UNITED STATES
SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

FORM 10-Q

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

For the quarterly period ended March 31, 2023

OR

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

1-16725
(Commission file number)

PRINCIPAL FINANCIAL GROUP, INC.

(Exact name of registrant as specified in its charter)

Delaware	**42-1520346**
(State or other jurisdiction of incorporation or organization)	(I.R.S. Employer Identification Number)

711 High Street, Des Moines, Iowa 50392
(Address of principal executive offices)

(515) 247-5111
(Registrant's telephone number, including area code)

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	PFG	Nasdaq Global Select Market

Indicate by check mark whether the Registrant (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the Registrant was required to file such reports) and (2) has been subject to such filing requirements for the past 90 days. Yes ☒ 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 ☒ No ☐

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, a smaller reporting company or an emerging growth company. See the definitions of "large accelerated filer," "accelerated filer," "smaller reporting company" and "emerging growth company" in Rule 12b-2 of the Exchange Act. (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 Exchange Act). Yes☐ No ☒

The total number of shares of the registrant's Common Stock, $0.01 par value, outstanding as of April 25, 2023, was 242,774,745.

PRINCIPAL FINANCIAL GROUP, INC.

TABLE OF CONTENTS

		Page
Part I - FINANCIAL INFORMATION		
Item 1.	Financial Statements	3
	Unaudited Condensed Consolidated Statements of Financial Position as of March 31, 2023 and December 31, 2022	3
	Unaudited Condensed Consolidated Statements of Operations for the three months ended March 31, 2023 and 2022	4
	Unaudited Condensed Consolidated Statements of Comprehensive Income for the three months ended March 31, 2023 and 2022	5
	Unaudited Condensed Consolidated Statements of Stockholders' Equity for the three months ended March 31, 2023 and 2022	6
	Unaudited Condensed Consolidated Statements of Cash Flows for the three months ended March 31, 2023 and 2022	7
	Notes to Unaudited Condensed Consolidated Financial Statements — March 31, 2023	8
Item 2.	Management's Discussion and Analysis of Financial Condition and Results of Operations	114
Item 3.	Quantitative and Qualitative Disclosures about Market Risk	145
Item 4.	Controls and Procedures	151
Part II — OTHER INFORMATION		
Item 1.	Legal Proceedings	152
Item 1A.	Risk Factors	152
Item 2.	Unregistered Sales of Equity Securities and Use of Proceeds	152
Item 6.	Exhibits	153
Signature		154

PART I — FINANCIAL INFORMATION

Item 1. Financial Statements

Principal Financial Group, Inc.
Condensed Consolidated Statements of Financial Position
(Unaudited)

	March 31, 2023	December 31, 2022 (As recast)
	(in millions)	
Assets		
Fixed maturities, available-for-sale	**$ 65,396.9**	$ 62,889.9
Fixed maturities, trading	**787.9**	760.7
Equity securities (2023 and 2022 include $761.6 million and $740.0 million related to consolidated variable interest entities)	**1,733.3**	1,708.6
Mortgage loans (2023 and 2022 include $1,166.7 million and $1,179.7 million related to consolidated variable interest entities)	**20,603.5**	20,629.8
Real estate (2023 and 2022 include $710.3 million and $649.0 million related to consolidated variable interest entities)	**2,300.1**	2,239.7
Policy loans	**788.0**	784.7
Other investments (2023 and 2022 include $396.6 million and $375.9 million related to consolidated variable interest entities)	**6,421.5**	6,122.0
Total investments	**98,031.2**	95,135.4
Cash and cash equivalents (2023 and 2022 include $44.5 million and $32.4 million related to consolidated variable interest entities)	**4,640.9**	4,848.0
Accrued investment income	**797.7**	742.1
Reinsurance recoverable and deposit receivable	**20,881.5**	21,154.0
Premiums due and other receivables	**3,837.6**	3,933.3
Deferred acquisition costs	**3,948.3**	3,948.0
Market risk benefit asset	**107.3**	109.2
Property and equipment	**986.2**	996.1
Goodwill	**1,636.1**	1,598.2
Other intangibles	**1,535.5**	1,533.3
Separate account assets (2023 and 2022 include $36,276.3 million and $34,193.8 million related to consolidated variable interest entities)	**162,000.8**	155,375.1
Other assets	**1,005.1**	1,205.6
Total assets	**$ 299,408.2**	$ 290,578.3
Liabilities		
Contractholder funds (2023 and 2022 include $329.2 million and $334.0 million related to consolidated variable interest entities)	**$ 42,958.0**	$ 42,825.3
Future policy benefits and claims	**44,699.9**	43,025.3
Market risk benefit liability	**194.4**	207.4
Other policyholder funds	**930.9**	911.5
Short-term debt	**24.2**	80.7
Long-term debt	**4,688.6**	3,997.0
Income taxes currently payable	**24.6**	19.2
Deferred income taxes	**1,417.1**	1,324.2
Separate account liabilities (2023 and 2022 include $36,276.3 million and $34,193.8 million related to consolidated variable interest entities)	**162,000.8**	155,375.1
Funds withheld payable	**20,524.4**	20,436.1
Other liabilities (2023 and 2022 include $101.2 million and $86.8 million related to consolidated variable interest entities)	**11,411.8**	12,096.7
Total liabilities	**288,874.7**	280,298.5
Redeemable noncontrolling interest (2023 and 2022 include $250.9 million and $235.3 million related to consolidated variable interest entities)	**272.7**	262.0
Stockholders' equity		
Common stock, par value $0.01 per share; 2,500.0 million shares authorized; 491.5 million and 489.8 million shares issued as of 2023 and 2022; 243.1 million and 243.5 million shares outstanding as of 2023 and 2022	**4.9**	4.9
Additional paid-in capital	**10,790.9**	10,740.4
Retained earnings	**16,398.8**	16,697.3
Accumulated other comprehensive loss	**(6,201.3)**	(6,879.0)
Treasury stock, at cost (248.4 million and 246.3 million shares as of 2023 and 2022)	**(10,775.4)**	(10,586.9)
Total stockholders' equity attributable to Principal Financial Group, Inc.	**10,217.9**	9,976.7
Noncontrolling interest	**42.9**	41.1
Total stockholders' equity	**10,260.8**	10,017.8
Total liabilities and stockholders' equity	**$ 299,408.2**	$ 290,578.3

See accompanying notes.

Principal Financial Group, Inc.
Condensed Consolidated Statements of Operations
(Unaudited)

	For the three months ended March 31,	
	2023	**2022**
		(As recast)
	(in millions, except per share data)	
Revenues		
Premiums and other considerations	**$ 1,448.6**	$ 887.4
Fees and other revenues	**995.3**	1,219.2
Net investment income	**986.7**	1,125.5
Net realized capital losses (1)	**(66.0)**	(136.6)
Net realized capital gains on funds withheld assets (1)	**81.0**	—
Change in fair value of funds withheld embedded derivative	**(626.6)**	—
Total revenues	**2,819.0**	3,095.5
Expenses		
Benefits, claims and settlement expenses	**1,773.9**	1,490.7
Liability for future policy benefits remeasurement (gain) loss	**(5.6)**	13.4
Market risk benefit remeasurement (gain) loss	**(2.9)**	8.9
Dividends to policyholders	**23.2**	23.1
Operating expenses	**1,242.9**	1,181.0
Total expenses	**3,031.5**	2,717.1
Income (loss) before income taxes	**(212.5)**	378.4
Income taxes (benefits)	**(78.0)**	35.2
Net income (loss)	**(134.5)**	343.2
Net income attributable to noncontrolling interest	**5.6**	4.5
Net income (loss) attributable to Principal Financial Group, Inc.	**$ (140.1)**	$ 338.7
Earnings per common share		
Basic earnings per common share	**$ (0.58)**	$ 1.31
Diluted earnings per common share	**$ (0.58)**	$ 1.28

(1) Includes realized and unrealized gains (losses). See Note 3, Investments, for further details.

See accompanying notes.

Principal Financial Group, Inc.
Condensed Consolidated Statements of Comprehensive Income
(Unaudited)

	For the three months ended March 31,	
	2023	**2022**
		(As recast)
	(in millions)	
Net income (loss)	**$ (134.5)**	$ 343.2
Other comprehensive income (loss), net:		
Net unrealized gains (losses) on available-for-sale securities	**1,078.1**	(4,112.2)
Net unrealized losses on derivative instruments	**—**	(18.8)
Liability for future policy benefits discount rate remeasurement gain (loss)	**(540.9)**	2,519.1
Market risk benefit nonperformance risk remeasurement gain	**6.0**	73.7
Foreign currency translation adjustment	**132.1**	155.1
Net unrecognized postretirement benefit obligation	**3.8**	6.7
Other comprehensive income (loss)	**679.1**	(1,376.4)
Comprehensive income (loss)	**544.6**	(1,033.2)
Comprehensive income attributable to noncontrolling interest	**7.0**	5.9
Comprehensive income (loss) attributable to Principal Financial Group, Inc.	**$ 537.6**	$ (1,039.1)

See accompanying notes.

Principal Financial Group, Inc.
Condensed Consolidated Statements of Stockholders' Equity
(Unaudited)

	Common stock	Additional paid-in capital	Retained earnings	Accumulated other comprehensive loss	Treasury stock	Noncontrolling interest	Total stockholders' equity
				(in millions)			
Balances as of January 1, 2022 (As recast)	$ 4.8	$ 10,495.0	$ 12,594.2	$ (2,084.1)	$ (8,925.8)	$ 56.4	$ 12,140.5
Common stock issued	0.1	19.5	—	—	—	—	19.6
Stock-based compensation	—	31.9	(2.9)	—	—	—	29.0
Treasury stock acquired, common	—	—	—	—	(754.1)	—	(754.1)
Accelerated share repurchase	—	(140.0)	—	—	—	—	(140.0)
Dividends to common stockholders	—	—	(167.0)	—	—	—	(167.0)
Distributions to noncontrolling interest	—	—	—	—	—	(16.1)	(16.1)
Contributions from noncontrolling interest	—	—	—	—	—	1.5	1.5
Purchase of subsidiary shares from noncontrolling interest (1)	—	(4.3)	—	—	—	(2.4)	(6.7)
Adjustments to redemption amount of redeemable noncontrolling interest	—	0.3	—	—	—	(0.4)	(0.1)
Net income (1)	—	—	338.7	—	—	14.8	353.5
Other comprehensive loss (1)	—	—	—	(1,377.8)	—	1.3	(1,376.5)
Balances as of March 31, 2022 (As recast)	$ 4.9	$ 10,402.4	$ 12,763.0	$ (3,461.9)	$ (9,679.9)	$ 55.1	$ 10,083.6
Balances as of January 1, 2023	**$ 4.9**	**$ 10,740.4**	**$ 16,697.3**	**$ (6,879.0)**	**$ (10,586.9)**	**$ 41.1**	**$ 10,017.8**
Common stock issued	**—**	**19.8**	**—**	**—**	**—**	**—**	**19.8**
Stock-based compensation	**—**	**31.4**	**(2.9)**	**—**	**—**	**0.1**	**28.6**
Treasury stock acquired, common	**—**	**—**	**—**	**—**	**(188.5)**	**—**	**(188.5)**
Dividends to common stockholders	**—**	**—**	**(155.5)**	**—**	**—**	**—**	**(155.5)**
Distributions to noncontrolling interest	**—**	**—**	**—**	**—**	**—**	**(2.1)**	**(2.1)**
Contributions from noncontrolling interest	**—**	**—**	**—**	**—**	**—**	**1.4**	**1.4**
Purchase of subsidiary shares from noncontrolling interest (1)	**—**	**(1.2)**	**—**	**—**	**—**	**—**	**(1.2)**
Adjustments to redemption amount of redeemable noncontrolling interest	**—**	**0.5**	**—**	**—**	**—**	**0.1**	**0.6**
Net loss (1)	**—**	**—**	**(140.1)**	**—**	**—**	**1.1**	**(139.0)**
Other comprehensive income (1)	**—**	**—**	**—**	**677.7**	**—**	**1.2**	**678.9**
Balances as of March 31, 2023	**$ 4.9**	**$ 10,790.9**	**$ 16,398.8**	**$ (6,201.3)**	**$ (10,775.4)**	**$ 42.9**	**$ 10,260.8**

(1) Excludes amounts attributable to redeemable noncontrolling interest. See Note 15, Stockholders' Equity, for further details.

See accompanying notes.

