 328.6	$ 1.60
Excluding:				
Net Investment Loss (net of tax benefit of $1.0; $—)	(3.4)	(0.02)	(0.1)	—
Amortization of the Cost of Reinsurance (net of tax benefit of $3.1; $4.2)	(12.1)	(0.06)	(15.5)	(0.08)
Net Reserve Decrease Related to Reserve Assumption Updates (net of tax expense of $32.5; $38.1)	122.5	0.61	143.3	0.70
Impairment Loss on Internal-Use Software (net of tax benefit of $—; $2.5)	—	—	(9.6)	(0.05)
After-tax Adjusted Operating Income	$ 303.7	$ 1.51	$ 210.5	$ 1.03

* Assuming Dilution

	Nine Months Ended September 30			
	2022		2021	
	(in millions)	per share *	(in millions)	per share *
Net Income	$ 1,034.6	$ 5.11	$ 664.5	$ 3.24
Excluding:				
Net Investment Gains and Losses				
Net Realized Investment Gain Related to Reinsurance Transaction (net of tax expense of $—; $14.2)	—	—	53.4	0.26
Net Investment Gain (Loss), Other (net of tax expense (benefit) of $(5.2); $3.8)	(17.1)	(0.09)	14.0	0.07
Total Net Investment Gain (Loss)	(17.1)	(0.09)	67.4	0.33
Items Related to Closed Block Individual Disability Reinsurance Transaction				
Change in Benefit Reserves and Transaction Costs (net of tax benefit of $—; $29.2)	—	—	(110.1)	(0.53)
Amortization of the Cost of Reinsurance (net of tax benefit of $10.1; $12.6)	(38.4)	(0.19)	(46.8)	(0.24)
Total Items Related to Closed Block Individual Disability Reinsurance Transaction	(38.4)	(0.19)	(156.9)	(0.77)
Net Reserve Decrease Related to Reserve Assumption Updates (net of tax expense of $32.5; $38.1)	122.5	0.61	143.3	0.70
Impairment Loss on Internal-Use Software (net of tax benefit of $—; $2.5)	—	—	(9.6)	(0.05)
Cost Related to Early Retirement of Debt (net of tax benefit of $—; $14.1)	—	—	(53.2)	(0.26)
Impairment Loss on ROU Asset (net of tax benefit of $—; $2.9)	—	—	(11.0)	(0.05)
Impact of U.K. Tax Rate Increase	—	—	(24.2)	(0.12)
After-tax Adjusted Operating Income	$ 967.6	$ 4.78	$ 708.7	$ 3.46

* 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 and the amortization of the cost of reinsurance as well as other items 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 September 30		Nine Months Ended September 30	
	2022	2021	2022	2021
	(in millions of dollars)			
Total Revenue	$ 2,961.9	$ 2,969.7	$ 8,985.3	$ 9,034.7
Excluding:				
Net Investment Gain (Loss)	(4.4)	(0.1)	(22.3)	85.4
Adjusted Operating Revenue	$ 2,966.3	$ 2,969.8	$ 9,007.6	$ 8,949.3
Income Before Income Tax	$ 515.3	$ 409.9	$ 1,270.5	$ 871.3
Excluding:				
Net Investment Gains and Losses				
Net Realized Investment Gain Related to Reinsurance Transaction	—	—	—	67.6
Net Investment Gain (Loss), Other	(4.4)	(0.1)	(22.3)	17.8
Total Net Investment Gain (Loss)	(4.4)	(0.1)	(22.3)	85.4
Items Related to Closed Block Individual Disability Reinsurance Transaction				
Change in Benefit Reserves and Transaction Costs	—	—	—	(139.3)
Amortization of the Cost of Reinsurance	(15.2)	(19.7)	(48.5)	(59.4)
Total Items Related to Closed Block Individual Disability Reinsurance Transaction	(15.2)	(19.7)	(48.5)	(198.7)
Net Reserve Decrease Related to Reserve Assumption Updates	155.0	181.4	155.0	181.4
Impairment Loss on Internal-Use Software	—	(12.1)	—	(12.1)
Cost Related to Early Retirement of Debt	—	—	—	(67.3)
Impairment Loss on ROU Asset	—	—	—	(13.9)
Adjusted Operating Income	$ 379.9	$ 260.4	$ 1,186.3	$ 896.5

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 reserves for policy and contract benefits, deferred acquisition costs, valuation of investments, pension and postretirement benefit plans, income taxes, and contingent liabilities. There have been no significant changes in our critical accounting estimates during the nine months ended September 30, 2022.

For additional information, refer to our significant accounting policies in Note 1 of the "Notes to Consolidated Financial Statements" in Part II, Item 8 and "Critical Accounting Estimates" in Part II, Item 7 of our annual report on Form 10-K for the year ended December 31, 2021.

Accounting Developments

In 2018, the Financial Accounting Standards Board issued Accounting Standard Update 2018-12, “Targeted Improvements to the Accounting for Long-Duration Contracts”. This update significantly amends the accounting and disclosure requirements for long-duration insurance contracts. These changes include 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, we will be 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 result in the elimination of the provision for risk of adverse deviation and premium deficiency (or loss recognition) testing. We will adopt this guidance effective January 1, 2023 using the modified retrospective approach with changes applied as of the beginning of the earliest period presented or January 1, 2021, also referred to as the transition date.

We are continuing our implementation efforts and are evaluating the effects of complying with this update. We expect that the most significant impact at the transition date will be the requirement to update the discount rate assumption to reflect an upper-medium grade fixed-income instrument, which will be generally equivalent to a single-A interest rate matched to the duration of our insurance liabilities and will result in a decrease to accumulated other comprehensive income (loss) (AOCI) within our total stockholders’ equity balance of approximately $6.5 billion to $7 billion as of January 1, 2021. In order to illustrate the sensitivity of this adjustment, if we had used interest rates as of September 30, 2022, the transition adjustment would have been a decrease to AOCI and total stockholders' equity of approximately $0.5 billion to $1 billion. The decrease in AOCI is driven primarily by the difference between the discount rate currently applied, which is based on an expected investment yield from our current investment strategy, and the single-A discount rate that will be required for our longest duration products. Our investment strategy reflects the illiquid nature of the majority of our liability cash flows and results in yields in the investment portfolios supporting the cash outflows required for these products that are generally higher than a single-A yield. In addition, the discount rate applied to reserves for our longest duration products such as long-term care, includes an assumption for long-term yields rising to more historical levels. After the transition date, we will be required to update the discount rate each subsequent reporting period with changes recorded in OCI and expect that this could have a material impact on OCI.

We expect that the recast of our net income for 2021 will result in a net favorable impact due primarily to the following changes:

- Updating the lifetime cohort net premium ratios (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. We expect this to result in an unfavorable impact to income for 2021. Our Unum US supplemental and voluntary, Colonial Life, and certain of our Closed Block product lines were most affected by this change due to generally favorable benefits experience observed during 2021.

- 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. We expect this to result in a net favorable impact to income for 2021. Our Unum US and Colonial Life product lines were most affected by this change with an overall increased amortization period.

- 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. We expect this to result in a favorable impact to income for 2021. Our Unum US supplemental and voluntary and Colonial Life product lines were most affected by this change.

- 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. We expect this to result in an unfavorable impact to income for 2021. Certain of our Unum US and Closed Block product lines were most affected by this change.

- Updating cash flow assumptions. We expect this to result in a favorable impact to income for 2021. Certain of our Unum US, Colonial Life, and Closed Block product lines were most affected by this change.

- Applying non-contemporaneous reinsurance accounting to the second phase of our Closed Block individual disability reinsurance transaction which was completed in the first quarter of 2021. The primary impacts of this change are:

    - Reversing the increase in benefits and change in reserves for future benefits resulting from the realization of previously unrealized investment gains and losses previously recorded in AOCI that will be removed as of the transition date which will have a favorable impact on income for 2021.

    - Remeasuring the ceded reserves as a separate cohort of reserves at interest rates prescribed by the update and the resulting change to the cost of reinsurance. We expect the differential in the discount rate applied to the direct and ceded cohorts of business will result in an unfavorable impact to income for 2021 partially offset by a decrease in the amortization of the cost of reinsurance as a result of a lower cost of reinsurance.

We expect that all of the above changes will continue to impact our earnings in periods subsequent to 2021 to varying degrees and over varying time periods with the exception of the one-time impact related to not recognizing the increase in benefits and change in reserves for future benefits resulting from the realization of previously unrealized investment gains and losses previously recorded in AOCI related to the second phase of our Closed Block individual disability reinsurance transaction.

This update will also significantly expand our disclosures. We do not have products with market risk benefits.

Although this update will significantly impact our GAAP-based financial position and results of operations, the update will not impact cash flows, statutory-based financial position or results of operations, or our view of our businesses.