Principal Financial Group, Inc.
Condensed Consolidated Statements of Cash Flows
(Unaudited)

	For the three months ended March 31,	
	2023	2022
	(in millions)	
Net cash provided by operating activities	**$ 695.3**	$ 31.5
Investing activities		
Fixed maturities available-for-sale and equity securities with intent to hold:		
Purchases	**(3,874.5)**	(5,413.1)
Sales	**1,714.5**	4,358.9
Maturities	**1,318.0**	2,045.7
Mortgage loans acquired or originated	**(318.2)**	(1,191.9)
Mortgage loans sold or repaid	**439.9**	407.7
Real estate acquired	**(41.2)**	(86.8)
Real estate sold	**—**	71.6
Net purchases of property and equipment	**(31.4)**	(25.4)
Net change in other investments	**(311.2)**	(39.9)
Net cash provided by (used in) investing activities	**(1,104.1)**	126.8
Financing activities		
Issuance of common stock	**19.8**	19.6
Accelerated share repurchase	**—**	(140.0)
Acquisition of treasury stock	**(188.5)**	(754.1)
Payments for financing element derivatives	**(10.5)**	(12.9)
Purchase of subsidiary shares from noncontrolling interest	**(2.8)**	(6.7)
Dividends to common stockholders	**(155.5)**	(167.0)
Issuance of long-term debt	**691.5**	—
Principal repayments of long-term debt	**(0.6)**	(0.5)
Net proceeds from (repayments of) short-term borrowings	**(61.2)**	193.2
Investment contract deposits	**3,264.3**	2,441.7
Investment contract withdrawals	**(3,047.2)**	(1,790.9)
Net increase (decrease) in banking operation deposits	**(307.6)**	468.5
Net cash provided by financing activities	**201.7**	250.9
Net increase (decrease) in cash and cash equivalents	**(207.1)**	409.2
Cash and cash equivalents at beginning of period	**4,848.0**	2,332.0
Cash and cash equivalents at end of period	**$ 4,640.9**	$ 2,741.2

See accompanying notes.

Principal Financial Group, Inc.
Notes to Condensed Consolidated Financial Statements
March 31, 2023
(Unaudited)

1. Nature of Operations and Significant Accounting Policies

Basis of Presentation

The accompanying unaudited condensed consolidated financial statements of Principal Financial Group, Inc. ("PFG") have been prepared in conformity with accounting principles generally accepted in the U.S. ("U.S. GAAP") for interim financial statements and with the instructions to Form 10-Q and Article 10 of Regulation S-X. In the opinion of management, all adjustments (consisting of normal recurring accruals) considered necessary for a fair presentation have been included. Operating results for the three months ended March 31, 2023, are not necessarily indicative of the results that may be expected for the year ended December 31, 2023, especially when considering risks and uncertainties that may impact our business, results of operations, financial condition and liquidity. Our use of estimates and assumptions affect amounts reported and disclosed and includes, but is not limited to, the fair value of investments in the absence of quoted market values, investment impairments and valuation allowances, the fair value of derivatives, funds withheld embedded derivative, deferred acquisition costs ("DAC") and other actuarial balances, measurement of goodwill and intangible assets, the liability for future policy benefits and claims, the value of pension and other postretirement benefits and accounting for income taxes and the valuation of deferred tax assets. Our estimates and assumptions could change in the future. Our results of operations and financial condition may also be impacted by other uncertainties including evolving regulatory, legislative and standard-setter accounting interpretations and guidance.

These interim unaudited condensed consolidated financial statements should be read in conjunction with our annual audited financial statements as of December 31, 2022, included in our Form 10-K for the year ended December 31, 2022, filed with the United States Securities and Exchange Commission ("SEC"). The accompanying condensed consolidated statement of financial position as of December 31, 2022, has been derived from the audited consolidated statement of financial position but does not include all of the information and footnotes required by U.S. GAAP for complete financial statements.

On January 1, 2023, we adopted the guidance commonly referred to as long-duration targeted improvements ("LDTI"), which updates certain requirements in the accounting for long-duration insurance and annuity contracts. The guidance was applied as of the January 1, 2021, transition date. As such, results for 2022 and 2021 have been recast and are also presented under the new LDTI guidance.

In the first quarter of 2023 we implemented changes to our organizational structure to better align businesses, distribution teams and product offerings for future growth. We integrated our global asset management and international pension businesses under one segment, Principal Asset Management. Results of our historically reported Principal Global Investors and Principal International segments are reported within this segment. Additionally, we are now reporting results for our Retirement and Income Solutions segment in total and not separated into Fee and Spread components. Finally, we updated the name of our U.S. Insurance Solutions segment to Benefits and Protection and will continue to report the results of Specialty Benefits and Life Insurance within this segment. Our segment results have been modified to reflect these changes, which did not have an impact on our consolidated financial statements. See Note 17, Segment Information, for financial results of our segments.

During the second quarter of 2022, we closed a coinsurance with funds withheld reinsurance transaction with Talcott Life &Annuity Re, Ltd. ("Talcott Life & Annuity Re"), a limited liability company organized under the laws of the Cayman Islands and an affiliate of Talcott Resolution Life, Inc., a subsidiary of Sixth Street, pursuant to which we ceded our in-force U.S. retail fixed annuity and universal life insurance with secondary guarantee ("ULSG") blocks of business (the "Reinsurance Transaction"). The economics of the Reinsurance Transaction were effective as of January 1, 2022. See Note 10, Reinsurance, for further details.

Certain reclassifications have been made to prior periods relating to the presentation of our loss adjustment expense ("LAE") liability and the change in that liability to conform to the current presentation. See Note 8, Future Policy Benefits and Claims. The LAE liability was previously reported in other liabilities in the consolidated statements of financial position and the change in the liability was previously reported in operating expenses in the consolidated statements of operations. The LAE liability is now reported in future policy benefits and claims in the consolidated statements of financial position and the change in the liability is now reported in benefits, claims and settlement expenses in the consolidated statements of operations.

Consolidation

We have relationships with various special purpose entities and other legal entities that must be evaluated to determine if the entities meet the criteria of a variable interest entity ("VIE") or a voting interest entity ("VOE"). This assessment is performed by reviewing contractual, ownership and other rights, including involvement of related parties, and requires use of judgment. First, we determine if we hold a variable interest in an entity by assessing if we have the right to receive expected losses and expected residual returns of the entity. If we hold a variable interest, then the entity is assessed to determine if it is a VIE. An entity is a VIE if the equity at risk is not sufficient to support its activities, if the equity holders lack a controlling financial interest or if the entity is structured with non-substantive voting rights. In addition to the previous criteria, if the entity is a limited partnership or similar entity, it is a VIE if the limited partners do not have the power to direct the entity's most significant activities through substantive kick-out rights or participating rights. A VIE is evaluated to determine the primary beneficiary. The primary beneficiary of a VIE is the enterprise with (1) the power to direct the activities of a VIE that most significantly impact the entity's economic performance and (2) the obligation to absorb losses of the entity or the right to receive benefits from the entity that could potentially be significant to the VIE. When we are the primary beneficiary, we are required to consolidate the entity in our financial statements. We reassess our involvement with VIEs on a quarterly basis. For further information about VIEs, refer to Note 2, Variable Interest Entities.

If an entity is not a VIE, it is considered a VOE. VOEs are generally consolidated if we own a greater than 50% voting interest. If we determine our involvement in an entity no longer meets the requirements for consolidation under either the VIE or VOE models, the entity is deconsolidated. Entities in which we have management influence over the operating and financing decisions but are not required to consolidate, other than investments accounted for at fair value under the fair value option, are reported using the equity method.

Recent Accounting Pronouncements

Description	Date of adoption	Effect on our consolidated financial statements or other significant matters
Standards adopted:		
Targeted improvements to the accounting for long-duration insurance contracts This authoritative guidance updated certain requirements in the accounting for long-duration insurance and annuity contracts. 1. The assumptions used to calculate the liability for future policy benefits on traditional and limited-payment contracts are reviewed and updated periodically. Cash flow assumptions are reviewed at least annually and updated when necessary with the impact recognized in net income. Discount rate assumptions are prescribed as the current upper-medium grade (low credit risk) fixed income instrument yield and are updated quarterly with the impact recognized in other comprehensive income ("OCI"). 2. Market risk benefits, which are contracts or contract features that provide protection to the policyholder from capital market risk and expose us to other-than-nominal capital market risk, are measured at fair value. The periodic change in fair value is recognized in net income with the exception of the periodic change in fair value related to our own nonperformance risk, which is recognized in OCI.	January 1, 2023	We created a governance framework and a plan to support implementation of the standard. Our implementation and evaluation process included, but was not limited to the following: ● identifying and documenting contracts and contract features in scope of the guidance; ● identifying the actuarial models, systems and processes to be updated; ● evaluating and selecting our systems solutions for implementing the new guidance; ● building models and evaluating preliminary output as models are developed; ● evaluating and finalizing our key accounting policies; ● assessing the impact to our chart of accounts; ● developing format and content of new disclosures;

Principal Financial Group, Inc.
Notes to Condensed Consolidated Financial Statements – (continued)
March 31, 2023
(Unaudited)

Description	Date of adoption	Effect on our consolidated financial statements or other significant matters
3. DAC and other actuarial balances for all insurance and annuity contracts are amortized on a constant basis over the expected term of the related contracts. 4. Additional disclosures are required, including disaggregated rollforwards of significant insurance liabilities and other account balances as well as disclosures about significant inputs, judgments, assumptions and methods used in measurement. The guidance for the liability for future policy benefits for traditional and limited-payment contracts and DAC was applied on a modified retrospective basis; that is, to contracts in force as of the beginning of the earliest period presented (January 1, 2021, also referred to as the transition date) based on their existing carrying amounts. An entity could elect to apply the changes retrospectively. The guidance for market risk benefits was applied retrospectively.		● conducting financial dry runs using model output and updated chart of accounts; ● evaluating transition requirements and impacts and ● establishing and documenting appropriate internal controls. This guidance changed how we account for many of our insurance and annuity products. The guidance did not have a material impact on our consolidated statements of operations. Further details about transition impacts of the guidance are included under the caption “Adoption of Targeted Improvements to the Accounting for Long-Duration Insurance Contracts Guidance.” The additional disclosure requirements can be found in the following notes: ● Note 5, Deferred Acquisition Costs and Other Actuarial Balances ● Note 6, Separate Account Balances ● Note 7, Contractholder Funds ● Note 8, Future Policy Benefits and Claims ● Note 9, Market Risk Benefits
Troubled debt restructurings and vintage disclosures This authoritative guidance eliminated the accounting requirements for Troubled Debt Restructurings (“TDRs”) by creditors and enhanced the disclosure requirements for certain loan refinancing and restructuring by creditors when a borrower is experiencing financial difficulty. The update required entities to disclose current-period gross write-offs by year of origination for financing receivables and net investments in leases. The amendments in this update were applied prospectively, except for the transition method related to the recognition and measurement of troubled debt restructurings, for which an entity had the option to apply a modified retrospective transition method. Early adoption was permitted.	January 1, 2023	This guidance did not have a material impact on our consolidated financial statements.

Description	Date of adoption	Effect on our consolidated financial statements or other significant matters
Targeted improvements to accounting for hedging activities – portfolio layer method This authoritative guidance is intended to further align the economics of a company's risk management activities in its financial statements with hedge accounting requirements. The guidance expanded the current single-layer method to allow multiple hedge layers of a single closed portfolio. Non-prepayable assets can also be included in the same portfolio. This guidance also clarified the current guidance on accounting for fair value basis adjustments applicable to both a single hedged layer and multiple hedged layers. Upon adoption, the application of these hedge strategies was applied prospectively. Early adoption was permitted.	January 1, 2023	This guidance did not have a material impact on our consolidated financial statements.
Facilitation of the effects of reference rate reform on financial reporting This authoritative guidance provided optional expedients and exceptions for contracts and hedging relationships affected by reference rate reform. An entity could elect not to apply certain modification accounting requirements to contracts affected by reference rate reform and instead account for the modified contract as a continuation of the existing contract. Also, an entity could apply optional expedients to continue hedge accounting for hedging relationships in which the critical terms changed due to reference rate reform. This guidance eased the financial reporting impacts of reference rate reform on contracts and hedging relationships and was effective until December 31, 2022. A subsequent amendment issued in December 2022 extended the relief date from December 31, 2022, to December 31, 2024, and was effective upon issuance.	March 12, 2020	We adopted the guidance upon issuance prospectively and elected the applicable optional expedients and exceptions for contracts and hedging relationships impacted by reference rate reform through December 31, 2024. The guidance did not have an impact on our consolidated financial statements upon adoption.

When we adopt new accounting standards, we have a process in place to perform a thorough review of the pronouncement, identify the financial statement and system impacts and create an implementation plan among our impacted business units to ensure we are compliant with the pronouncement on the date of adoption. This includes having effective processes and controls in place to support the reported amounts.

Adoption of Targeted Improvements to the Accounting for Long-Duration Insurance Contracts Guidance

As mentioned above, we adopted LDTI on January 1, 2023.

Principal Financial Group, Inc.
Notes to Condensed Consolidated Financial Statements – (continued)
March 31, 2023
(Unaudited)

For traditional and limited-payment long-duration contracts, we review and update, if necessary, assumptions used to measure cash flows for the liability for future policy benefits during the third quarter of each year, or more frequently if evidence suggests assumptions should be revised. The change in our liability estimate as a result of updating cash flow assumptions is recognized in net income. Actual cash flows are grouped into issue-year cohorts for the liability calculation and updated quarterly. Cohorts are used as the unit of account for liability measurement. Discount rate assumptions are prescribed as the current upper-medium grade (low-credit-risk) fixed-income instrument yield. The discount rate is updated quarterly at each reporting date with the impact recognized in OCI. The provision for risk of adverse deviation is eliminated, as is premium deficiency, or loss recognition, testing. We also removed unrealized gain (loss) adjustments, previously recorded in accumulated other comprehensive income ("AOCI"), attributable to the impact of unrealized gains and losses on premium deficiency testing.

Under LDTI, market risk benefits ("MRBs"), which are contracts or contract features that provide protection to the policyholder from capital market risk and expose us to other-than-nominal capital market risk, are measured at fair value. The periodic change in fair value is recognized in net income with the exception of the periodic change in fair value related to our own nonperformance risk, which is recognized in OCI. Certain contract features previously accounted for as an embedded derivative or as an additional liability for annuitization benefits or death or other insurance benefits are recorded as MRBs under LDTI.

LDTI simplified the amortization of DAC and other actuarial balances such as the unearned revenue liability and sales inducement asset for long-duration contracts. These balances were previously amortized in proportion to premiums, estimated gross profits, estimated gross margins or estimated gross revenues; however, these balances are now amortized on a constant level basis over the expected life of the related contracts. Impairment testing is no longer applicable for DAC. We also removed unrealized gain (loss) adjustments, previously recorded in AOCI, as the LDTI amortization is not impacted by investment gains and losses.

LDTI also requires disaggregated rollforwards for the liability for future policy benefits, additional liability for certain benefit features, MRBs, DAC and other actuarial balances required to be amortized on a basis consistent with DAC. Although the accounting for the additional liability for certain benefit features, separate account liabilities and contractholder funds does not change under LDTI, the guidance requires disaggregated rollforwards for those balances. Further, for certain actuarial balances, disclosures are required for the significant inputs, judgments, assumptions and methods used in measurement, including changes in those inputs, judgments and assumptions, and the effect of those changes on measurement.

The LDTI guidance is not prescriptive as to the appropriate level of aggregation for disclosures; however, amounts from different reportable segments cannot be aggregated. Factors to consider in determining the level of aggregation for disclosures include the type of coverage, geography and market or type of customer. We have identified the following levels of aggregation for LDTI disclosures. The disclosures do not include levels of aggregation for insignificant balances.

- Retirement and Income Solutions:
  - Workplace savings and retirement solutions – Group annuity contracts offered to the plan sponsors of defined contribution plans or defined benefit plans
  - Individual variable annuities – Variable deferred annuities offered to individuals for both qualified and nonqualified retirement savings
  - Pension risk transfer – Single premium group annuities offered to pension plan sponsors and other institutions
  - Individual fixed deferred annuities – An exited business that offered single premium deferred annuity contracts and flexible premium deferred annuities ("FPDAs") to individuals for both qualified and nonqualified retirement savings
  - Individual fixed income annuities – An exited business that offered single premium immediate annuities ("SPIAs") and deferred income annuities ("DIAs") to individuals for both qualified and nonqualified retirement savings
  - Investment only – Primarily guaranteed investment contracts ("GICs") and funding agreements offered to retirement plan sponsors and other institutions
- Principal Asset Management – Principal International
  - Latin America:
    - Individual fixed income annuities – SPIAs offered to individuals

    - Pension – Certain retirement accumulation products where the segregated funds and associated obligation to the client are consolidated within our financial statements as separate account assets and liabilities and are only in the scope of LDTI disclosures for separate accounts
  - Asia:
    - Guaranteed pension – Pension savings schemes offered to both employers and employees
- Benefits and Protection – Specialty Benefits:
  - Individual disability – Disability insurance providing protection to individuals and/or business owners
- Benefits and Protection – Life Insurance:
  - Universal life – Universal life, variable universal life and indexed universal life insurance products offered to individuals and/or business owners, which will be collectively referred to hereafter as "universal life" contracts; includes our exited ULSG business
  - Term life – Term life insurance products offered to individuals and/or business owners
  - Participating life – Participating life insurance contracts offered to individuals, some of which are part of a closed block of business and are only in the scope of LDTI disclosures for DAC
- Corporate:
  - Long-term care insurance – A closed block of long-term care insurance that is fully reinsured, which was offered on both a group and individual basis.

For the separate account liability disclosures, our Retirement and Income Solutions segment will use a Group retirement contracts level of aggregation. This consists primarily of separate account liabilities for the workplace savings and retirement solutions business as well as amounts for the investment only and pension risk transfer businesses.

Impact of Adoption

We adopted the guidance for the liability for future policy benefits for traditional and limited-payment contracts and DAC and other actuarial balances on a modified retrospective basis; that is, to contracts in force as of the beginning of the earliest period presented based on their existing carrying amounts. We adopted the guidance for MRBs and cost of reinsurance retrospectively. Results for reporting periods beginning January 1, 2021, within our consolidated financial statements are presented under the new guidance.

Principal Financial Group, Inc.
Notes to Condensed Consolidated Financial Statements – (continued)
March 31, 2023
(Unaudited)

A cumulative effect adjustment of $159.9 million was recorded as a decrease to retained earnings and a cumulative effect adjustment of $5,128.0 million was recorded as a decrease to AOCI as of January 1, 2021, as shown below.

	Retained earnings			Accumulated other comprehensive income		
	Pre-Tax	Tax	After-Tax	Pre-Tax	Tax	After-Tax
			(in millions)			
DAC and other actuarial balances:						
Adjustment for reversal of unrealized loss from AOCI (1)(2)	$ —	$ —	$ —	$ 421.5	$ (88.5)	$ 333.0
Cost of reinsurance asset (liability):						
Cumulative effect of amortization basis change	(9.0)	1.9	(7.1)	—	—	—
Adjustment of unrealized loss in AOCI	—	—	—	16.1	(3.4)	12.7
Reinsurance recoverable:						
Adjustment for reversal of unrealized gain from AOCI (2)	—	—	—	(45.5)	9.5	(36.0)
Adjustment under the modified retrospective approach (3)	31.4	(6.6)	24.8	—	—	—
Effect of remeasurement of the recoverable at the current discount rate	—	—	—	201.8	(42.4)	159.4
Liability for future policy benefits:						
Adjustment for reversal of unrealized loss from AOCI (2)	—	—	—	1,965.3	(452.2)	1,513.1
Adjustment under the modified retrospective approach (3)	(119.1)	29.8	(89.3)	17.9	(4.8)	13.1
Effect of remeasurement of the liability at the current discount rate	—	—	—	(9,043.1)	2,024.8	(7,018.3)
Market risk benefits:						
Cumulative effect of changes in the nonperformance risk between the original contract issue date and the transition date	—	—	—	(4.8)	1.0	(3.8)
Adjustments to the host contract for differences between previous carrying amount and measurement of the MRB	20.9	(4.4)	16.5	—	—	—
Retained earnings adjustment for the valuation of contracts as MRBs (exclusive of nonperformance risk changes)	(258.8)	54.4	(204.4)	—	—	—
Reclassification of nonperformance risk changes between retained earnings and AOCI (4)	108.4	(22.5)	85.9	(108.4)	22.5	(85.9)
Investment in equity method subsidiary impacted by LDTI (5)	22.8	(9.1)	13.7	(25.5)	10.2	(15.3)
Total impact on opening balance as of January 1, 2021	$ (203.4)	$ 43.5	$ (159.9)	$ (6,604.7)	$ 1,476.7	$ (5,128.0)

(1) Includes the impact for DAC, sales inducement asset and the unearned revenue liability. We have not included the disaggregated rollforwards for the sales inducement asset within the footnote disclosures due to immateriality.
(2) Prior period unrealized gain (loss) adjustments in AOCI were reversed as an adjustment to the opening balance of AOCI upon the adoption of LDTI.
(3) The impact of loss cohorts, those with net premiums in excess of gross premiums, and cohorts with negative reserves, was reflected as an adjustment to the opening balance of retained earnings upon adoption of LDTI. The foreign currency translation related to the liability for future policy benefits was reflected as an adjustment to the opening balance of AOCI.
(4) The cumulative effect of changes in the nonperformance risk between the original contract issue date and the transition date for contract features previously accounted for as an embedded derivative was recorded as a reclassification from retained earnings to AOCI.
(5) Reflects the impact from our equity method investment in Brasilprev Seguros e Previdencia, which had transition impacts for the liability for future policy benefits and the additional liability for certain benefit features.

Principal Financial Group, Inc.
Notes to Condensed Consolidated Financial Statements – (continued)
March 31, 2023
(Unaudited)

The table below reflects the increase (decrease) to the impacted line items in the consolidated statements of financial position related to the cumulative effect adjustment as of January 1, 2021.

	Increase (decrease)
	(in millions)
Assets	
Other investments (1)	$ (1.6)
Reinsurance recoverable and deposit receivable	187.7
Premiums due and other receivables (2)	(24.4)
Deferred acquisition costs	450.9
Market risk benefit asset (3)	18.9
Other assets (4)	19.3
Total assets	$ 650.8
Liabilities	
Contractholder funds (5)	$ (397.9)
Future policy benefits and claims (6)	7,143.4
Market risk benefit liability (3)	663.5
Other policyholder funds (7)	48.8
Deferred income taxes	(1,519.1)
Total liabilities	5,938.7
Stockholders' equity	
Retained earnings	(159.9)
Accumulated other comprehensive income	(5,128.0)
Total stockholders' equity	(5,287.9)
Total liabilities and stockholders' equity	$ 650.8

(1) Reflects the impact on our investment in Brasilprev Seguros e Previdencia, which is accounted for using the equity method.
(2) Includes the impact on the cost of reinsurance asset.
(3) This is a new line item on the consolidated statements of financial position as a result of implementing LDTI. These contract features were previously recorded as embedded derivatives within contractholder funds or additional liabilities for certain benefit features within future policy benefits and claims on the consolidated statements of financial position.
(4) Reflects the impact on the sales inducement asset.
(5) Reflects the impact of contract features previously recorded as embedded derivatives that are recorded as MRBs under LDTI.
(6) Includes the impact on the liability for future policy benefits and cost of reinsurance liability. Also includes the impact on contract features classified as additional liabilities for certain benefit features that are recorded as MRBs under LDTI.
(7) Reflects the impact on the unearned revenue liability.

The disaggregated rollforwards below reconcile the ending asset or liability balances as of December 31, 2020, to the opening balance as of January 1, 2021, which is the earliest period presented within the consolidated financial statements, for those balances impacted by LDTI with associated disaggregated disclosure requirements. The level of aggregation presented within the rollforwards is consistent with the disaggregated rollforwards required by the guidance. The balances as of December 31, 2020, shown in the rollforwards below, do not equal amounts reported on the consolidated statements of financial position as they do not include balances for short-duration contracts, insignificant balances not included in our levels of aggregation for disclosures and other amounts not within the scope of the disaggregated rollforwards.

Principal Financial Group, Inc.
Notes to Condensed Consolidated Financial Statements – (continued)
March 31, 2023
(Unaudited)

Deferred Acquisition Costs

	Balance as of December 31, 2020	Adjustment for reversal of unrealized loss from AOCI (1)	Balance as of January 1, 2021 (2)
		(in millions)	
Retirement and Income Solutions:			
Workplace savings and retirement solutions	$ 424.6	$ 52.6	$ 477.2
Individual variable annuities	281.7	0.2	281.9
Pension risk transfer (3)	—	—	—
Individual fixed deferred annuities	11.5	181.2	192.7
Investment only	12.6	—	12.6
Total Retirement and Income Solutions	730.4	234.0	964.4
Benefits and Protection:			
Specialty Benefits:			
Individual disability	529.8	—	529.8
Life Insurance:			
Universal life	1,443.0	165.3	1,608.3
Term life	607.9	—	607.9
Participating life	60.3	51.6	111.9
Total Benefits and Protection	2,641.0	216.9	2,857.9
Total	$ 3,371.4	$ 450.9	$ 3,822.3

(1) Prior period adjustments in AOCI were reversed as an adjustment to the opening balance of AOCI upon the adoption of LDTI.
(2) Does not include DAC for short-duration contracts or insignificant balances for long-duration contracts not included in our levels of aggregation for disclosures. Refer to Note 5, Deferred Acquisition Costs and Other Actuarial Balances, for further information on DAC.
(3) This product began recording DAC upon implementing LDTI.