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

Consolidated Operating Results

(in millions of dollars)

	Three Months Ended September 30			Nine Months Ended September 30		
	2022	% Change	2021	2022	% Change	2021
Revenue						
Premium Income	$ 2,391.7	1.6 %	$ 2,353.7	$ 7,212.3	1.5 %	$ 7,106.4
Net Investment Income	511.6	(7.0)	550.2	1,597.8	(3.9)	1,662.4
Net Investment Gain (Loss)	(4.4)	N.M.	(0.1)	(22.3)	N.M.	85.4
Other Income	63.0	(4.4)	65.9	197.5	9.4	180.5
Total Revenue	2,961.9	(0.3)	2,969.7	8,985.3	(0.5)	9,034.7
Benefits and Expenses						
Benefits and Change in Reserves for Future Benefits	1,579.3	(10.0)	1,753.9	5,181.3	(8.4)	5,659.2
Commissions	271.5	5.1	258.3	819.1	5.3	777.9
Interest and Debt Expense	47.0	5.1	44.7	141.3	5.1	134.4
Cost Related to Early Retirement of Debt	4.2	N.M.	—	4.2	(93.8)	67.3
Deferral of Acquisition Costs	(139.4)	8.4	(128.6)	(419.1)	7.8	(388.9)
Amortization of Deferred Acquisition Costs	150.8	9.0	138.4	449.5	2.0	440.8
Compensation Expense	285.9	18.3	241.6	794.1	9.4	725.9
Other Expenses	247.3	(1.7)	251.5	744.4	(0.3)	746.8
Total Benefits and Expenses	2,446.6	(4.4)	2,559.8	7,714.8	(5.5)	8,163.4
Income Before Income Tax	515.3	25.7	409.9	1,270.5	45.8	871.3
Income Tax Expense	104.6	28.7	81.3	235.9	14.1	206.8
Net Income	$ 410.7	25.0	$ 328.6	$ 1,034.6	55.7	$ 664.5

N.M. = not a meaningful percentage

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 1.169 and 1.380 for the three months ended September 30, 2022 and 2021, and 1.246 and 1.385 for the nine months ended September 30, 2022 and 2021, respectively. If the 2021 results for our U.K. operations had been translated at the exchange rates of 2022, our adjusted operating revenue and adjusted operating income by segment would have been lower by approximately $29 million and $4 million, respectively, in the third quarter of 2021 and lower by approximately $57 million and $8 million, respectively, in the first nine months of 2021. 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 for our principal operating business segments in the third quarter and first nine months of 2022 increased compared to the same periods of 2021, primarily due to in-force block growth and higher overall sales. Premium income continues to decline, as expected, in our Closed Block segment.

Net investment income decreased in the third quarter and first nine months of 2022 compared to the same periods of 2021 primarily due to lower miscellaneous investment income, partially offset by a higher level of invested assets and higher investment income from inflation index-linked bonds held by Unum UK. Also impacting the comparison for the first nine months of 2022 is a decline in the yield on invested assets.

Credit losses on fixed maturity securities were $0.5 million during the third quarter of 2022 and we did not recognize any credit losses on fixed maturity securities during the third quarter of 2021. Credit losses on fixed maturity securities during the first nine months of 2022 and 2021 were $4.6 million and $9.3 million, respectively. 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 investment gains (losses) of $14.9 million and $2.6 million in the third quarters of 2022 and 2021, respectively, and $10.7 million and $21.2 million in first nine months of 2022 and 2021, respectively. The changes in the embedded derivative are primarily driven by movements in credit spreads in the overall investment market. Also included in the net investment gains and losses for the first nine months of 2021 is a net realized investment gain of $67.6 million related to the transfer of investments in the second phase of the Closed Block individual disability reinsurance transaction. 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 individual disability reinsured business in the Closed Block segment.

Overall benefits experience was favorable in the third quarter and first nine months of 2022 relative to the same periods of 2021. Overall benefits experience includes the impact of the reserve assumption updates in our Unum US group disability and Unum US group life product lines in the third quarter and first nine months of 2022 and in our Unum US group disability product line and Closed Block segment in the third quarter and first nine months of 2021. Also included in the overall benefits experience for the first nine months of 2021 is the reserve recognition impact from the second phase of the Closed Block individual disability reinsurance transaction that occurred during the first quarter of 2021. The benefits experience 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 third quarter and first nine months of 2022 compared to the same periods of 2021 driven primarily by in-force block growth and higher sales in our Colonial Life and Unum US segments. The increase in amortization of deferred acquisition costs in the third quarter of 2022 compared to the same period of 2021 is due primarily to a higher level of policy terminations in our Colonial Life segment and our Unum US voluntary benefits product line. The increase in the amortization of deferred acquisition costs in the first nine months of 2022 compared to the same period of 2021 is due to a higher level of policy terminations for our Colonial Life segment, partially offset by a lower level of policy terminations in the Unum US voluntary benefits product line.

Cost related to early retirement of debt for the third quarter and first nine months of 2022 includes costs associated with the redemption of $350.0 million aggregate principal amount of our 4.000% senior notes due 2024 and costs related to the retirement of $14.0 million aggregate liquidation amount of the 7.405% capital securities due 2038 issued by Provident Financing Trust I (the Trust), which resulted in the reduction of a corresponding principal amount of our 7.405% junior subordinated debt securities due 2038 then held by the Trust. Cost related to early retirement of debt for the first nine months of 2021 includes costs associated with the redemption of $500.0 million aggregate principal amount of our 4.500% senior notes due 2025. See Note 12 of the "Notes to Consolidated Financial Statements" contained herein in Item 1 for further information.

Other expenses and compensation expense, on a combined basis, increased in the third quarter and first nine months of 2022 compared to the same periods of 2021 due to an increase in employee-related costs, operational investments in the business, and growth in our fee-based service products. Also contributing to the increase for the first nine months of 2022 compared to the same period of 2021 is a larger decrease in the allowance for expected credit losses on premium receivable balances during the first nine months of 2021 compared to the same period of 2022. Partially offsetting the increase in expenses for the first nine months of 2022 compared to the same period of 2021 are costs related to the second phase of the Closed Block individual disability reinsurance transaction that occurred in the first quarter of 2021 as well as a reduction in the amortization of the cost of reinsurance in the third quarter and first nine months of 2022.

Our effective income tax rates for the third quarter and first nine months of 2022 were 20.3 percent and 18.6 percent of income before income tax, respectively, compared to 19.8 percent and 23.7 percent for the same prior year periods. Our effective income tax rates differed from the U.S. statutory rate of 21 percent in effect for the third quarter and first nine months of 2022 primarily due to the foreign tax rate differential and partially offset by global intangible low-taxed income tax. Our effective income tax rates differed from the U.S. statutory rate of 21 percent in effect for the third quarter and first nine months of 2021 primarily due to unfavorable global intangible low-taxed income tax and favorable adjustments to our prior year tax return. Also impacting the difference between the effective tax rate and the U.S. statutory rate in effect for the first nine months of 2021 was the unfavorable impact of the U.K. tax rate increase. See note 12 of the "Notes to Consolidated Financial Statements" contained herein in Item 1 for further information.

Consolidated Sales Results

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

(in millions)

	Three Months Ended September 30			Nine Months Ended September 30		
	2022	% Change	2021	2022	% Change	2021
Unum US	$ 157.5	11.0 %	$ 141.9	$ 645.4	14.9 %	$ 561.9
Unum International	$ 40.1	66.4 %	$ 24.1	$ 110.1	36.9 %	$ 80.4
Colonial Life	$ 115.9	3.2 %	$ 112.3	$ 338.1	7.8 %	$ 313.6

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.

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 September 30			Nine Months Ended September 30		
	2022	% Change	2021	2022	% Change	2021
Adjusted Operating Revenue						
Premium Income	$1,559.6	3.9 %	$1,500.8	$4,676.8	2.8 %	$4,548.7
Net Investment Income	170.6	(3.2)	176.2	509.4	(5.6)	539.5
Other Income	49.0	12.6	43.5	146.8	17.3	125.2
Total	1,779.2	3.4	1,720.5	5,333.0	2.3	5,213.4
Benefits and Expenses						
Benefits and Change in Reserves for Future Benefits	834.1	(12.2)	950.2	2,912.4	(8.3)	3,175.6
Commissions	151.3	5.4	143.5	458.6	4.5	439.0
Deferral of Acquisition Costs	(66.2)	8.3	(61.1)	(199.4)	3.1	(193.4)
Amortization of Deferred Acquisition Costs	75.3	5.9	71.1	228.0	(6.4)	243.7
Other Expenses	354.7	13.2	313.3	1,036.4	9.1	950.0
Total	1,349.2	(4.8)	1,417.0	4,436.0	(3.9)	4,614.9
Income Before Income Tax and Net Investment Gains and Losses	430.0	41.7	303.5	897.0	49.9	598.5
Reserve Assumption Updates	(155.0)	27.9	(215.0)	(155.0)	27.9	(215.0)
Adjusted Operating Income	$ 275.0	N.M.	$ 88.5	$ 742.0	93.5	$ 383.5
Operating Ratios (% of Premium Income):						
Benefit Ratio[1]	63.4 %		77.6 %	65.6 %		74.5 %
Other Expense Ratio	22.7 %		20.9 %	22.2 %		20.9 %
Adjusted Operating Income Ratio	17.6 %		5.9 %	15.9 %		8.4 %

[1]Excludes the $155.0 million and $215.0 million reserve decreases from the third quarters and first nine months of 2022 and 2021, respectively, related to the assumption updates that occurred during the third quarters of each year.