The balances and changes in DAC for 2021 for each level of aggregation were as follows:

Retirement and Income Solutions

	For the year ended December 31, 2021				
	Workplace savings and retirement solutions	Individual variable annuities	Pension risk transfer (1)	Individual fixed deferred annuities	Investment only
			(in millions)		
Balance at beginning of period	$ 477.2	$ 281.9	$ —	$ 192.7	$ 12.6
Costs deferred	50.1	26.4	2.7	7.6	9.1
Amortized to expense	(38.3)	(27.1)	—	(38.1)	(3.6)
Balance at end of period	$ 489.0	$ 281.2	$ 2.7	$ 162.2	$ 18.1

(1) Amortization during 2021 was nominal.

Principal Financial Group, Inc.
Notes to Condensed Consolidated Financial Statements – (continued)
March 31, 2023
(Unaudited)

Benefits and Protection

	For the year ended December 31, 2021			
	Specialty Benefits	Life Insurance		
	Individual disability	Universal life	Term life	Participating life
	(in millions)			
Balance at beginning of period	$ 529.8	$ 1,608.3	$ 607.9	$ 111.9
Costs deferred	89.8	84.3	126.5	1.9
Amortized to expense	(38.9)	(96.4)	(55.5)	(11.5)
Balance at end of period	$ 580.7	$ 1,596.2	$ 678.9	$ 102.3

Unearned Revenue Liability

	Balance as of December 31, 2020	Adjustment for reversal of unrealized gain from AOCI (1)	Balance as of January 1, 2021 (2)
		(in millions)	
Benefits and Protection - Life Insurance:			
Universal life	$ 335.6	$ 48.8	$ 384.4
Total	$ 335.6	$ 48.8	$ 384.4

(1) Prior period adjustments in AOCI were reversed as an adjustment to the opening balance of AOCI upon the adoption of LDTI.
(2) Reported within other policyholder funds in the consolidated statements of financial position. Refer to Note 5, Deferred Acquisition Costs and Other Actuarial Balances, for further information on the unearned revenue liability.

Benefits and Protection

The balances and changes in the unearned revenue liability for 2021 for Life Insurance – Universal life were as follows:

	For the year ended December 31, 2021
	(in millions)
Balance at beginning of period	$ 384.4
Deferrals	66.1
Revenue recognized	(25.2)
Balance at end of period	$ 425.3

Principal Financial Group, Inc.
Notes to Condensed Consolidated Financial Statements – (continued)
March 31, 2023
(Unaudited)

Liability for Future Policy Benefits

	Balance as of December 31, 2020	Adjustment for reversal of unrealized loss from AOCI (1)	Adjustment under the modified retrospective approach (2)	Effect of remeasurement of the liability at the current discount rate (3)	Balance as of January 1, 2021 (4)
			(in millions)		
Retirement and Income Solutions:					
Pension risk transfer	$ 21,982.8	$ (947.0)	$ —	$ 4,827.9	$ 25,863.7
Individual fixed income annuities	6,147.2	(215.0)	0.1	1,213.5	7,145.8
Total Retirement and Income Solutions	28,130.0	(1,162.0)	0.1	6,041.4	33,009.5
Principal Asset Management - Principal International:					
Latin America:					
Individual fixed income annuities	5,038.4	(634.6)	61.7	2,096.0	6,561.5
Benefits and Protection:					
Specialty Benefits:					
Individual disability	2,173.8	(168.7)	2.4	493.4	2,500.9
Life Insurance:					
Term life	834.5	—	7.0	318.8	1,160.3
Total Benefits and Protection	3,008.3	(168.7)	9.4	812.2	3,661.2
Corporate:					
Long-term care insurance	134.1	—	30.0	93.5	257.6
Total	$ 36,310.8	$ (1,965.3)	$ 101.2	$ 9,043.1	$ 43,489.8

(1) Prior period adjustments in AOCI related to premium deficiency testing were reversed as an adjustment to the opening balance of AOCI upon the adoption of LDTI.
(2) As a result of updating cash flow assumptions and measuring the liability for future policy benefits at the issue-year cohort level, the impact of loss cohorts, those with net premiums in excess of gross premiums, and cohorts with negative reserves, was reflected as an adjustment to the opening balance of retained earnings upon adoption of LDTI.
(3) The remeasurement of the liability at the current upper-medium grade fixed-income instrument yield, which was generally lower than the locked-in interest accretion rate, was reflected as an adjustment to the opening balance of AOCI upon the adoption of LDTI.
(4) Reported within future policy benefits and claims in the consolidated statements of financial position. Refer to Note 8, Future Policy Benefits and Claims, for further information on the liability for future policy benefits.

Principal Financial Group, Inc.
Notes to Condensed Consolidated Financial Statements – (continued)
March 31, 2023
(Unaudited)

The balances and changes in the liability for future policy benefits for 2021 for each level of aggregation were as follows:

Retirement and Income Solutions and Principal Asset Management – Principal International

	For the year ended December 31, 2021		
	Retirement and Income Solutions		Principal Asset Management – Principal International
			Latin America
	Pension risk transfer	Individual fixed income annuities	Individual fixed income annuities
		(in millions)	
Present value of expected future policy benefit payments			
Balance at beginning of period	$ 25,863.7	$ 7,145.8	$ 6,561.5
Effect of changes in discount rate assumptions at beginning of period	(4,827.9)	(1,213.5)	(2,096.0)
Balance at beginning of period at original discount rate	21,035.8	5,932.3	4,465.5
Effect of actual variances from expected experience	(2.4)	(1.3)	(4.9)
Adjusted beginning of period balance at original discount rate	21,033.4	5,931.0	4,460.6
Interest accrual	916.7	240.5	444.3
Benefit payments	(1,772.5)	(532.0)	(436.0)
Issuances	1,801.7	82.9	141.3
Foreign currency translation adjustment	—	—	(751.9)
Balance at end of period at original discount rate	21,979.3	5,722.4	3,858.3
Effect of changes in discount rate assumptions at end of period	3,386.5	812.6	478.5
Future policy benefits	$ 25,365.8	$ 6,535.0	$ 4,336.8

Principal Financial Group, Inc.
Notes to Condensed Consolidated Financial Statements – (continued)
March 31, 2023
(Unaudited)

Benefits and Protection and Corporate

	For the year ended December 31, 2021		
	Benefits and Protection		Corporate
	Specialty Benefits	Life Insurance	
	Individual disability	Term life	Long-term care insurance
		(in millions)	
Present value of expected net premiums			
Balance at beginning of period	$ 3,148.3	$ 3,799.0	$ 66.7
Effect of changes in discount rate assumptions at beginning of period	(340.7)	(861.1)	(17.6)
Balance at beginning of period at original discount rate	2,807.6	2,937.9	49.1
Effect of changes in cash flow assumptions	—	—	2.8
Effect of actual variances from expected experience	122.0	211.4	(0.8)
Adjusted beginning of period balance at original discount rate	2,929.6	3,149.3	51.1
Interest accrual	95.4	151.1	2.9
Net premiums collected	(280.4)	(315.0)	(5.2)
Issuances	206.4	518.2	—
Balance at end of period at original discount rate	2,951.0	3,503.6	48.8
Effect of changes in discount rate assumptions at end of period	198.9	690.1	14.0
Balance at end of period	$ 3,149.9	$ 4,193.7	$ 62.8
Present value of expected future policy benefit payments			
Balance at beginning of period	$ 5,649.2	$ 4,959.3	$ 324.3
Effect of changes in discount rate assumptions at beginning of period	(834.1)	(1,179.9)	(111.1)
Balance at beginning of period at original discount rate	4,815.1	3,779.4	213.2
Effect of changes in cash flow assumptions	—	—	0.5
Effect of actual variances from expected experience	118.8	216.0	(4.6)
Adjusted beginning of period balance at original discount rate	4,933.9	3,995.4	209.1
Interest accrual	181.0	194.3	12.4
Benefit payments	(179.7)	(335.7)	(13.5)
Issuances	212.1	543.4	—
Balance at end of period at original discount rate	5,147.3	4,397.4	208.0
Effect of changes in discount rate assumptions at end of period	501.0	913.9	89.5
Balance at end of period	$ 5,648.3	$ 5,311.3	$ 297.5
Future policy benefits (1)	$ 2,498.4	$ 1,117.6	$ 234.7
Reinsurance impact	(549.9)	(0.1)	(234.7)
Future policy benefits after reinsurance	$ 1,948.5	$ 1,117.5	$ —

(1) Represents the present value of expected future policy benefit payments less the present value of expected net premiums.

Additional Liability for Certain Benefit Features

Benefits and Protection

The balances and changes in the additional liability for certain benefits features for 2021 for Life Insurance - Universal life were as follows:

	For the year ended, December 31, 2021
	(in millions)
Balance at beginning of period	$ 3,463.9
Effect of changes in cash flow assumptions	(11.1)
Effect of actual variances from expected experience	18.1
Interest accrual	158.3
Net assessments collected	324.7
Benefit payments	(83.1)
Other (1)	(56.6)
Balance at end of period	$ 3,814.2

(1) Reflects model refinements accounted for as a change in accounting estimate.

Market Risk Benefits

	Asset (liability) balance as of December 31, 2020 (1)	Cumulative effect of changes in the nonperformance risk between the original contract issue date and the transition date (2)	Retained earnings adjustment for the valuation of contracts as MRBs (exclusive of nonperformance risk changes) (3)	Asset (liability) balance as of January 1, 2021 (4)
		(in millions)		
Retirement and Income Solutions:				
Individual variable annuities	$ (348.6)	$ (4.8)	$ (237.9)	$ (591.3)
Principal Asset Management - Principal International:				
Asia:				
Guaranteed pension (5)	(53.3)	—	—	(53.3)
Total	$ (401.9)	$ (4.8)	$ (237.9)	$ (644.6)

(1) The balance as of December 31, 2020, for MRBs represents the contract features that meet the definition of an MRB under LDTI and the related carrying amount of those features prior to adoption. These contract features were previously accounted for as an embedded derivative, or as an additional liability for annuitization benefits or death or other insurance benefits.
(2) The cumulative effect of the change in our own nonperformance risk between the original contract issuance date and the transition date of LDTI for contract features previously accounted for as an additional liability for certain benefit features was recorded as an adjustment to the opening balance of AOCI.
(3) The cumulative difference, exclusive of the nonperformance risk change, between the pre-adoption carrying amount and the fair value measurement for MRBs was recorded as an adjustment to the opening balance of retained earnings.
(4) Refer to Note 9, Market Risk Benefits, for further information on MRBs. The cumulative effect of changes in the nonperformance risk between the original contract issue date and the transition date for contract features previously accounted for as an embedded derivative was recorded as a reclassification from retained earnings to AOCI.
(5) This product had nominal transition adjustments.

Principal Financial Group, Inc.
Notes to Condensed Consolidated Financial Statements – (continued)
March 31, 2023
(Unaudited)

The balances and changes in MRBs for 2021 for each level of aggregation were as follows:

	For the year ended December 31, 2021	
	Retirement and Income Solutions	Principal Asset Management – Principal International
		Asia
	Individual variable annuities	Guaranteed pension
	(in millions)	
Balance at beginning of period	$ (591.3)	$ (53.3)
Effect of changes in nonperformance risk at beginning of period	106.7	6.5
Adjusted balance at beginning of period	(484.6)	(46.8)
Effect of:		
Interest accrual and expected policyholder behavior	(120.7)	(5.3)
Benefit payments	0.4	5.7
Changes in interest rates	154.3	7.6
Changes in equity markets	106.4	1.4
Changes in equity index volatility	15.1	—
Actual policyholder behavior different from expected behavior	2.3	3.6
Changes in future expected policyholder behavior	(96.6)	0.5
Changes in other future expected assumptions	38.2	2.3
Foreign currency translation adjustment	—	0.2
Adjusted balance at end of period	(385.2)	(30.8)
Effect of changes in nonperformance risk at end of period	(109.5)	(4.3)
Balance at end of period	$ (494.7)	$ (35.1)

2. Variable Interest Entities

We have relationships with various types of entities which may be VIEs. Certain VIEs are consolidated in our financial results. See Note 1, Nature of Operations and Significant Accounting Policies, under the caption “Consolidation” for further details of our consolidation accounting policies. We did not provide financial or other support to investees designated as VIEs for the periods ended March 31, 2023 and December 31, 2022.