N.M. = not a meaningful percentage

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 September 30			Nine Months Ended September 30		
	2022	% Change	2021	2022	% Change	2021
Adjusted Operating Revenue						
Premium Income						
Group Long-term Disability	$ 480.9	6.5 %	$ 451.4	$1,419.2	3.8 %	$1,367.7
Group Short-term Disability	232.2	9.3	212.4	685.9	7.0	641.2
Total Premium Income	713.1	7.4	663.8	2,105.1	4.8	2,008.9
Net Investment Income	84.8	(9.1)	93.3	262.6	(7.8)	284.7
Other Income	48.4	15.0	42.1	143.5	18.2	121.4
Total	846.3	5.9	799.2	2,511.2	4.0	2,415.0
Benefits and Expenses						
Benefits and Change in Reserves for Future Benefits	326.0	5.6	308.6	1,301.3	(1.0)	1,314.3
Commissions	52.1	6.1	49.1	158.0	4.5	151.2
Deferral of Acquisition Costs	(12.9)	4.9	(12.3)	(38.1)	1.9	(37.4)
Amortization of Deferred Acquisition Costs	13.1	1.6	12.9	38.6	—	38.6
Other Expenses	217.2	16.5	186.4	630.5	10.7	569.8
Total	595.5	9.3	544.7	2,090.3	2.6	2,036.5
Income Before Income Tax and Net Investment Gains and Losses	250.8	(1.5)	254.5	420.9	11.2	378.5
Reserve Assumption Updates	(121.0)	43.7	(215.0)	(121.0)	43.7	(215.0)
Adjusted Operating Income	$ 129.8	N.M.	$ 39.5	$ 299.9	83.4	$ 163.5
Operating Ratios (% of Premium Income):						
Benefit Ratio[1]	62.7 %		78.9 %	67.6 %		76.1 %
Other Expense Ratio	30.5 %		28.1 %	30.0 %		28.4 %
Adjusted Operating Income Ratio	18.2 %		6.0 %	14.2 %		8.1 %
Persistency:						
Group Long-term Disability				90.7 %		89.8 %
Group Short-term Disability				89.2 %		87.1 %

[1]*Excludes the $121.0 million and $215.0 million reserve decreases from the third quarters and first nine months of 2022 and 2021, respectively, related to the assumption updates that occurred during the third quarters of each year.*

N.M. = not a meaningful percentage

Premium income was higher in the third quarter and first nine months of 2022 compared to the same periods of 2021 driven primarily by in-force block growth and favorable persistency. Net investment income was lower in the third quarter and first nine months of 2022 relative to the same periods of 2021 due primarily to lower miscellaneous investment income and a decrease in the yield on invested assets. Other income increased in the third quarter and first nine months of 2022 compared to the same periods of 2021 due primarily to continued growth in our fee-based service products.

Benefits experience, excluding the impacts of the reserve assumption updates, was favorable in the third quarter and first nine months of 2022 compared to the same periods of 2021 due primarily to favorable claim recoveries in our group long-term disability product line as well as lower claims incidence in both the group short-term and long-term disability product lines.

Commissions were higher in the third quarter and first nine months of 2022 compared to the same periods of 2021 due primarily to in-force block growth and favorable persistency. The deferral of acquisition costs was higher in the third quarter and first nine months of 2022 compared to the same periods of 2021 due primarily to higher sales. The amortization of deferred acquisition costs was generally consistent in the third quarter and first nine months of 2022 with the same periods of 2021. Our other expense ratio increased in the third quarter and first nine months of 2022 compared to the same periods of 2021 due primarily to increases in employee-related costs, growth in our fee-based service products, and operational investments in our business.

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 September 30			Nine Months Ended September 30		
	2022	% Change	2021	2022	% Change	2021
Adjusted Operating Revenue						
Premium Income						
Group Life	$ 417.7	3.3 %	$ 404.2	$1,249.9	1.7 %	$1,228.8
Accidental Death & Dismemberment	43.8	10.6	39.6	129.7	5.4	123.0
Total Premium Income	461.5	4.0	443.8	1,379.6	2.1	1,351.8
Net Investment Income	25.3	4.1	24.3	75.1	(1.3)	76.1
Other Income	0.4	(20.0)	0.5	1.2	(7.7)	1.3
Total	487.2	4.0	468.6	1,455.9	1.9	1,429.2
Benefits and Expenses						
Benefits and Change in Reserves for Future Benefits	325.8	(27.0)	446.6	1,052.8	(17.8)	1,281.2
Commissions	38.8	6.6	36.4	113.7	4.2	109.1
Deferral of Acquisition Costs	(9.0)	1.1	(8.9)	(26.9)	(1.5)	(27.3)
Amortization of Deferred Acquisition Costs	8.3	(12.6)	9.5	24.8	(13.6)	28.7
Other Expenses	58.4	12.1	52.1	168.7	7.0	157.7
Total	422.3	(21.2)	535.7	1,333.1	(14.0)	1,549.4
Income (Loss) Before Income Tax and Net Investment Gains and Losses	64.9	196.7	(67.1)	122.8	N.M.	(120.2)
Reserve Assumption Update	(34.0)	N.M.	—	(34.0)	N.M.	—
Adjusted Operating Income (Loss)	$ 30.9	146.1	$ (67.1)	$ 88.8	173.9	$ (120.2)
Operating Ratios (% of Premium Income):						
Benefit Ratio[1]	78.0 %		100.6 %	78.8 %		94.8 %
Other Expense Ratio	12.7 %		11.7 %	12.2 %		11.7 %
Adjusted Operating Income (Loss) Ratio	6.7 %		(15.1)%	6.4 %		(8.9)%
Persistency:						
Group Life				89.2 %		89.9 %
Accidental Death & Dismemberment				88.1 %		89.3 %

[1]*Excludes the $34.0 million reserve decrease from the third quarter and first nine months of 2022 related to the assumption update that occurred during the third quarter of 2022.*

N.M. = not a meaningful percentage

Premium income was higher in the third quarter and first nine months of 2022 compared to the same periods of 2021 driven by in-force block growth, partially offset by lower persistency. Net investment income was higher in the third quarter of 2022 relative to the same period of 2021 due primarily to an increase in the yield on invested assets and an increase in the level of invested assets, partially offset by lower miscellaneous investment income. Net investment income was lower in the first nine months of 2022 relative to the same period of 2021 due primarily to lower miscellaneous investment income, partially offset by an increase in the level of invested assets.

Benefits experience, excluding the impacts of the reserve assumption update, was favorable in the third quarter and first nine months of 2022 compared to the same periods of 2021 largely due to lower mortality in the group life product line, resulting primarily from lessening impacts of COVID-19 on our insured population.

Commissions were higher in the third quarter and first nine months of 2022 compared to the same periods of 2021 due primarily to in-force block growth. The deferral of acquisition costs was generally consistent in the third quarter and first nine months of 2022 with the same periods of 2021. The amortization of deferred acquisition costs decreased in the third quarter and first nine months of 2022 compared to the same periods of 2021 due to a decline in the level of the deferred asset. The other expense ratio increased in the third quarter and first nine months of 2022 compared to the same periods of 2021 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 September 30			Nine Months Ended September 30		
	2022	% Change	2021	2022	% Change	2021
Adjusted Operating Revenue						
Premium Income						
Voluntary Benefits	$ 199.0	(5.1)%	$ 209.6	$ 635.2	(0.8)%	$ 640.4
Individual Disability	118.9	2.8	115.7	350.3	1.5	345.0
Dental and Vision	67.1	(1.2)	67.9	206.6	2.0	202.6
Total Premium Income	385.0	(2.1)	393.2	1,192.1	0.3	1,188.0
Net Investment Income	60.5	3.2	58.6	171.7	(3.9)	178.7
Other Income	0.2	(77.8)	0.9	2.1	(16.0)	2.5
Total	445.7	(1.5)	452.7	1,365.9	(0.2)	1,369.2
Benefits and Expenses						
Benefits and Change in Reserves for Future Benefits	182.3	(6.5)	195.0	558.3	(3.8)	580.1
Commissions	60.4	4.1	58.0	186.9	4.6	178.7
Deferral of Acquisition Costs	(44.3)	11.0	(39.9)	(134.4)	4.4	(128.7)
Amortization of Deferred Acquisition Costs	53.9	10.7	48.7	164.6	(6.7)	176.4
Other Expenses	79.1	5.7	74.8	237.2	6.6	222.5
Total	331.4	(1.5)	336.6	1,012.6	(1.6)	1,029.0
Adjusted Operating Income	$ 114.3	(1.6)	$ 116.1	$ 353.3	3.9	$ 340.2
Operating Ratios (% of Premium Income):						
Benefit Ratios:						
Voluntary Benefits	42.6 %		46.6 %	41.2 %		43.3 %
Individual Disability	40.0 %		40.1 %	41.3 %		43.6 %
Dental and Vision	74.5 %		75.0 %	73.6 %		75.1 %
Other Expense Ratio	20.5 %		19.0 %	19.9 %		18.7 %
Adjusted Operating Income Ratio	29.7 %		29.5 %	29.6 %		28.6 %
Persistency:						
Voluntary Benefits				75.1 %		75.4 %
Individual Disability				89.2 %		88.4 %
Dental and Vision				81.4 %		86.3 %

Premium income was lower in the third quarter of 2022 compared to the same period of 2021, due primarily to lower persistency in both the voluntary benefits and dental and vision product lines, partially offset by higher sales in both the individual disability and voluntary benefits product lines. Premium income was generally consistent in the first nine months of 2022 compared to the same period of 2021 with higher sales in the individual disability product line, mostly offset by lower persistency in the voluntary benefits product line. Net investment income was higher in the third quarter of 2022 compared to the same period of 2021 due to an increase in the yield on invested assets. Net investment income was lower in the first nine months of 2022 compared to the same period of 2021 due to lower miscellaneous investment income and a decrease in the level of invested assets, partially offset by an increase in the yield on invested assets.

Benefits experience for voluntary benefits was favorable in the third quarter and first nine months of 2022 compared to the same periods of 2021 due to favorable claims experience in all products, including within the life product line, resulting primarily from lessening impacts of COVID-19 on our insured population. Benefits experience for the individual disability product line was favorable in the third quarter and first nine months of 2022 compared to the same periods of 2021 due primarily to lower claims activity. Benefits experience for the dental and vision product line was favorable in the third quarter and first nine months of 2022 due primarily to lower claims incidence.

Commissions and deferral of acquisition costs were higher in the third quarter and first nine months of 2022 compared to the same periods of 2021 due primarily to higher sales in the individual disability product line. Also contributing to the increase in commissions for the first nine months of 2022 compared to the same period of 2021 were higher sales in the voluntary benefits product line. The amortization of deferred acquisition costs was higher in the third quarter of 2022 compared to the same period of 2021 due to a higher level of policy terminations, and decreased in the first nine months of 2022 relative to the same period of 2021 due to a lower level of policy terminations, primarily in the voluntary benefits product line. Our other expense ratio increased in the third quarter and first nine months of 2022 compared to the same periods of 2021 due primarily to an increase in employee-related costs and an increase in operational investments in our business. Also contributing to the increase for the first nine months of 2022 compared to the same period of 2021 is a larger decrease in the allowance for expected credit losses on premium receivable balances during the first nine months of 2021 compared to the same period of 2022.

Sales

(in millions of dollars)

	Three Months Ended September 30			Nine Months Ended September 30		
	2022	% Change	2021	2022	% Change	2021
Sales by Product						
Group Disability and Group Life and AD&D						
Group Long-term Disability	$ 35.4	35.1 %	$ 26.2	$ 139.2	40.2 %	$ 99.3
Group Short-term Disability	18.3	(15.3)	21.6	82.4	7.2	76.9
Group Life and AD&D	26.9	1.1	26.6	137.5	14.0	120.6
Subtotal	80.6	8.3	74.4	359.1	21.0	296.8
Supplemental and Voluntary						
Voluntary Benefits	40.5	19.1	34.0	188.8	5.7	178.7
Individual Disability	25.9	23.9	20.9	64.9	22.9	52.8
Dental and Vision	10.5	(16.7)	12.6	32.6	(3.0)	33.6
Subtotal	76.9	13.9	67.5	286.3	8.0	265.1
Total Sales	$ 157.5	11.0	$ 141.9	$ 645.4	14.9	$ 561.9
Sales by Market Sector						
Group Disability and Group Life and AD&D						
Core Market (< 2,000 employees)	$ 58.7	27.9 %	$ 45.9	$ 228.5	21.9 %	$ 187.5
Large Case Market	21.9	(23.2)	28.5	130.6	19.5	109.3
Subtotal	80.6	8.3	74.4	359.1	21.0	296.8
Supplemental and Voluntary	76.9	13.9	67.5	286.3	8.0	265.1
Total Sales	$ 157.5	11.0	$ 141.9	$ 645.4	14.9	$ 561.9

Group sales increased during the third quarter of 2022 compared to the same period of 2021 due to higher sales to new and existing customers in the core market, which we define as employee groups with fewer than 2,000 employees, partially offset by lower sales to new customers in the large case market. Group sales increased during the first nine months of 2022 compared to the same period of 2021 due to higher sales to new and existing customers in the core market and higher sales to existing customers in the large case market. Despite the overall increase in group sales, we are continuing to experience strong competition for new customers in the large case market. The sales mix in the group market sector for the first nine months of 2022 was approximately 63 percent core market and 37 percent large case market.

Voluntary benefits sales increased during the third quarter and first nine months of 2022 compared to the same periods of 2021 due primarily to higher sales to existing customers in the core market and higher sales to new customers in the large case market. Individual disability sales, which are primarily concentrated in the multi-life market, increased in the third quarter and first nine months of 2022 compared to the same periods of 2021 due to higher sales to both new and existing customers. Dental and vision sales decreased during the third quarter and first nine months of 2022 compared to the same periods of 2021 due to lower sales to new customers, partially 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 2022, 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, and claims processing. In addition, we will continue to focus on the expansion of our portfolio of products. In particular, with respect to smaller employers, we will continue to provide comprehensive 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 significant investment in leave management services provides 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.

Our near-term results will be influenced by pandemic trends, specifically the mortality rate in our insured population along with the level and severity of infection rates. As the pandemic impacts have lessened, we experienced a recovery in earnings given the underlying strength of our business. We expect full year premium income to grow at a higher rate than 2021, partially due to in-force block growth as a result of wage inflation and an increase in the number of lives covered for our group products. While we expect our 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. We may also experience potential disruption in our overall claims processing activity, which can result in short-term unfavorable experience. Furthermore, we could continue to experience an increase in the volume of activity associated with our leave management services which would lead to an increase in expenses.

A rising 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 September 30			Nine Months Ended September 30		
	2022	% Change	2021	2022	% Change	2021
Adjusted Operating Revenue						
Premium Income						
Unum UK						
Group Long-term Disability	$ 89.8	(11.6)%	$ 101.6	$ 287.5	(5.4)%	$ 303.8
Group Life	35.0	20.3	29.1	100.5	19.1	84.4
Supplemental	27.4	(3.2)	28.3	85.8	1.9	84.2
Unum Poland	21.1	(6.6)	22.6	66.7	(0.6)	67.1
Total Premium Income	173.3	(4.6)	181.6	540.5	0.2	539.5
Net Investment Income	37.0	11.8	33.1	122.3	29.0	94.8
Other Income	0.2	(50.0)	0.4	0.7	16.7	0.6
Total	210.5	(2.1)	215.1	663.5	4.5	634.9
Benefits and Expenses						
Benefits and Change in Reserves for Future Benefits	131.1	(6.1)	139.6	432.8	3.9	416.6
Commissions	15.0	7.9	13.9	44.9	10.3	40.7
Deferral of Acquisition Costs	(2.9)	(12.1)	(3.3)	(9.3)	(3.1)	(9.6)
Amortization of Deferred Acquisition Costs	1.2	(40.0)	2.0	5.8	(4.9)	6.1
Other Expenses	36.2	2.0	35.5	107.3	4.7	102.5
Total	180.6	(3.8)	187.7	581.5	4.5	556.3
Adjusted Operating Income	$ 29.9	9.1	$ 27.4	$ 82.0	4.3	$ 78.6

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 reserves and 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 (loss) 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 September 30			Nine Months Ended September 30		
	2022	% Change	2021	2022	% Change	2021
Adjusted Operating Revenue						
Premium Income						
Group Long-term Disability	£ 76.2	3.4 %	£ 73.7	£ 228.4	4.1 %	£ 219.3
Group Life	29.8	41.2	21.1	80.3	31.9	60.9
Supplemental	23.4	13.6	20.6	68.4	12.5	60.8
Total Premium Income	129.4	12.1	115.4	377.1	10.6	341.0
Net Investment Income	29.9	32.9	22.5	93.3	45.3	64.2
Other Income	—	N.M.	0.2	0.1	(50.0)	0.2
Total	159.3	15.4	138.1	470.5	16.1	405.4
Benefits and Expenses						
Benefits and Change in Reserves for Future Benefits	101.7	11.3	91.4	312.8	16.0	269.6
Commissions	9.1	21.3	7.5	26.0	20.4	21.6
Deferral of Acquisition Costs	(1.0)	(16.7)	(1.2)	(3.3)	3.1	(3.2)
Amortization of Deferred Acquisition Costs	0.6	(50.0)	1.2	3.7	(2.6)	3.8
Other Expenses	25.3	21.6	20.8	69.2	15.7	59.8
Total	135.7	13.4	119.7	408.4	16.2	351.6
Adjusted Operating Income	£ 23.6	28.3	£ 18.4	£ 62.1	15.4	£ 53.8
Weighted Average Pound/Dollar Exchange Rate	1.169		1.380	1.246		1.385
Operating Ratios (% of Premium Income):						
Benefit Ratio	78.6 %		79.2 %	82.9 %		79.1 %
Other Expense Ratio	19.6 %		18.0 %	18.4 %		17.5 %
Adjusted Operating Income Ratio	18.2 %		15.9 %	16.5 %		15.8 %
Persistency:						
Group Long-term Disability				84.9 %		88.9 %
Group Life				88.2 %		86.0 %
Supplemental				92.3 %		89.9 %

N.M. = not a meaningful percentage

Premium income was higher in the third quarter and first nine months of 2022 compared to the same periods of 2021 due to in-force block growth and sales growth in the group life product line.

Net investment income was higher in the third quarter and first nine months of 2022 compared to the same periods of 2021 due primarily to higher investment income from inflation index-linked bonds. Our investments in inflation index-linked bonds support the claim reserves associated with certain group policies that provide for inflation-linked increases in benefits. The change in net investment income attributable to these index-linked bonds is partially offset by a change in the reserves for future claim payments related to the inflation index-linked group long-term disability and group life policies.

Benefits experience was favorable in the third quarter of 2022 compared to the same period of 2021 due primarily to inflation index-linked experience for our group life and group long-term disability products, partially offset by higher claim incidence in our supplemental product line. Due to rising inflation, many of our claims reached the maximum annual inflation index-linked adjustment in the first half of 2022, resulting in a decrease in inflation-related benefit adjustments in the third quarter of 2022 compared to the same period of 2021. Benefits experience was unfavorable in the first nine months of 2022 compared to the same periods of 2021 due primarily to higher inflation index-linked experience, higher claims incidence in the group long-term disability product line, and higher claim incidence in our supplemental product line.

Commissions increased in the third quarter and first nine months of 2022 compared to the same periods of 2021 due primarily to in-force block growth. The deferral of acquisition costs were generally consistent in the third quarter and first nine months of 2022 compared to the same periods of 2021. The amortization of deferred acquisition costs decreased during the third quarter and first nine months of 2022 compared to the same periods of 2021 due primarily to a decline in the level of deferred asset. The other expense ratio was higher in the third quarter and first nine months of 2022 compared to the same periods of 2021 due to an increase in employee-related costs and an increase in operational investments in our business.