Consolidated Variable Interest Entities

Mandatory Retirement Savings Funds

We hold an equity interest in Chilean mandatory privatized social security funds in which we provide asset management services. We determined the mandatory privatized social security funds, which also include contributions for voluntary pension savings, voluntary non-pension savings and compensation savings accounts, are VIEs. This is because the equity holders as a group lack the power, due to voting rights or similar rights, to direct the activities of the entity that most significantly impact the entity’s economic performance and also because equity investors are protected from below-average market investment returns relative to the industry’s return, due to a regulatory guarantee that we provide. Further, we concluded we are the primary beneficiary through our power to make decisions and our significant variable interest in the funds. The purpose of the funds, which reside in legally segregated entities, is to provide long-term retirement savings. The obligation to the customer is directly related to the assets held in the funds and, as such, we present the assets as separate account assets and the obligation as separate account liabilities within our consolidated statements of financial position.

Principal International Hong Kong offers retirement pension schemes in which we provide trustee, administration and asset management services to employers and employees under the Hong Kong Mandatory Provident Fund and Occupational Retirement Schemes Ordinance pension schemes. Each pension scheme has various guaranteed and non-guaranteed constituent funds, or investment options, in which customers can invest their money. The guaranteed funds provide either a guaranteed rate of return to the customer or a minimum guarantee on withdrawals under certain qualifying events. We determined the guaranteed funds are VIEs due to the fact the equity holders, as a group, lack the obligation to absorb expected losses due to the guarantee we provide. We concluded we are the primary beneficiary because we have the power to make decisions and to receive benefits and the obligation to absorb losses that could be potentially significant to the VIE. Therefore, we consolidate the underlying assets and liabilities of the funds and present as separate accounts or within the general account, depending on the terms of the guarantee.

Real Estate

We invest in several real estate limited partnerships and limited liability companies. The entities invest in real estate properties. Certain of these entities are VIEs based on the combination of our significant economic interest and related voting rights. We determined we are the primary beneficiary as a result of our power to control the entities through our significant ownership. Due to the nature of these real estate investments, the investment balance will fluctuate as we purchase and sell interests in the entities and as capital expenditures are made to improve the underlying real estate.

Sponsored Investment Funds

We sponsor and invest in certain investment funds for which we provide asset management services. Although our asset management fee is commensurate with the services provided and consistent with fees for similar services negotiated at arms-length, we have a variable interest for funds where our other interests are more than insignificant. The funds are VIEs as the equity holders lack power through voting rights to direct the activities of the entity that most significantly impact its economic performance. We determined we are the primary beneficiary of the VIEs where our interest in the entity is more than insignificant and we are the asset manager.

Residential Mortgage Loans

We invest in ABS trusts. The trusts issue various collateralized mortgage obligation certificates and purchase residential mortgage loans. The trusts are considered VIEs due to insufficient equity to sustain themselves. We concluded we are the primary beneficiary as we purchase substantially all of the certificates and have the obligation to absorb losses that could potentially be significant to the VIEs. We deconsolidated a trust during the fourth quarter of 2022 as we no longer held substantially all of the certificates.

Assets and Liabilities of Consolidated Variable Interest Entities

The carrying amounts of our consolidated VIE assets, which can only be used to settle obligations of consolidated VIEs, and liabilities of consolidated VIEs for which creditors do not have recourse were as follows:

	March 31, 2023		December 31, 2022	
	Total assets	Total liabilities	Total assets	Total liabilities
	(in millions)			
Mandatory retirement savings funds (1)	**$ 36,985.1**	**$ 36,606.1**	$ 34,876.9	$ 34,528.3
Real estate (2)	**753.6**	**52.2**	689.6	42.2
Sponsored investment funds (3)	**501.4**	**7.2**	471.4	2.6
Residential mortgage loans (4)	**1,169.6**	**41.4**	1,182.6	41.8
Total	**$ 39,409.7**	**$ 36,706.9**	$ 37,220.5	$ 34,614.9

(1) The assets of the mandatory retirement savings funds primarily include separate account assets and equity securities. The liabilities primarily include separate account liabilities and contractholder funds.
(2) The assets of the real estate VIEs primarily include real estate, other investments and cash. Liabilities primarily include other liabilities.
(3) The assets of sponsored investment funds are primarily fixed maturities and equity securities, certain of which are reported with other investments, and cash. The consolidated statements of financial position included a $250.9 million and $235.3 million redeemable noncontrolling interest for sponsored investment funds as of March 31, 2023 and December 31, 2022, respectively.
(4) The assets of the residential mortgage loans VIEs primarily include residential mortgage loans. The liabilities primarily include other liabilities.

Unconsolidated Variable Interest Entities

We hold a variable interest in a number of VIEs where we are not the primary beneficiary. Our investments in these VIEs are reported in fixed maturities, available-for-sale; fixed maturities, trading; equity securities and other investments in the consolidated statements of financial position and are described below.

Unconsolidated VIEs include certain commercial mortgage-backed securities (“CMBS”), residential mortgage-backed pass-through securities (“RMBS”) and other ABS. All of these entities were deemed VIEs because the equity within these entities is insufficient to sustain them. We determined we are not the primary beneficiary in the entities within these categories of investments. This determination was based primarily on the fact we do not own the class of security that controls the unilateral right to replace the special servicer or equivalent function.

We invest in cash collateralized debt obligations, collateralized bond obligations, collateralized loan obligations and other collateralized structures, which are VIEs due to insufficient equity to sustain the entities. We have determined we are not the primary beneficiary of these entities primarily because we do not control the economic performance of the entities and were not involved with the design of the entities or because we do not have a potentially significant variable interest in the entities for which we are the asset manager.

We have invested in various VIE trusts and similar entities as a debt holder. Most of these entities are classified as VIEs due to insufficient equity to sustain them. In addition, we have an entity classified as a VIE based on the combination of our significant economic interest and lack of voting rights. We have determined we are not the primary beneficiary primarily because we do not control the economic performance of the entities and were not involved with the design of the entities.

We have invested in partnerships and other funds, which are classified as VIEs. The entities are VIEs as equity holders lack the power to control the most significant activities of the entities because the equity holders do not have either the ability by a simple majority to exercise substantive kick-out rights or substantive participating rights. We have determined we are not the primary beneficiary because we do not have the power to direct the most significant activities of the entities.

As previously discussed, we sponsor and invest in certain investment funds that are VIEs. We determined we are not the primary beneficiary of the VIEs for which we are the asset manager but do not have a potentially significant variable interest in the funds.

We hold an equity interest in Mexican mandatory privatized social security funds in which we provide asset management services. Our equity interest in the funds is considered a variable interest. We concluded the funds are VIEs because the equity holders as a group lack decision-making ability through their voting rights. We are not the primary beneficiary of the VIEs because although we, as the asset manager, have the power to direct the activities of the VIEs, we do not have a potentially significant variable interest in the funds.

Principal Financial Group, Inc.
Notes to Condensed Consolidated Financial Statements – (continued)
March 31, 2023
(Unaudited)

The carrying value and maximum loss exposure for our unconsolidated VIEs were as follows:

	Asset carrying value	Maximum exposure to loss (1)
	(in millions)	
March 31, 2023		
Fixed maturities, available-for-sale:		
Corporate	**$ 162.9**	**$ 174.8**
Residential mortgage-backed pass-through securities	**2,794.9**	**2,951.5**
Commercial mortgage-backed securities	**4,927.8**	**5,555.1**
Collateralized debt obligations (2)	**4,902.3**	**5,136.6**
Other debt obligations	**6,906.7**	**7,934.9**
Fixed maturities, trading:		
Residential mortgage-backed pass-through securities	**11.1**	**11.1**
Commercial mortgage-backed securities	**78.7**	**78.7**
Collateralized debt obligations (2)	**4.7**	**4.7**
Other debt obligations	**30.2**	**30.2**
Equity securities	**110.2**	**110.2**
Other investments:		
Other limited partnership and fund interests (3)	**1,539.5**	**2,614.6**
December 31, 2022		
Fixed maturities, available-for-sale:		
Corporate	$ 111.8	$ 127.2
Residential mortgage-backed pass-through securities	2,228.7	2,420.6
Commercial mortgage-backed securities	4,864.6	5,572.2
Collateralized debt obligations (2)	4,566.4	4,820.0
Other debt obligations	6,507.6	7,566.2
Fixed maturities, trading:		
Residential mortgage-backed pass-through securities	5.4	5.4
Commercial mortgage-backed securities	83.4	83.4
Collateralized debt obligations (2)	5.7	5.7
Other debt obligations	80.0	80.0
Equity securities	99.8	99.8
Other investments:		
Other limited partnership and fund interests (3)	1,473.5	2,434.9

(1) Our risk of loss is limited to our initial investment measured at amortized cost for fixed maturities, available-for-sale, plus any unfunded commitments and/or guarantees and similar provisions for collateralized debt obligations and other debt obligations. Our risk of loss is limited to our investment measured at fair value for our fixed maturities, trading and equity securities. Our risk of loss is limited to our carrying value plus any unfunded commitments and/or guarantees and similar provisions for our other investments. A carrying value of zero is used if distributions have been received in excess of our investment, resulting in a negative carrying value for the investment. Unfunded commitments are not liabilities on our consolidated statements of financial position because we are only required to fund additional equity when called upon to do so by the general partner or investment manager.

(2) Primarily consists of collateralized loan obligations backed by secured corporate loans.

(3) As of March 31, 2023 and December 31, 2022, the maximum exposure to loss for other limited partnership and fund interests includes $146.7 million and $144.3 million, respectively, of debt within certain of our managed international real estate funds that is fully secured by assets whose value exceeds the amount of the debt, but also includes recourse to the investment manager.

Money Market Funds

We are the investment manager for certain money market mutual funds. These types of funds are exempt from assessment under any consolidation model due to a scope exception for money market funds registered under Rule 2a-7 of the Investment Company Act of 1940 or similar funds. As of March 31, 2023 and December 31, 2022, money market mutual funds we manage held $4.5 billion and $4.2 billion in total assets, respectively. We have no contractual obligation to contribute to these funds; however, we provide support through the waiver of fees and through expense reimbursements. The amount of fees waived and expenses reimbursed was insignificant.

3. Investments

Our investments include assets backing reserves as part of a coinsurance with funds withheld agreement. The funds withheld invested assets are reported within their respective line items, primarily consisting of fixed maturities available-for-sale, mortgage loans and other investments. See Note 10, Reinsurance, for more information on the funds withheld invested assets.

Fixed Maturities and Equity Securities

Fixed maturities include bonds, ABS, redeemable preferred stock and certain non-redeemable preferred securities. Equity securities include mutual funds, common stock, non-redeemable preferred stock and required regulatory investments. We classify fixed maturities as either available-for-sale or trading at the time of the purchase and, accordingly, carry them at fair value. Equity securities are also carried at fair value. See Note 16, Fair Value Measurements, for methodologies related to the determination of fair value. Unrealized gains and losses related to fixed maturities, available-for-sale, excluding those in fair value hedging relationships, are reflected in stockholders' equity, net of adjustments associated with related actuarial balances, derivatives in cash flow hedge relationships and applicable income taxes. Mark-to-market adjustments on certain equity securities and mark-to-market adjustments on certain fixed maturities, trading are reflected in net realized capital gains (losses). Mark-to-market adjustments on certain fixed maturities, trading are reflected in market risk benefit remeasurement (gain) loss. Unrealized gains and losses related to hedged portions of fixed maturities, available-for-sale in fair value hedging relationships are reflected in net investment income. Mark-to-market adjustments related to certain securities carried at fair value with an investment objective to realize economic value through mark-to-market changes are reflected in net investment income.

The amortized cost of fixed maturities includes cost adjusted for amortization of premiums and discounts, computed using the interest method. The amortized cost of fixed maturities, available-for-sale is adjusted for changes in fair value of the hedged portions of securities in fair value hedging relationships and excludes accrued interest receivable. Accrued interest receivable is reported in accrued investment income on the consolidated statements of financial position. Fixed maturities, available-for-sale are subject to an allowance for credit loss and changes in the allowance are reported in net income as a component of net realized capital gains (losses). Interest income, as well as prepayment fees and the amortization of the related premium or discount, is reported in net investment income. For loan-backed and structured securities, we recognize income using a constant effective yield based on currently anticipated cash flows.