Sales

(in millions of dollars and pounds)

	Three Months Ended September 30			Nine Months Ended September 30		
	2022	% Change	2021	2022	% Change	2021
Unum International Sales by Product						
Unum UK						
Group Long-term Disability	$ 6.4	(36.6)%	$ 10.1	$ 35.2	5.4 %	$ 33.4
Group Life	28.1	N.M.	6.8	49.0	114.0	22.9
Supplemental	2.2	(40.5)	3.7	14.5	6.6	13.6
Unum Poland	3.4	(2.9)	3.5	11.4	8.6	10.5
Total Sales	$ 40.1	66.4	$ 24.1	$ 110.1	36.9	$ 80.4
Unum International Sales by Market Sector						
Unum UK						
Group Long-term Disability and Group Life						
Core Market (< 500 employees)	$ 9.3	— %	$ 9.3	$ 32.8	7.5 %	$ 30.5
Large Case Market	25.2	N.M.	7.6	51.4	99.2	25.8
Subtotal	34.5	104.1	16.9	84.2	49.6	56.3
Supplemental	2.2	(40.5)	3.7	14.5	6.6	13.6
Unum Poland	3.4	(2.9)	3.5	11.4	8.6	10.5
Total Sales	$ 40.1	66.4	$ 24.1	$ 110.1	36.9	$ 80.4
Unum UK Sales by Product						
Group Long-term Disability	£ 5.5	(25.7)%	£ 7.4	£ 27.6	14.5 %	£ 24.1
Group Life	23.5	N.M.	4.9	39.7	140.6	16.5
Supplemental	1.9	(29.6)	2.7	11.3	14.1	9.9
Total Sales	£ 30.9	106.0	£ 15.0	£ 78.6	55.6	£ 50.5
Unum UK Sales by Market Sector						
Group Long-term Disability and Group Life						
Core Market (< 500 employees)	£ 7.9	17.9 %	£ 6.7	£ 25.9	17.7 %	£ 22.0
Large Case Market	21.1	N.M.	5.6	41.4	122.6	18.6
Subtotal	29.0	135.8	12.3	67.3	65.8	40.6
Supplemental	1.9	(29.6)	2.7	11.3	14.1	9.9
Total Sales	£ 30.9	106.0	£ 15.0	£ 78.6	55.6	£ 50.5

N.M. = not a meaningful percentage

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 third quarter of 2022 compared to the same period of 2021 driven by lower sales to new customers in both the large case market and the core market, which we define as employee groups with fewer than 500 employees, partially offset by higher sales to existing customers in the core market. Group long-term disability sales were higher in the first nine months of 2022 compared to the same period of 2021 driven by higher sales to new customers in the large case market and existing customers in the core market, partially offset by lower sales to new customers in the core market.

Group life sales increased in the third quarter and first nine months of 2022 compared to the same periods of 2021 driven primarily by higher sales to new customers in the large case market.

Supplemental sales decreased in the third quarter of 2022 compared to the same period of 2021 due primarily to lower sales in both the critical illness and dental product lines. Supplemental sales increased in the first nine months of 2022 compared to the same period of 2021 due primarily to higher sales in the dental product line, partially offset by lower sales in the critical illness product line.

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. For our Unum UK line of business, achieving growth within our existing portfolio of products remains a priority. We will focus on delivering a high quality service and building best in class health and wellbeing services to continue to improve retention of our key customers and drive growth in small case business. We will also maintain our disciplined sales approach. Within our Unum Poland line of business, we will leverage our U.S. and U.K. expertise to grow existing distribution channels and expand our current product offerings. We continue to invest in digital capabilities, technology, and product enhancements which we believe will drive sustainable growth over the long term.

In 2022, we expect strong premium growth, but recognize that we could continue to experience claims volatility across our lines of business as pandemic impacts lessen. Despite ongoing economic uncertainty, we believe we are well positioned to capitalize on future growth opportunities as the operating environment improves. As part of our continued pricing discipline and our reserving methodology, we continuously monitor emerging interest rate experience and adjust our pricing and reserve discount rates, as appropriate. We will likely continue to experience higher net investment income and fluctuations in our benefit ratio due to the higher level of inflation in the U.K. we expect to continue during the year. We continuously monitor key indicators to assess our risks and adjust our business plans accordingly to respond to external challenges.

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 September 30			Nine Months Ended September 30		
	2022	% Change	2021	2022	% Change	2021
Adjusted Operating Revenue						
Premium Income						
Accident, Sickness, and Disability	$ 236.1	(0.8)%	$ 238.0	$ 714.0	(0.2)%	$ 715.1
Life	100.2	5.9	94.6	303.2	5.5	287.3
Cancer and Critical Illness	87.0	(1.4)	88.2	264.4	—	264.5
Total Premium Income	423.3	0.6	420.8	1,281.6	1.2	1,266.9
Net Investment Income	38.6	(25.5)	51.8	115.4	(12.0)	131.1
Other Income	0.3	—	0.3	0.8	—	0.8
Total	462.2	(2.3)	472.9	1,397.8	(0.1)	1,398.8
Benefits and Expenses						
Benefits and Change in Reserves for Future Benefits	198.0	(15.8)	235.2	613.8	(10.8)	688.2
Commissions	86.0	6.8	80.5	258.0	8.9	236.9
Deferral of Acquisition Costs	(70.3)	9.5	(64.2)	(210.4)	13.2	(185.9)
Amortization of Deferred Acquisition Costs	74.3	13.8	65.3	215.7	12.9	191.0
Other Expenses	83.8	10.3	76.0	239.1	9.0	219.4
Total	371.8	(5.3)	392.8	1,116.2	(2.9)	1,149.6
Adjusted Operating Income	$ 90.4	12.9	$ 80.1	$ 281.6	13.0	$ 249.2
Operating Ratios (% of Premium Income):						
Benefit Ratio	46.8 %		55.9 %	47.9 %		54.3 %
Other Expense Ratio	19.8 %		18.1 %	18.7 %		17.3 %
Adjusted Operating Income Ratio	21.4 %		19.0 %	22.0 %		19.7 %
Persistency:						
Accident, Sickness, and Disability				73.8 %		75.6 %
Life				85.1 %		84.9 %
Cancer and Critical Illness				82.3 %		82.1 %

Premium income in the third quarter and first nine months of 2022 was favorable compared to the same periods of 2021, due to higher sales in prior periods, partially offset by lower overall persistency. Net investment income decreased during the third quarter and first nine months of 2022 relative to the same periods of 2021 due to lower miscellaneous investment income and a decline in the yield on invested assets, partially offset by an increase in the level of invested assets.

Benefits experience during the third quarter and first nine months of 2022 was favorable compared to the same periods of 2021 across all product lines.

Commissions and the deferral of acquisition costs were higher in the third quarter and first nine months of 2022 relative to the same periods of 2021 due to higher sales in prior periods. The amortization of deferred acquisition costs was higher during the third quarter and first nine months of 2022 relative to the same periods of 2021 due to a higher level of policy terminations primarily in the accident, sickness, and disability product line. The other expense ratio was higher in the third quarter and first nine months of 2022 relative to the same periods of 2021 due primarily to an increase in operational investments in our business and an increase in employee-related costs. Also impacting the comparison for the first nine months of 2022 is a decrease in the allowance for expected credit losses on premium receivable balances during the first nine months of 2021 that did not recur during the same period of 2022.

Sales

(in millions of dollars)

	Three Months Ended September 30			Nine Months Ended September 30		
	2022	% Change	2021	2022	% Change	2021
Sales by Product						
Accident, Sickness, and Disability	$ 71.4	2.3 %	$ 69.8	$ 210.0	6.9 %	$ 196.4
Life	27.9	5.7	26.4	80.4	9.8	73.2
Cancer and Critical Illness	16.6	3.1	16.1	47.7	8.4	44.0
Total Sales	$ 115.9	3.2	$ 112.3	$ 338.1	7.8	$ 313.6
Sales by Market Sector						
Commercial						
Core Market (< 1,000 employees)	$ 73.4	1.5 %	$ 72.3	$ 225.4	8.8 %	$ 207.2
Large Case Market	10.7	(25.2)	14.3	36.3	(16.4)	43.4
Subtotal	84.1	(2.9)	86.6	261.7	4.4	250.6
Public Sector	31.8	23.7	25.7	76.4	21.3	63.0
Total Sales	$ 115.9	3.2	$ 112.3	$ 338.1	7.8	$ 313.6

Commercial market sales decreased in the third quarter of 2022 compared to the same period of 2021 due to lower sales to existing customers in the large case market, partially offset by higher sales to existing customers in the core market, which we define as accounts with fewer than 1,000 employees. Commercial market sales increased in the first nine months of 2022 compared to the same period of 2021 due to higher sales to existing customers in the core market, partially offset by lower sales to both new and existing customers in the large case market. Public sector market sales increased in the third quarter and first nine months of 2022 compared to the same periods of 2021 due to higher sales to both new and existing customers. The number of new accounts decreased 4.0 percent and 4.6 percent, respectively, in the third quarter and first nine months of 2022 compared to the same periods of 2021. The average new case size increased 9.5 percent and 2.9 percent, respectively, in the third quarter and first nine months of 2022 compared to the same periods of 2021.