Principal Financial Group, Inc.
Notes to Condensed Consolidated Financial Statements – (continued)
March 31, 2023
(Unaudited)

The amortized cost, gross unrealized gains and losses, allowance for credit loss and fair value of fixed maturities, available-for-sale were as follows:

	Amortized cost (1)	Gross unrealized gains	Gross unrealized losses	Allowance for credit loss	Fair value
			(in millions)		
March 31, 2023					
Fixed maturities, available-for-sale:					
U.S. government and agencies	**$ 2,041.5**	**$ 1.5**	**$ 213.1**	**$ —**	**$ 1,829.9**
Non-U.S. governments	**584.3**	**20.9**	**56.0**	**—**	**549.2**
States and political subdivisions	**7,061.5**	**21.5**	**909.6**	**—**	**6,173.4**
Corporate	**40,630.6**	**542.6**	**3,872.6**	**4.0**	**37,296.6**
Residential mortgage-backed pass-through securities	**2,951.5**	**16.3**	**172.9**	**—**	**2,794.9**
Commercial mortgage-backed securities	**5,555.1**	**1.2**	**628.5**	**—**	**4,927.8**
Collateralized debt obligations (2)	**5,024.6**	**8.8**	**131.1**	**—**	**4,902.3**
Other debt obligations	**7,564.7**	**13.7**	**655.5**	**0.1**	**6,922.8**
Total fixed maturities, available-for-sale	**$ 71,413.8**	**$ 626.5**	**$ 6,639.3**	**$ 4.1**	**$ 65,396.9**

	Amortized cost (1)	Gross unrealized gains	Gross unrealized losses	Allowance for credit loss	Fair value
			(in millions)		
December 31, 2022					
Fixed maturities, available-for-sale:					
U.S. government and agencies	$ 1,990.9	$ 0.1	$ 251.2	$ —	$ 1,739.8
Non-U.S. governments	611.2	20.9	64.8	—	567.3
States and political subdivisions	7,355.4	13.7	1,136.8	—	6,232.3
Corporate	40,370.4	461.0	4,640.5	7.7	36,183.2
Residential mortgage-backed pass-through securities	2,420.6	6.2	198.1	—	2,228.7
Commercial mortgage-backed securities	5,572.2	0.5	708.1	—	4,864.6
Collateralized debt obligations (2)	4,705.6	4.5	143.7	—	4,566.4
Other debt obligations	7,236.8	5.7	734.8	0.1	6,507.6
Total fixed maturities, available-for-sale	$ 70,263.1	$ 512.6	$ 7,878.0	$ 7.8	$ 62,889.9

(1) Amortized cost excludes accrued interest receivable of$632.6 million and $578.0 million as of March 31, 2023 and December 31, 2022, respectively.
(2) Primarily consists of collateralized loan obligations backed by secured corporate loans.

Principal Financial Group, Inc.
Notes to Condensed Consolidated Financial Statements – (continued)
March 31, 2023
(Unaudited)

The amortized cost and fair value of fixed maturities, available-for-sale as of March 31, 2023, by expected maturity, were as follows:

	Amortized cost	Fair value
	(in millions)	
Due in one year or less	$ 1,603.7	$ 1,593.3
Due after one year through five years	9,104.5	8,819.0
Due after five years through ten years	11,055.5	10,268.5
Due after ten years	28,554.2	25,168.3
Subtotal	50,317.9	45,849.1
Mortgage-backed and other asset-backed securities	21,095.9	19,547.8
Total	$ 71,413.8	$ 65,396.9

Actual maturities may differ because borrowers may have the right to call or prepay obligations. Our portfolio is diversified by industry, issuer and asset class. Credit concentrations are managed to established limits.

Net Realized Capital Gains and Losses

Net realized capital gains and losses on sales of investments are determined on the basis of specific identification. In general, in addition to realized capital gains and losses on investment sales and periodic settlements on derivatives not designated as hedges, we report gains and losses related to the following in net realized capital gains (losses) on the consolidated statements of operations: mark-to-market adjustments on certain equity securities, mark-to-market adjustments on certain fixed maturities, trading, mark-to-market adjustments on sponsored investment funds, mark-to-market adjustments on derivatives not designated as hedges, cash flow hedge gains (losses) when the hedged item impacts realized capital gains (losses), changes in the valuation allowance for fixed maturities available-for-sale and certain financing receivables, impairments of real estate held for investment and impairments on equity method investments. Investment gains and losses on sales of certain real estate held for sale due to investment strategy and mark-to-market adjustments on certain securities carried at fair value with an investment objective to realize economic value through mark-to-market changes are reported as net investment income and are excluded from net realized capital gains (losses).

Principal Financial Group, Inc.
Notes to Condensed Consolidated Financial Statements – (continued)
March 31, 2023
(Unaudited)

The major components of net realized capital gains (losses) on investments are shown below and are net of amounts on funds withheld invested assets that are passed directly to the reinsurer. See Note 10, Reinsurance, for further details. The amounts below do not include net realized capital gains (losses) on funds withheld assets that are not passed to the reinsurer, which are separately reported on the consolidated statements of operations

	For the three months ended March 31,	
	2023	**2022**
	(in millions)	
Fixed maturities, available-for-sale:		
Gross gains	**$ 17.8**	$ 165.8
Gross losses	**(28.0)**	(120.7)
Net credit losses	**(7.7)**	(6.1)
Hedging, net (1)	**(1.2)**	(0.7)
Fixed maturities, trading (2)	**(0.5)**	(6.3)
Equity securities (3)	**(15.6)**	(105.2)
Mortgage loans	**(2.7)**	(19.6)
Derivatives (1)	**(42.9)**	8.4
Other	**14.8**	(52.2)
Net realized capital losses	**$ (66.0)**	$ (136.6)

(1) The change in fair value of fixed maturities, available-for-sale and the change in fair value of derivative hedging instruments in fair value hedging relationships are reported in net investment income with the earnings effect of fixed maturities, available-for-sale. Gains (losses) for fixed maturities, available-for-sale related to terminated cash flow hedges continue to be reflected in net realized capital gains (losses).
(2) Unrealized gains (losses) on fixed maturities, trading still held at the reporting date were$(1.8) million and $(5.2) million for the three months ended March 31, 2023 and 2022, respectively. This excludes $1.8 million and $(7.9) million in unrealized gains (losses) for the three months ended March 31, 2023 and 2022, respectively, that were reported in market risk benefit remeasurement (gain) loss and $(2.8) million and $0.0 million of unrealized gains (losses) for the three months ended March 31, 2023 and 2022, respectively, that were reported in net realized capital gains (losses) on funds withheld assets.
(3) Unrealized gains (losses) on equity securities still held at the reporting date were$(13.7) million and $(105.5) million for the three months ended March 31, 2023 and 2022, respectively. This excludes $(0.6) million and $(19.3) million of unrealized gains (losses) for the three months ended March 31, 2023 and 2022, respectively, that were reported in net investment income and $1.7 million and $0.0 million of unrealized gains (losses) for the three months ended March 31, 2023 and 2022, respectively, that were reported in net realized capital gains (losses) on funds withheld assets.

Proceeds from sales of investments (excluding call and maturity proceeds) in fixed maturities, available-for-sale were $1,639.0 million and $4,859.7 million for the three months ended March 31, 2023 and 2022, respectively.

Allowance for Credit Loss

We have a process in place to identify fixed maturity securities that could potentially require an allowance for credit loss. This process involves monitoring market events that could impact issuers' credit ratings, business climate, management changes, litigation and government actions and other similar factors. This process also involves monitoring late payments, pricing levels, downgrades by rating agencies, key financial ratios, financial statements, revenue forecasts and cash flow projections as indicators of credit issues.

Each reporting period, all securities in an unrealized loss position are reviewed to determine whether a decline in value is due to credit. Relevant facts and circumstances considered include: (1) the extent the fair value is below cost; (2) the reasons for the decline in value; (3) the financial position and access to capital of the issuer, including the current and future impact of any specific events and (4) for structured securities, the adequacy of the expected cash flows. To the extent we determine an unrealized loss is due to credit, an allowance for credit loss is recognized through a reduction to net income.

Principal Financial Group, Inc.
Notes to Condensed Consolidated Financial Statements – (continued)
March 31, 2023
(Unaudited)

We estimate the amount of the allowance for credit loss as the difference between amortized cost and the present value of the expected cash flows of the security. The present value is determined using the best estimate cash flows discounted at the effective interest rate implicit to the security at the date of purchase or the current yield to accrete an asset-backed or floating rate security. The methodology and assumptions for establishing the best estimate cash flows vary depending on the type of security. The ABS cash flow estimates are based on security specific facts and circumstances that may include collateral characteristics, expectations of delinquency and default rates, loss severity and prepayment speeds and structural support, including subordination and guarantees. The corporate security cash flow estimates are derived from scenario-based outcomes of expected corporate restructurings or liquidations using bond specific facts and circumstances including timing, security interests and loss severity. We do not measure a credit loss allowance on accrued interest receivable because we write off the accrued interest receivable balance to net investment income in a timely manner when we have concern regarding collectability.

Amounts on fixed maturities, available-for-sale deemed to be uncollectible are written off and removed from the allowance for credit loss. A write-off may also occur if we intend to sell a security or whether it is more likely than not we will be required to sell the security before the recovery of its amortized cost which, in some cases, may extend to maturity.

A rollforward of the allowance for credit loss by major security type was as follows.

	For the three months ended March 31, 2023								
	U.S. government and agencies	Non-U.S. governments	States and political subdivisions	Corporate	Residential mortgage-backed pass-through securities	Commercial mortgage-backed securities	Collateralized debt obligations (1)	Other debt obligations	Total
					(in millions)				
Beginning balance	$ —	$ —	$ —	$ 7.7	$ —	$ —	$ —	$ 0.1	$ 7.8
Additional increases (decreases) for credit losses on securities with an allowance recorded in the previous period	—	—	—	(4.2)	—	—	—	—	(4.2)
Foreign currency translation adjustment	—	—	—	0.5	—	—	—	—	0.5
Ending balance	$ —	$ —	$ —	$ 4.0	$ —	$ —	$ —	$ 0.1	$ 4.1

	For the three months ended March 31, 2022								
	U.S. government and agencies	Non-U.S. governments	States and political subdivisions	Corporate	Residential mortgage-backed pass-through securities	Commercial mortgage-backed securities	Collateralized debt obligations (1)	Other debt obligations	Total
					(in millions)				
Beginning balance	$ —	$ —	$ —	$ 15.1	$ —	$ 0.3	$ —	$ 0.1	$ 15.5
Additions for credit losses not previously recorded	—	—	—	1.0	—	—	—	—	1.0
Additional increases (decreases) for credit losses on securities with an allowance recorded in the previous period	—	—	—	3.0	—	—	—	—	3.0
Foreign currency translation adjustment	—	—	—	0.9	—	—	—	—	0.9
Ending balance	$ —	$ —	$ —	$ 20.0	$ —	$ 0.3	$ —	$ 0.1	$ 20.4

(1) Primarily consists of collateralized loan obligations backed by secured corporate loans.

During 2023 and 2022, we did not write off any accrued interest to net investment income.

Principal Financial Group, Inc.
Notes to Condensed Consolidated Financial Statements – (continued)
March 31, 2023
(Unaudited)

Available-for-Sale Securities in Unrealized Loss Positions Without an Allowance for Credit Loss

For available-for-sale securities with unrealized losses for which an allowance for credit loss has not been recorded, the gross unrealized losses and fair value, aggregated by investment category and length of time that individual securities have been in a continuous unrealized loss position were as follows:

	March 31, 2023					
	Less than twelve months		Greater than or equal to twelve months		Total	
	Fair value	Gross unrealized losses	Fair value	Gross unrealized losses	Fair value	Gross unrealized losses
	(in millions)					
Fixed maturities, available-for-sale (1):						
U.S. government and agencies	$ 879.6	$ 86.0	$ 605.2	$ 127.3	$ 1,484.8	$ 213.3
Non-U.S. governments	257.4	21.4	131.5	34.5	388.9	55.9
States and political subdivisions	3,191.6	372.3	2,251.2	537.3	5,442.8	909.6
Corporate	17,165.8	1,571.1	12,333.1	2,303.7	29,498.9	3,874.8
Residential mortgage-backed pass-through securities	616.0	16.4	1,159.9	156.5	1,775.9	172.9
Commercial mortgage-backed securities	996.4	78.4	3,749.0	548.6	4,745.4	627.0
Collateralized debt obligations (2)	1,738.4	33.5	2,484.8	97.5	4,223.2	131.0
Other debt obligations	2,413.2	116.9	3,382.9	538.5	5,796.1	655.4
Total fixed maturities, available-for-sale	$ 27,258.4	$ 2,296.0	$ 26,097.6	$ 4,343.9	$ 53,356.0	$ 6,639.9

(1) Fair value and gross unrealized losses are excluded for available-for-sale securities for which an allowance for credit loss has been recorded.
(2) Primarily consists of collateralized loan obligations backed by secured corporate loans.