Segment Outlook

We remain committed to providing employees and their families with simple, modern, and personal benefit solutions. During 2022, 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 2022, 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 2022, we expect positive operating trends with full year premium income growth compared to the prior year, but at a rate that is below pre-pandemic levels. While we expect our claim experience to continue to improve as impacts from COVID-19 lessen, we could continue to experience claims volatility, particularly in our life and disability products. Our net investment income may continue to be impacted by volatility in miscellaneous investment income. 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, individual disability, and other insurance products no longer actively marketed. We discontinued offering individual long-term care in 2009 and group long-term care in 2012. Individual disability in this segment generally consists of policies we sold prior to the mid-1990s and entirely discontinued selling in 2004. As of March 2021, we ceded a significant portion of this individual disability business to a third party reinsurer. See "Executive Summary" herein Item 2 for further discussion. Other insurance products include 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 September 30			Nine Months Ended September 30		
	2022	% Change	2021	2022	% Change	2021
Adjusted Operating Revenue						
Premium Income						
Long-term Care	$ 174.5	(0.9)%	$ 176.1	$ 523.0	(1.0)%	$ 528.4
Individual Disability	59.5	(17.7)	72.3	185.3	(14.5)	216.8
All Other	1.5	(28.6)	2.1	5.1	(16.4)	6.1
Total Premium Income	235.5	(6.0)	250.5	713.4	(5.0)	751.3
Net Investment Income	251.4	(11.7)	284.6	817.7	(6.7)	876.5
Other Income	13.1	(32.1)	19.3	45.6	(8.4)	49.8
Total	500.0	(9.8)	554.4	1,576.7	(6.0)	1,677.6
Benefits and Expenses						
Benefits and Change in Reserves for Future Benefits	416.1	(3.0)	428.9	1,222.3	(11.4)	1,378.8
Commissions	19.2	(5.9)	20.4	57.6	(6.0)	61.3
Other Expenses	45.8	(5.8)	48.6	137.8	(9.2)	151.8
Total	481.1	(3.4)	497.9	1,417.7	(10.9)	1,591.9
Income Before Income Tax and Net Investment Gains and Losses	18.9	(66.5)	56.5	159.0	85.5	85.7
Long-term Care Reserve Increase	—	N.M.	2.1	—	N.M.	2.1
Individual Disability Reserve Increase	—	N.M.	6.4	—	N.M.	6.4
Group Pension Reserve Increase	—	N.M.	25.1	—	N.M.	25.1
Impacts from Closed Block Individual Disability Reinsurance Transaction	—	—	—	—	N.M.	139.3
Amortization of the Cost of Reinsurance	15.2	(22.8)	19.7	48.5	(18.4)	59.4
Adjusted Operating Income	$ 34.1	(68.9)	$ 109.8	$ 207.5	(34.7)	$ 318.0
Interest Adjusted Loss Ratios:						
Long-term Care[1]	85.7 %		74.8 %	80.6 %		75.7 %
Individual Disability[2]	77.5 %		58.2 %	78.6 %		65.6 %
Operating Ratios (% of Premium Income):						
Other Expense Ratio[3]	13.0 %		11.5 %	12.5 %		11.5 %
Income Ratio	8.0 %		22.6 %	22.3 %		11.4 %
Adjusted Operating Income Ratio	14.5 %		43.8 %	29.1 %		42.3 %
Persistency:						
Long-term Care				95.4 %		95.5 %
Individual Disability				86.4 %		86.5 %

[1]Excludes the $2.1 million reserve increase from the third quarter and first nine months of 2021 related to the assumption update that occurred during the third quarter of 2021.

[2]Excludes the $133.1 million reserve recognition from the first nine months of 2021 related to the second phase of the reinsurance transaction that occurred during the first quarter of 2021. Also excludes the $6.4 million reserve increase from the third quarter and first nine months of 2021 related to the assumption update that occurred during the third quarter of 2021.

[3]Excludes amortization of the cost of reinsurance from the third quarter and first nine months of 2022 and 2021. Also excludes $6.2 million of transaction costs from the first nine months of 2021 related to the reinsurance transaction that occurred during the first quarter of 2021.

N.M. = not a meaningful percentage

Premium income for long-term care decreased in the third quarter and first nine months of 2022 relative to the same periods of 2021 due to policy terminations and maturities, partially offset by rate increases. 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. Premium income for individual disability decreased in the third quarter and first nine months of 2022 compared to the same periods of 2021 due to policy terminations and maturities.

Net investment income was lower during the third quarter and first nine months of 2022 relative to the same periods of 2021 due to lower miscellaneous investment income, partially related to smaller increases in the net asset values (NAV) on our private equity partnerships, and a decline in the yield on invested assets, 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 individual disability business.

The interest adjusted loss ratio for long-term care, excluding the reserve increase related to the assumption update in the third quarter of 2021, was less favorable during the third quarter and first nine months of 2022 relative to the same periods of 2021 driven by higher submitted claims. The interest adjusted loss ratio for long-term care for the rolling twelve months was 81.0 percent. The interest adjusted loss ratio for individual disability, excluding the reserve increase related to the assumption update in the third quarter of 2021 and the reserve recognition impact from the reinsurance transaction in the first quarter of 2021, was unfavorable during the third quarter and first nine months of 2022 relative to the same periods of 2021 due primarily to volatility as a result of the relatively small amount of business retained.

The other expense ratio, excluding certain transaction costs incurred and the amortization of the cost of reinsurance related to the previously discussed reinsurance transaction, was higher in the third quarter and first nine months of 2022 compared to the same periods of 2021 due primarily to a decline in the expense allowance related to the ceded block of individual disability business.

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. 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 net asset value (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, which is in loss recognition and should report levels of benefits plus operating expenses that equal the gross premium reported, we expect the long term interest adjusted loss ratio to be in the 85 to 90 percent range with some quarterly volatility. Claim resolution rates, which measure the resolution of claims from recovery, deaths, settlements, and benefit expirations, 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, interest rates, mortality, morbidity, resolutions, premium rate increases, benefit change elections, and persistency, could result in a material impact on the adequacy of our reserves, including adjustments to reserves established under loss recognition.

As a result of the execution of the reinsurance transaction related to our Closed Block individual disability line of business where we have fully ceded a significant portion of this business, we expect that the primary impact on earnings will be the amortization of the cost of reinsurance for that agreement which we expect will be approximately $64 million for 2022. The cost of reinsurance will continue to be amortized on a declining trajectory consistent with the expected run-off pattern of the

ceded reserves, which we estimate to be approximately 25 years. Due to the relatively small amount of business that has been retained, we expect that the interest adjusted loss ratio will be more volatile from period to period and we expect minimal earnings related to the retained business.

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 September 30			Nine Months Ended September 30		
	2022	% Change	2021	2022	% Change	2021
Adjusted Operating Revenue						
Net Investment Income	$ 14.0	N.M.	$ 4.5	$ 33.0	61.0 %	$ 20.5
Other Income	0.4	(83.3)	2.4	3.6	(12.2)	4.1
Total	14.4	108.7	6.9	36.6	48.8	24.6
Interest, Debt, and Other Expenses	63.9	(0.8)	64.4	163.4	(34.8)	250.7
Loss Before Income Tax and Net Investment Gains and Losses	(49.5)	13.9	(57.5)	(126.8)	43.9	(226.1)
Impairment Loss on Internal-Use Software	—	N.M.	12.1	—	N.M.	12.1
Cost Related to Early Retirement of Debt	—	—	—	—	N.M.	67.3
Impairment Loss on ROU Asset	—	—	—	—	N.M.	13.9
Adjusted Operating Loss	$ (49.5)	(9.0)	$ (45.4)	$ (126.8)	4.5	$ (132.8)

N.M. = not a meaningful percentage

Adjusted operating loss increased in the third quarter of 2022 relative to the same period of 2021, which excludes the impairment loss on internal-use software, due primarily to higher employee-related costs and an increase in interest and debt expenses, partially offset by favorable net investment income driven primarily by an increase in the yield on invested assets, and lower pension expenses. Adjusted operating loss decreased in the first nine months of 2022 relative to the same period of 2021, which excludes the impairment loss on internal-use software, the cost related to the early retirement of debt, and the impairment loss on the ROU asset, due to higher net investment income driven primarily by an increase in the yield on invested assets and lower pension expenses, partially offset by an increase in employee-related costs and an increase in interest and debt expenses. See Note 12 of the "Notes to Consolidated Financial Statements" contained herein in Item 1 for further discussion on the impairment loss on internal-use software, the cost related to early retirement of debt, and the impairment loss on the ROU asset.

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 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 predominately 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 reserve 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 to manage 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.

Closed Block Individual Disability Reinsurance Transaction

As part of the second phase of the Closed Block individual disability reinsurance transaction entered into in December 2020 with Commonwealth, in March 2021 we transferred fixed maturity securities of $226.8 million on an amortized cost basis and $293.7 million on a fair value basis and we recorded a total realized investment gain from the transfer of these securities, including a related net gain from cash flow hedges of $67.6 million. See "Executive Summary" for further information on the reinsurance transaction contained herein in this 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 September 30, 2022

(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	$ 2,528.8	$ (267.4)	$ 2,030.1	$ 294.3	$ 498.7	$ 26.9
Capital Goods	3,192.3	(296.2)	2,306.7	356.3	885.6	60.1
Communications	2,134.2	(193.6)	1,452.3	262.2	681.9	68.6
Consumer Cyclical	1,350.3	(148.1)	1,093.9	164.5	256.4	16.4
Consumer Non-Cyclical	5,448.3	(590.1)	3,953.3	683.1	1,495.0	93.0
Energy	2,736.3	(131.2)	1,583.0	194.2	1,153.3	63.0
Financial Institutions	3,305.3	(527.4)	3,013.4	541.3	291.9	13.9
Mortgage/Asset-Backed	530.3	(24.7)	399.6	32.1	130.7	7.4
Sovereigns	809.1	(63.5)	263.8	99.8	545.3	36.3
Technology	1,554.8	(217.0)	1,428.6	223.7	126.2	6.7
Transportation	1,545.8	(198.2)	1,233.4	214.2	312.4	16.0
U.S. Government Agencies and Municipalities	4,101.8	(651.3)	2,665.0	754.8	1,436.8	103.5
Public Utilities	4,910.9	(259.9)	2,744.6	386.6	2,166.3	126.7
Total	$ 34,148.2	$ (3,568.6)	$ 24,167.7	$ 4,207.1	$ 9,980.5	$ 638.5

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 September 30, 2022 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 September 30, 2022. The increase in the unrealized loss on fixed maturity securities during the third quarter of 2022 was due primarily to an increase in U.S. Treasury rates.

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

(in millions of dollars)

	2022			2021	
	September 30	June 30	March 31	December 31	September 30
Fair Value < 100% >= 70% of Amortized Cost					
<= 90 days	$ 523.7	$ 514.7	$ 491.6	$ 29.9	$ 42.8
> 90 <= 180 days	879.0	1,177.1	199.5	29.4	0.2
> 180 <= 270 days	945.4	268.9	109.1	0.7	26.3
> 270 days <= 1 year	218.6	147.1	1.1	21.8	1.4
> 1 year <= 2 years	195.0	66.5	67.2	5.1	3.9
> 2 years <= 3 years	2.9	6.5	1.7	—	—
Sub-total	2,764.6	2,180.8	870.2	86.9	74.6
Fair Value < 70% >= 40% of Amortized Cost					
<= 90 days	—	10.3	—	—	—
> 90 <= 180 days	22.3	37.8	3.1	—	—
> 180 <= 270 days	564.2	80.6	3.7	—	—
> 270 days <= 1 year	427.4	39.4	—	1.5	—
> 1 year <= 2 years	176.5	39.8	1.9	—	—
> 2 years <= 3 years	18.5	—	—	—	—
Sub-total	1,208.9	207.9	8.7	1.5	—
Total	$ 3,973.5	$ 2,388.7	$ 878.9	$ 88.4	$ 74.6

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

(in millions of dollars)

	2022			2021	
	September 30	June 30	March 31	December 31	September 30
Fair Value < 100% >= 70% of Amortized Cost					
<= 90 days	$ 27.1	$ 73.4	$ 24.8	$ 0.8	$ 0.4
> 90 <= 180 days	58.5	92.8	5.9	0.3	—
> 180 <= 270 days	103.8	13.5	1.9	—	2.0
> 270 days <= 1 year	15.2	3.3	—	2.2	2.1
> 1 year <= 2 years	3.8	0.2	1.8	2.5	2.6
> 2 years <= 3 years	0.7	1.4	3.7	0.3	0.2
> 3 years	3.4	2.9	7.9	5.6	4.8
Sub-total	212.5	187.5	46.0	11.7	12.1
Fair Value < 70% >= 40% of Amortized Cost					
> 90 <= 180 days	—	6.1	—	—	—
> 180 <= 270 days	5.0	3.4	—	—	—
> 270 days <= 1 year	—	1.4	—	—	—
> 2 years <= 3 years	6.2	5.4	—	—	—
> 3 years	9.9	9.1	—	—	—
Sub-total	21.1	25.4	—	—	—
Total	$ 233.6	$ 212.9	$ 46.0	$ 11.7	$ 12.1

As of September 30, 2022, we held 86 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 September 30, 2022

(in millions of dollars)

Classification	Fair Value	Gross Unrealized Loss	Numbers of Issuers
Basic Industry	$ 291.7	$ (69.6)	5
Capital Goods	332.5	(93.8)	7
Communications	409.7	(104.4)	7
Consumer Cyclical	281.0	(76.5)	5
Consumer Non-Cyclical	1,090.4	(237.8)	17
Energy	213.0	(43.6)	3
Financial Institutions	1,091.4	(230.4)	15
Mortgage/Asset-Backed	363.6	(31.5)	1
Sovereigns	239.5	(84.9)	2
Technology	417.7	(110.7)	8
Transportation	293.4	(92.2)	7
U.S. Government Agencies and Municipalities	161.5	(32.1)	3
Public Utilities	415.2	(100.1)	6
Total	$ 5,600.6	$ (1,307.6)	86

At September 30, 2022, we held two below investment-grade fixed maturity securities with a gross unrealized loss greater than $10.0 million. The first security is a pharmaceutical company and had a fair value of $36.0 million and a gross unrealized loss of $14.2 million. The second security is an energy company and had a fair value of $54.1 million and a gross unrealized loss of $10.2 million.

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 September 30, 2022, 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.

During the third quarter of 2022, we recognized a realized loss of $12.6 million on the sale of securities of a pharmaceutical company that was impacted by an adverse ruling surrounding a patent held for its largest drug. We had no other individual investment losses of $10.0 million or greater from credit losses or sales of fixed maturity securities during the first nine months of 2022 or 2021.

As of September 30, 2022, the amortized cost net of allowance for credit losses and fair value of our below-investment-grade fixed maturity securities was $2,242.0 million and $2,013.3 million, respectively, and our below-investment-grade fixed maturity securities as a percentage of our total investment portfolio decreased from 5.8 percent at December 31, 2021 to 4.8 percent at September 30, 2022 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 foreign 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 $2,476.4 million and $2,560.4 million at September 30, 2022 and December 31, 2021, respectively. Our investments in mortgage loans are carried at amortized cost less an allowance for expected credit losses which was $8.7 million and $8.3 million at September 30, 2022 and December 31, 2021, 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. We held no impaired mortgage loans at September 30, 2022 or December 31, 2021. 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 $1,124.6 million and $978.6 million at September 30, 2022 and December 31, 2021, 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 $12.6 million and $98.6 million for the partnerships in the third quarter and first nine months of 2022, respectively. 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 $806.2 million of commitments for additional investments in the partnerships at September 30, 2022 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 reinvestment, duration, foreign currency, and credit risks. Historically, we have utilized current and forward-starting interest rate swaps, options on forward-starting interest rate swaps and U.S. Treasury rates, current and forward-starting currency swaps, forward treasury locks, currency forward contracts, forward contracts on specific fixed income securities, and credit default swaps. During the first nine months of 2022, we entered into $679.0 million of notional forward U.S. Treasury interest rate locks in our long-term care product line to manage our reinvestment risk. 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 on derivatives was $1.7 million at September 30, 2022. The carrying value of fixed maturity securities and cash collateral received from our counterparties was $13.7 million and $81.7 million at September 30, 2022, respectively. The carrying value of fixed maturity securities and cash collateral posted to our counterparties was $20.7 million and $6.1 million at September 30, 2022, respectively. 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.

Other

Our exposure to non-current investments, defined as invested assets which are delinquent as to interest and/or principal payments, totaled $13.2 million and $19.8 million on a fair value basis at September 30, 2022 and December 31, 2021, respectively.

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, 2021, 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 September 30, 2022, Unum Group and our intermediate holding companies had available holding company liquidity of $1,079 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 October 2021, our board of directors authorized the repurchase of up to $250.0 million of Unum Group's outstanding common stock through December 2022, 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 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. 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. In total, we repurchased 1.7 million shares pursuant to the February 2022 accelerated share repurchase agreement. During the nine months ended September 30, 2022, we repurchased 2.5 million shares in open market transactions at a cost of $87.5 million. As of September 30, 2022, the remaining repurchase amount under the current share repurchase program was $62.5 million. See Note 10 of the "Notes to Consolidated Financial Statements" contained herein in Item 1.

Closed Block Individual Disability Reinsurance Transaction

In December 2020, we completed the first phase of a reinsurance transaction, pursuant to which Provident, Paul Revere, and Unum America, wholly-owned domestic insurance subsidiaries of Unum Group and collectively referred to as "the ceding companies", each entered into separate reinsurance agreements with Commonwealth to reinsure, on a coinsurance basis effective as of July 1, 2020, approximately 75 percent of the Closed Block individual disability insurance business, primarily direct business written by the ceding companies. In March 2021, we completed the second phase of the reinsurance transaction, pursuant to which the ceding companies and Commonwealth amended and restated their respective reinsurance agreements to reinsure on a coinsurance and modified coinsurance basis effective as of January 1, 2021, a substantial portion of the remaining Closed Block individual disability business that was not ceded in December 2020, primarily business previously assumed by the ceding companies. Commonwealth established and will maintain collateralized trust accounts for the benefit of the ceding companies to secure its obligations under the reinsurance agreements. In connection with the second phase of the reinsurance transaction in March 2021, Commonwealth paid a ceding commission to the ceding companies of $18.2 million and the ceding companies transferred assets of $767 million, which consisted primarily of cash and fixed maturity securities. We released approximately $200 million of capital during the first quarter of 2021 as a result of the closing of the second phase of the transaction.

See "Executive Summary" contained herein in this Item 2 for further discussion on the impacts related to this reinsurance transaction.

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 are 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, 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. During the fourth quarter of 2020, reserves were deficient by approximately $2,290 million, prior to the 2020 phase-in adjustment. The increase in the reserve deficiency from the original $2,100 million as of December 31, 2018 was primarily driven by changes in the assumed reinvestment rate. The 2020 phase-in amount was recorded in the fourth quarter of 2020 and was approximately $229 million, resulting in $2,061 million remaining to be phased in as of December 31, 2020. During the fourth quarter of 2021, reserves were deficient by approximately $2,748 million, prior to the 2021 phase in adjustment. The increase in the reserve deficiency from the balance as of December 31, 2020 was primarily driven by changes in the assumed reinvestment rate. The 2021 phase in amount was recorded in the fourth quarter of 2021 and was approximately $438 million, resulting in approximately $2,310 million remaining to be phased in as of December 31, 2021. A $50 million phase-in amount was recorded in each of the first three quarters of 2022, resulting in approximately $2,160 million remaining to be phased in as of September 30, 2022. The phase in amounts for 2020, 2021, and 2022 were funded using cash flows from operations and capital contributions from Unum Group. The 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 2021 nor do we anticipate that Fairwind will pay dividends in 2022. During the first nine months of 2022, Unum Group made $465.0 million in capital contributions to Fairwind in connection with the premium deficiency reserve establishment during 2022.