Of the total amounts, Principal Life Insurance Company's ("Principal Life") consolidated portfolio represented $51,982.6 million in available-for-sale fixed maturities with gross unrealized losses of $6,493.8 million. Of the available-for-sale fixed maturities within Principal Life's consolidated portfolio in a gross unrealized loss position, 94% were investment grade (rated AAA through BBB-) with an average price of 89 (carrying value/amortized cost) as of March 31, 2023. Gross unrealized losses in our fixed maturities portfolio decreased during the three months ended March 31, 2023, primarily due to a decrease in interest rates.

For those securities that had been in a continuous unrealized loss position for less than twelve months, Principal Life's consolidated portfolio held 4,895 securities with a carrying value of $26,573.1 million and unrealized losses of $2,243.3 million reflecting an average price of 92 as of March 31, 2023. Of this portfolio, 94% was investment grade (rated AAA through BBB-) as of March 31, 2023, with associated unrealized losses of $2,170.6 million. The unrealized losses on these securities can primarily be attributed to changes in market interest rates and changes in credit spreads since the securities were acquired.

For those securities that had been in a continuous unrealized loss position greater than or equal to twelve months, Principal Life's consolidated portfolio held 5,130 securities with a carrying value of $25,409.5 million and unrealized losses of $4,250.5 million as of March 31, 2023. The average credit rating of this portfolio was A+ with an average price of 86 as of March 31, 2023. Of the $4,250.5 million in unrealized losses, the corporate sector accounts for $2,228.7 million in unrealized losses with an average price of 84 and an average credit rating of BBB+. Furthermore, unrealized losses include $544.5 million within the CMBS sector with an average price of 87 and an average credit rating of AA; $530.8 million within the states and political subdivision sector with an average price of 81 and an average credit rating of AA-; and $415.0 million within the collateralized mortgage obligation security sector with an average price of 84 and an average credit rating of AAA. The unrealized losses on these securities can primarily be attributed to changes in market interest rates and changes in credit spreads since the securities were acquired.

Principal Financial Group, Inc.
Notes to Condensed Consolidated Financial Statements – (continued)
March 31, 2023
(Unaudited)

Because we expected to recover our amortized cost, we did not record an allowance for credit loss on these securities as of March 31, 2023. Because it was not our intent to sell the fixed maturity available-for-sale securities with unrealized losses and it was not more likely than not that we would be required to sell these securities before recovery of the amortized cost, which may be at maturity, we did not write down these investments to fair value.

	December 31, 2022					
	Less than twelve months		Greater than or equal to twelve months		Total	
	Fair value	Gross unrealized losses	Fair value	Gross unrealized losses	Fair value	Gross unrealized losses
	(in millions)					
Fixed maturities, available-for-sale (1):						
U.S. government and agencies	$ 1,528.3	$ 209.4	$ 181.5	$ 41.8	$ 1,709.8	$ 251.2
Non-U.S. governments	407.5	57.7	19.9	7.1	427.4	64.8
States and political subdivisions	5,303.5	1,008.9	391.9	127.8	5,695.4	1,136.7
Corporate	27,309.5	3,944.6	2,944.1	698.0	30,253.6	4,642.6
Residential mortgage-backed pass-through securities	1,201.7	97.5	574.8	105.7	1,776.5	203.2
Commercial mortgage-backed securities	3,648.5	484.0	1,124.8	222.5	4,773.3	706.5
Collateralized debt obligations (2)	2,832.2	89.0	1,330.1	54.7	4,162.3	143.7
Other debt obligations	3,419.8	292.0	2,283.8	437.6	5,703.6	729.6
Total fixed maturities, available-for-sale	$ 45,651.0	$ 6,183.1	$ 8,850.9	$ 1,695.2	$ 54,501.9	$ 7,878.3

(1) Fair value and gross unrealized losses are excluded for available-for-sale securities for which an allowance for credit loss has been recorded.
(2) Primarily consists of collateralized loan obligations backed by secured corporate loans.

Of the total amounts, Principal Life's consolidated portfolio represented $53,353.1 million in available-for-sale fixed maturities with gross unrealized losses of $7,741.4 million. Of the available-for-sale fixed maturities within Principal Life's consolidated portfolio in a gross unrealized loss position, 94% were investment grade (rated AAA through BBB-) with an average price of 87 (carrying value/amortized cost) as of December 31, 2022. Gross unrealized losses in our fixed maturities portfolio increased during the year ended December 31, 2022, primarily due to an increase in interest rates and a widening of credit spreads.

For those securities that had been in a continuous unrealized loss position for less than twelve months, Principal Life's consolidated portfolio held 7,589 securities with a carrying value of $44,857.0 million and unrealized losses of $6,096.3 million reflecting an average price of 88 as of December 31, 2022. Of this portfolio, 95% was investment grade (rated AAA through BBB-) as of December 31, 2022, with associated unrealized losses of $5,920.4 million. The unrealized losses on these securities can primarily be attributed to changes in market interest rates and changes in credit spreads since the securities were acquired.

For those securities that had been in a continuous unrealized loss position greater than or equal to twelve months, Principal Life's consolidated portfolio held 1,654 securities with a carrying value of $8,496.1 million and unrealized losses of $1,645.1 million as of December 31, 2022. The average credit rating of this portfolio was AA- with an average price of 84 as of December 31, 2022. Of the $1,645.1 million in unrealized losses, the corporate sector accounts for $654.9 million in unrealized losses with an average price of 80 and an average credit rating of BBB+. Furthermore, unrealized losses include $320.2 million within the collateralized mortgage obligation security sector with an average price of 81 and an average credit rating of AAA; $220.9 million within the CMBS sector with an average price of 83 and an average credit rating of AA+; and $126.8 million within the states and political subdivision sector with an average price of 75 and an average credit rating of AA-. The unrealized losses on these securities can primarily be attributed to changes in market interest rates and changes in credit spreads since the securities were acquired.

Principal Financial Group, Inc.
Notes to Condensed Consolidated Financial Statements – (continued)
March 31, 2023
(Unaudited)

Because we expected to recover our amortized cost, we did not record an allowance for credit loss on these securities as of December 31, 2022. Because it was not our intent to sell the fixed maturity available-for-sale securities with unrealized losses and it was not more likely than not that we would be required to sell these securities before recovery of the amortized cost, which may be at maturity, we did not write down these investments to fair value.

Net Unrealized Gains and Losses on Available-for-Sale Securities and Derivative Instruments

The net unrealized gains and losses on investments in available-for-sale securities and the net unrealized gains and losses on derivative instruments in cash flow hedge relationships are reported as separate components of stockholders' equity. The cumulative amount of net unrealized gains and losses on available-for-sale securities and derivative instruments in cash flow hedge relationships net of adjustments related to actuarial balances, policyholder liabilities, noncontrolling interest and applicable income taxes was as follows:

	March 31, 2023	December 31, 2022
	(in millions)	
Net unrealized losses on fixed maturities, available-for-sale (1)	**$ (6,072.3)**	$ (7,445.7)
Net unrealized gains on derivative instruments	**50.7**	50.7
Adjustments for assumed changes in amortization patterns	**(1.5)**	(1.7)
Adjustments for assumed changes in policyholder liabilities	**0.4**	0.5
Net unrealized gains (losses) other investments and noncontrolling interest adjustments	**(6.2)**	7.9
Provision for deferred income tax benefits	**1,288.8**	1,570.1
Net unrealized losses on available-for-sale securities and derivative instruments	**$ (4,740.1)**	$ (5,818.2)

(1) Excludes net unrealized gains (losses) on fixed maturities, available-for-sale included in fair value hedging relationships.

Financing Receivables

Mortgage Loans

Mortgage loans consist of commercial and residential mortgage loans. Our commercial mortgage loan portfolio consists primarily of non-recourse, fixed rate mortgages on stabilized properties. Our residential mortgage loan portfolio is composed of first lien and home equity mortgages concentrated in Chile and the United States.

Commercial and residential mortgage loans are generally reported at cost adjusted for amortization of premiums and accrual of discounts, computed using the interest method and net of valuation allowances. Amortized cost excludes accrued interest receivable. Interest income is accrued on the principal amount of the loan based on the loan's contractual interest rate. Interest income, as well as prepayment of fees and the amortization of the related premium or discount, is reported in net investment income on the consolidated statements of operations. Accrued interest receivable is reported in accrued investment income on the consolidated statements of financial position. Any changes in the loan valuation allowances are reported in net realized capital gains (losses) on the consolidated statements of operations. Further details relating to our valuation allowance are included under the caption "Financing Receivables Valuation Allowance."

Direct Financing Leases

Our direct financing leases are concentrated in Chile. Our Chilean operations enter into private placement contracts for commercial, industrial and office space properties whereby our Chilean operations purchase the real estate and/or building from the seller-lessee but then lease the property back to the seller-lessee. Ownership of the property is transferred to the lessee by the end of the lease term. Direct financing leases are reported as a component of other investments in the consolidated statements of financial position.

Principal Financial Group, Inc.
Notes to Condensed Consolidated Financial Statements – (continued)
March 31, 2023
(Unaudited)

Reinsurance Recoverable and Deposit Receivable

Our reinsurance recoverables include amounts due from reinsurers for paid or unpaid claims, claims incurred but not reported or policy benefits. We cede life, disability, medical and long-term care insurance as well as fixed annuity contracts with significant life insurance risk to other insurance companies through reinsurance. Deposit receivables include amounts due from the reinsurer for fixed annuity contracts without significant life insurance risk recorded using the deposit method of accounting.

Credit Quality Information for Financing Receivables

The amortized cost of our financing receivables by credit risk and vintage was as follows:

	March 31, 2023						
	2023	2022	2021	2020 (in millions)	2019	Prior	Total
Commercial mortgage loans:							
A- and above	$ 71.0	$ 1,039.4	$ 2,302.1	$ 1,779.6	$ 2,206.7	$ 6,595.5	$ 13,994.3
BBB+ thru BBB-	14.9	454.2	444.2	185.4	390.9	827.2	2,316.8
BB+ thru BB-	31.8	116.4	18.2	3.2	—	136.9	306.5
B+ and below	—	—	—	—	—	49.5	49.5
Total	$ 117.7	$ 1,610.0	$ 2,764.5	$ 1,968.2	$ 2,597.6	$ 7,609.1	$ 16,667.1
Direct financing leases:							
A- and above	$ —	$ 129.8	$ 14.7	$ 62.7	$ 1.5	$ 235.8	$ 444.5
BBB+ thru BBB-	—	25.5	23.2	52.2	12.8	84.1	197.8
BB+ thru BB-	2.2	—	62.0	8.7	—	1.9	74.8
Total	$ 2.2	$ 155.3	$ 99.9	$ 123.6	$ 14.3	$ 321.8	$ 717.1
Residential mortgage loans:							
Performing	$ 81.6	$ 1,114.0	$ 1,730.4	$ 448.6	$ 132.9	$ 493.8	$ 4,001.3
Non-performing	—	5.3	4.7	3.8	1.4	7.7	22.9
Total	$ 81.6	$ 1,119.3	$ 1,735.1	$ 452.4	$ 134.3	$ 501.5	$ 4,024.2
Reinsurance recoverable and deposit receivable							$ 20,884.0

Principal Financial Group, Inc.
Notes to Condensed Consolidated Financial Statements – (continued)
March 31, 2023
(Unaudited)

	December 31, 2022						
	2022	2021	2020	2019	2018	Prior	Total
				(in millions)			
Commercial mortgage loans:							
A- and above	$ 1,036.4	$ 2,277.9	$ 1,807.3	$ 2,210.2	$ 2,187.9	$ 4,624.9	$ 14,144.6
BBB+ thru BBB-	385.6	439.6	156.8	418.7	238.9	691.7	2,331.3
BB+ thru BB-	104.0	16.8	3.0	—	8.9	71.7	204.4
B+ and below	—	—	—	—	8.3	41.7	50.0
Total	$ 1,526.0	$ 2,734.3	$ 1,967.1	$ 2,628.9	$ 2,444.0	$ 5,430.0	$ 16,730.3
Direct financing leases:							
A- and above	$ 110.5	$ 13.0	$ 39.9	$ 1.4	$ 42.9	$ 167.3	$ 375.0
BBB+ thru BBB-	33.9	21.9	62.4	11.9	11.7	70.4	212.2
BB+ thru BB-	2.7	57.3	12.1	2.0	—	2.1	76.2
B+ and below	—	1.6	—	—	—	—	1.6
Total	$ 147.1	$ 93.8	$ 114.4	$ 15.3	$ 54.6	$ 239.8	$ 665.0
Residential mortgage loans:							
Performing	$ 1,144.8	$ 1,740.7	$ 447.1	$ 133.0	$ 75.4	$ 417.8	$ 3,958.8
Non-performing	8.0	4.7	2.2	1.7	0.6	7.0	24.2
Total	$ 1,152.8	$ 1,745.4	$ 449.3	$ 134.7	$ 76.0	$ 424.8	$ 3,983.0
Reinsurance recoverable and deposit receivable							$ 21,156.7

The amortized cost of commercial mortgage loans, direct financing leases and residential mortgage loans excluded accrued interest receivable of $54.3 million, $1.7 million and $10.9 million, respectively, as of March 31, 2023, and $57.7 million, $0.0 million and $19.6 million, respectively, as of December 31, 2022.