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 September 30, 2022 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 2022, 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 nine months ended September 30, 2022, we made contributions of $47.3 million and £2.9 million to our U.S. and U.K. defined contribution plans, respectively, and expect to make additional contributions of approximately $28 million and £1 million during the remainder of 2022. We made no contributions to our U.S. and U.K. qualified defined benefit pension plans during the nine months ended September 30, 2022 and we do not expect to make any contributions to either plan during the remainder of 2022. 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 long-term debt balance at September 30, 2022 was $3,429.2 million, net of deferred debt issuance costs of $33.7 million, and consisted primarily of unsecured senior notes and junior subordinated debt securities.

In September 2022, pursuant to privately negotiated transactions, we purchased, and the Provident Financing Trust I (the Trust) retired, $14.0 million aggregate liquidation amount of the Trust's 7.405% capital securities due 2038, which resulted in the reduction of a corresponding principal amount of our 7.405% junior subordinated debt securities due 2038 then held by the Trust. We incurred costs of $1.2 million related to the early retirement of the junior subordinated debt securities.

In August 2022, we entered into a five-year $350.0 million senior unsecured delayed draw term loan facility with a syndicate of lenders. Also in August 2022, we drew the entire amount of the term loan facility, which is scheduled to mature in August 2027. Amounts due under the term loan facility incur interest based on the prime rate, the federal funds rate or the Secured

Overnight Financing Rate (SOFR). The proceeds from the term loan facility were used to redeem $350.0 million aggregate principal amount of our 4.000% senior notes due 2024. We incurred costs of $3.0 million related to the early retirement of these unsecured senior notes.

In April 2022, we amended and restated our existing credit agreement providing for a five-year $500 million senior unsecured revolving credit facility with a syndicate of lenders. The credit facility, which was previously set to expire in April 2024, was extended through April 2027. We may request that the lenders' aggregate commitments of $500 million under the facility be increased by up to an additional $200 million. Certain of our traditional U.S. life insurance subsidiaries, Unum America, Provident, and Colonial Life, joined the agreement and may borrow under the credit facility, and we can elect to add additional insurance subsidiaries to the facility at any later date. Any obligation of a subsidiary under the credit facility is several only and not joint and is subject to an unconditional guarantee by Unum Group. We may also request, on up to two occasions, that the lenders' commitment termination dates be extended by one year. The credit facility provides for borrowings at an interest rate based on the prime rate, the federal funds rate or the SOFR. The credit facility also provides for the issuance of letters of credit subject to certain terms and limitations. At September 30, 2022, 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. The credit facility provides for borrowings at an interest rate based on the prime rate or the federal funds rate. No amounts have been drawn on the letter of credit. If drawings are made in the future, we may elect to borrow such amounts from the lenders pursuant to term loans made under the credit facility.

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. We 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. 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). We pay a semi-annual facility fee to the trust at a rate of 2.225% per year on the unexercised portion of the maximum amount of senior notes that we could issue and sell to the trust and we reimburse the trust for its expenses.

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

See "Debt, 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, 2021 for further discussion.

Commitments

At September 30, 2022, we had unfunded unconditional commitments of $0.7 million to fund tax credit partnership investments and $8.4 million to fund the purchase of transferable state tax credits. These commitments are recognized as liabilities in our consolidated balance sheets, with a corresponding recognition of other long-term investments and other assets, respectively. In addition, we had commitments of $30.5 million to fund certain investments in private placement fixed maturity securities and $806.2 million to fund certain private equity partnerships. As of September 30, 2022, we had $9.0 million of commercial mortgage loan commitments.

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, 2021. During the first nine months of 2022, 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 September 30, 2022, we held $100.1 million of cash collateral from securities lending agreements. The average cash collateral balance during the first nine months of 2022 was $96.4 million, and the maximum amount outstanding at any month end was $122.1 million. As of September 30, 2022, we held $139.1 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 nine months of 2022 was $186.6 million, and the maximum amount outstanding at any month end was $212.2 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 September 30, 2022, nor did we utilize any securities repurchase agreements during the first nine months of 2022. 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 September 30, 2022, we owned $17.3 million of FHLB common stock and had outstanding advances of $118.5 million from the regional FHLBs which were used for the purpose of investing in either short-term investments or fixed maturity securities. As of September 30, 2022, we have additional borrowing capacity of approximately $767.4 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)

	Nine Months Ended September 30	
	2022	2021
Net Cash Provided by Operating Activities	$ 1,061.8	$ 907.4
Net Cash Used by Investing Activities	(691.2)	(905.8)
Net Cash Used by Financing Activities	(302.3)	(76.9)
Net Change in Cash and Bank Deposits	$ 68.3	$ (75.3)

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.

Included in the change in insurance reserves and liabilities to reconcile net income to net cash provided by operating activities as reported in our consolidated statements of cash flows for the first nine months of 2022 and 2021 were the net reserve decreases related to the reserve assumption updates that occurred in the third quarters of 2022 and 2021. Also included in the change in insurance reserves and liabilities and net investment (gain) loss to reconcile net income to net cash provided by operating activities as reported in our consolidated statements of cash flows for the first nine months of 2021 were the impacts of the second phase of the Closed Block individual disability reinsurance transaction. Additionally, the operating cash flows for the first nine months of 2021 included $456.8 million of cash paid to the reinsurer related to the second phase of the Closed Block individual disability reinsurance transaction. See "Executive Summary" contained herein in this Item 2 and Notes 7 and 12 of the "Notes to Consolidated Financial Statements" for additional information on the Closed Block individual disability reinsurance transaction and the reserve assumption updates.

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 policyholder account deposits and withdrawals related to our universal life products.

Cash used to repurchase shares of Unum Group's common stock during the first nine months of 2022 was $136.1 million. There were no share repurchases made during the first nine months of 2021.

During the first nine months of 2022 and 2021, we paid dividends of $188.4 million and $178.0 million, respectively, to holders of Unum Group's common stock.

In September 2022, we purchased, and the Trust retired, $14.0 million aggregate liquidation amount of our 7.405% capital securities due 2038, for which we paid an additional $1.2 million in cash associated with the early retirement of this debt.

In August 2022, we entered into a five-year $350.0 million senior unsecured delayed draw term loan facility with a syndicate of lenders. Also in August 2022, we drew the entire amount of the term loan facility and used the proceeds to redeem $350.0 million aggregate principal amount of our 4.000% senior notes due 2024, for which we paid an additional $2.4 million in cash associated with the early retirement of this debt.

In June 2021, we issued $600.0 million of 4.125% senior notes due 2051 and received total proceeds of $588.1 million.

Also in June 2021, we redeemed $500.0 million aggregate principal amount of our 4.500% senior notes due 2025, for which we paid an additional $62.8 million in cash associated with the early retirement of this debt.

Included in financing cash flows during the first nine months of 2022 and 2021 was $5.2 million and $40.4 million, respectively, of cash received related to the ALR cohort volatility agreement with Commonwealth as a result of the Closed Block individual disability reinsurance transaction.

See Note 12 of the "Notes to Consolidated Financial Statements" contained herein in Item 1 and "Debt, Term Loan Facility, Credit Facilities, and Other Sources of Liquidity" contained in this Item 2 for further information.

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	Stable	Stable	Stable
Financial Strength Rating	Stable	Stable	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.

In July 2022, AM Best upgraded its financial strength rating on Unum Insurance Company from A- to A, reflecting the strategic importance of this subsidiary to Unum Group and also affirmed its financial strength rating for our other domestic insurance subsidiaries as well as their issuer credit ratings on our senior debt obligations. In addition, AM Best revised the outlook for the long-term issuer credit rating to positive from stable, reflecting strengthening in risk-adjusted capitalization, stable asset quality, adequate reserves, and enhanced liquidity. The AM Best outlook for financial strength rating remains stable.

There have been no other changes in the rating agencies' outlooks or ratings during 2022 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, 2021 for further information regarding our debt and financial strength ratings and the risks associated with rating changes.

ITEM 3. QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK

We are subject to various market risk exposures including interest rate risk and foreign exchange rate 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, 2021. During the first nine months of 2022, there was no substantive change to our market risk or the management of this risk.

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 September 30, 2022.

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 September 30, 2022 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, 2021.

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

The following table provides information about our share repurchase activity for the third quarter of 2022.

	(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 (2)
July 1 - July 31, 2022	330,042	$ 32.46	330,042	$ 94,344,567
August 1 - August 31, 2022	451,793	37.35	451,793	77,469,976
September 1 - September 30, 2022	382,990	39.16	382,990	62,470,410
Total	1,164,825		1,164,825	

(1) The average price paid per share excludes the cost of commissions.

(2) In October 2021, our board of directors authorized the repurchase of up to $250.0 million of Unum Group's outstanding common stock through December 2022.

ITEM 6. EXHIBITS

Index to Exhibits

(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: November 2, 2022	By:	/s/ Steven A. Zabel
		Steven A. Zabel
		Executive Vice President, Chief Financial Officer
Date: November 2, 2022	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: November 2, 2022

/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: November 2, 2022

/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 September 30, 2022 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: November 2, 2022

/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 September 30, 2022 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: November 2, 2022

/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.