Financing Receivables Credit Monitoring

Commercial Mortgage Loan Credit Risk Profile Based on Internal Rating

We actively monitor and manage our commercial mortgage loan and direct financing lease portfolios. All commercial mortgage loans and direct financing leases are analyzed regularly and substantially all are internally rated, based on a proprietary risk rating cash flow model, in order to monitor the financial quality of these assets. The models stress expected cash flows at various levels and at different points in time depending on the durability of the income stream, which includes our assessment of factors such as location (macro and micro markets), tenant quality and lease expirations. Our internal rating analysis presents expected losses in terms of an S&P Global ("S&P") bond equivalent rating for domestic commercial mortgage loans and Feller rate equivalent for Chilean commercial mortgage loans and direct financing leases. As the credit risk for commercial mortgage loans and direct financing leases increases, we adjust our internal ratings downward with loans in the category "B+ and below" having the highest risk for credit loss. Internal ratings on commercial mortgage loans and direct financing leases are updated at least annually and potentially more often for certain investments with material changes in collateral value or occupancy and for investments on an internal "watch list".

Commercial mortgage loans and direct financing leases that require more frequent and detailed attention are identified and placed on an internal "watch list". Among the criteria that may indicate a potential problem are significant negative changes in ratios of loan to value or contract rents to debt service, major tenant vacancies or bankruptcies, borrower sponsorship problems, late payments, delinquent taxes and loan relief/restructuring requests.

Residential Mortgage Loan Credit Risk Profile Based on Performance Status

Our residential mortgage loan portfolio is monitored based on performance of the loans. Monitoring on a residential mortgage loan increases when the loan is delinquent or earlier if there is an indication of potential impairment. We define non-performing domestic residential mortgage loans as loans 90 days or greater delinquent or on non-accrual status. We define non-performing residential first lien mortgages in the Chilean market as loans that have missed a specified number of coupon payments based on the nature of the loans and collection practices in that market.

Non-Accrual Financing Receivables

Financing receivables are placed on non-accrual status if we have concern regarding the collectability of future payments or if a financing receivable has matured without being paid off or extended. Factors considered may include conversations with the borrower, loss of major tenant, bankruptcy of borrower or major tenant, decreased property cash flow for commercial mortgage loans and direct financing leases or number of days past due and other circumstances for residential mortgage loans. Based on an assessment as to the collectability of the principal, a determination is made to apply any payments received either against the principal, against the valuation allowance or according to the contractual terms. When a financing receivable is placed on non-accrual status, the accrued unpaid interest receivable is reversed against interest income. Accrual of interest resumes after factors resulting in doubts about collectability have improved. Financing receivables in the Chilean market are carried on accrual for a longer period of delinquency than domestic financing receivables, as assessment of collectability is based on the nature of the financing receivables and collection practices in that market.

The amortized cost of financing receivables on non-accrual status was as follows:

	March 31, 2023		
	Beginning amortized cost on nonaccrual status	Ending amortized cost on nonaccrual status	Amortized cost of nonaccrual assets without a valuation allowance
		(in millions)	
Commercial mortgage loans	**$ 50.0**	**$ 49.4**	**$ —**
Residential mortgage loans	**17.8**	**15.3**	**0.6**
Total	**$ 67.8**	**$ 64.7**	**$ 0.6**

	December 31, 2022		
	Beginning amortized cost on nonaccrual status	Ending amortized cost on nonaccrual status	Amortized cost of nonaccrual assets without a valuation allowance
		(in millions)	
Commercial mortgage loans	$ 13.2	$ 50.0	$ —
Residential mortgage loans	4.0	17.8	0.6
Total	$ 17.2	$ 67.8	$ 0.6

Interest income recognized on non-accrual financing receivables was as follows:

	For the three months ended March 31,	
	2023	2022
	(in millions)	
Commercial mortgage loans	**$ —**	$ 0.3
Total	**$ —**	$ 0.3

Principal Financial Group, Inc.
Notes to Condensed Consolidated Financial Statements – (continued)
March 31, 2023
(Unaudited)

The aging of our financing receivables, based on amortized cost, was as follows:

	March 31, 2023						
	30-59 days past due	60-89 days past due	90 days or more past due	Total past due	Current	Total (1)	Amortized cost 90 days or more and accruing
				(in millions)			
Commercial mortgage loans	$ 24.4	$ —	$ 14.5	$ 38.9	$ 16,628.2	$ 16,667.1	$ 1.1
Direct financing leases	6.3	44.9	4.4	55.6	661.5	717.1	4.4
Residential mortgage loans	69.8	16.7	15.6	102.1	3,922.1	4,024.2	7.6
Total	$ 100.5	$ 61.6	$ 34.5	$ 196.6	$ 21,211.8	$ 21,408.4	$ 13.1

	December 31, 2022						
	30-59 days past due	60-89 days past due	90 days or more past due	Total past due	Current	Total (1)	Amortized cost 90 days or more and accruing
				(in millions)			
Commercial mortgage loans	$ 45.9	$ 7.5	$ 14.4	$ 67.8	$ 16,662.5	$ 16,730.3	$ —
Direct financing leases	6.6	6.2	1.6	14.4	650.6	665.0	1.6
Residential mortgage loans	73.1	15.4	16.2	104.7	3,878.3	3,983.0	6.4
Total	$ 125.6	$ 29.1	$ 32.2	$ 186.9	$ 21,191.4	$ 21,378.3	$ 8.0

(1) As of both March 31, 2023 and December 31, 2022,no reinsurance recoverables or deposit receivables were considered past due.

Financing Receivables Valuation Allowance

We establish a valuation allowance to provide for the risk of credit losses inherent in our financing receivables. The valuation allowance is maintained at a level believed adequate by management to absorb estimated expected credit losses. The valuation allowance is based on amortized cost excluding accrued interest receivable and includes reserves for pools of financing receivables with similar risk characteristics. We do not measure a credit loss allowance on accrued interest receivable because we write off the uncollectible accrued interest receivable balance to net investment income in a timely manner, generally within 90 days domestically or, in the Chilean market, based on the nature of the loans and collection practices in that market. During 2023 and 2022, we did not write off any commercial mortgage loan accrued interest or residential mortgage loan accrued interest.

For commercial and residential mortgage loans and direct financing leases, management's periodic evaluation and assessment of the valuation allowance adequacy is based on known and inherent risks in the portfolio, adverse situations that may affect a borrower's ability to repay, the estimated value of the underlying collateral, composition of the portfolio, portfolio delinquency information, underwriting standards, peer group information, current and forecasted economic conditions, loss experience and other relevant factors. For reinsurance recoverables and deposit receivables, management's periodic evaluation and assessment of the valuation allowance adequacy is based on known and inherent risks, adverse situations that may affect a reinsurer's ability to repay, current and forecasted economic conditions, industry loss experience and other relevant factors.

Principal Financial Group, Inc.
Notes to Condensed Consolidated Financial Statements – (continued)
March 31, 2023
(Unaudited)

Our commercial mortgage loans and direct financing leases are pooled by risk rating level with an estimated loss ratio applied against each risk rating level. The loss ratio is generally based upon historical loss experience for each risk rating level as adjusted for certain current and forecasted environmental factors management believes to be relevant. Environmental factors are forecasted for two years or less with immediate reversion to historical experience. The allowance for direct financing leases is also adjusted for the residual value of the leased assets. A commercial mortgage loan or direct financing lease is evaluated individually if it does not continue to share similar risk characteristics of a pool. We analyze the need for an individual evaluation for any domestic commercial mortgage loan that is delinquent for 60 days or more, in process of foreclosure, restructured, on the internal "watch list" or that currently is evaluated individually. We analyze the need for an individual evaluation for any Chilean commercial mortgage loan or direct financing lease that is considered past due based on collection practices in the Chilean market and the nature of the loan or lease.

We estimate expected credit losses for certain commercial mortgage loan or direct financing lease commitments where we have a contractual obligation to extend credit. The expected credit losses are estimated based on the commercial mortgage loan or direct financing lease valuation allowance process described previously, adjusted for probability of funding. The estimated expected credit losses for commercial mortgage loan and direct financing lease commitments are reported in other liabilities on the consolidated statements of financial position. The change in the credit loss liability for commitments is included in net realized capital gains (losses) on the consolidated statements of operations. Once funded, expected credit losses for commercial mortgage loans or direct financing leases are included within the commercial mortgage loan or direct financing lease valuation allowance described previously.

We evaluate residential mortgage loans based on aggregated risk factors and historical loss experience by pool type. We adjust these quantitative factors for qualitative factors of present and forecasted conditions. Qualitative factors include items such as economic and business conditions, changes in the portfolio, value of underlying collateral and concentrations. A residential mortgage loan is evaluated individually if it does not continue to share similar risk characteristics of a pool. We analyze the need for an individual evaluation for any domestic residential mortgage loan that is delinquent for 60 days or more, in process of foreclosure, restructured, on the internal "watch list" or that currently is evaluated individually. We analyze the need for an individual evaluation for any Chilean residential mortgage loan that is considered past due based on collection practices in the Chilean market and the nature of the loan.

As discussed previously, commercial and residential mortgage loans and direct financing leases are evaluated individually if the asset does not continue to share similar risk characteristics of a pool. When we determine a commercial or residential mortgage loan is probable of foreclosure, a valuation allowance is established equal to the difference between the carrying amount of the mortgage loan and the estimated value of the collateral reduced by the cost to sell. For certain commercial mortgage loans where repayment is expected to be provided substantially through the operation or sale of the collateral and the borrower is experiencing financial difficulty, we elect to establish a valuation allowance equal to the difference between the carrying amount of the mortgage loan and the estimated value of the real estate collateral, which may be reduced by the cost to sell. Estimated value may also be based on either the present value of the expected future cash flows discounted at the asset's effective interest rate or the asset's observable market price. Subsequent changes in the estimated value are reflected in the valuation allowance. Amounts on financing receivables deemed to be uncollectible are charged off and removed from the valuation allowance. The change in the valuation allowance for loans and direct financing leases is included in net realized capital gains (losses) on the consolidated statements of operations.

Our reinsurance recoverables and deposit receivable are pooled by reinsurer risk rating with an estimated loss ratio applied against each risk rating level. The loss ratio is generally based upon industry historical loss experience and expected recovery timing as adjusted for certain current and forecasted environmental factors management believes to be relevant. Environmental factors are forecasted for five years or less with immediate reversion to industry historical experience. A reinsurance recoverable or deposit receivable is evaluated individually if it does not continue to share similar risk characteristics of a pool. We analyze the need for an individual evaluation for any reinsurance recoverable or deposit receivable based on past due payments and changes in reinsurer risk ratings. The change in the valuation allowance for reinsurance recoverables and deposit receivable is included in benefits, claims and settlement expenses on the consolidated statements of operations.

Principal Financial Group, Inc.
Notes to Condensed Consolidated Financial Statements – (continued)
March 31, 2023
(Unaudited)

A rollforward of our valuation allowance was as follows:

	For the three months ended March 31, 2023				
	Commercial mortgage loans	Direct financing leases	Residential mortgage loans	Reinsurance recoverables	Total
			(in millions)		
Beginning balance	**$ 77.9**	**$ 0.6**	**$ 5.6**	**$ 2.7**	**$ 86.8**
Provision	**3.8**	**(0.1)**	**0.1**	**(0.2)**	**3.6**
Charge-offs	**—**	**—**	**(0.1)**	**—**	**(0.1)**
Recoveries	**—**	**—**	**0.2**	**—**	**0.2**
Foreign currency translation adjustment	**0.2**	**0.1**	**0.1**	**—**	**0.4**
Ending balance	**$ 81.9**	**$ 0.6**	**$ 5.9**	**$ 2.5**	**$ 90.9**

	For the three months ended March 31, 2022				
	Commercial mortgage loans	Direct financing leases	Residential mortgage loans	Reinsurance recoverables	Total
			(in millions)		
Beginning balance	$ 43.9	$ 0.4	$ 2.0	$ 2.7	$ 49.0
Provision	22.1	—	(0.5)	—	21.6
Charge-offs	—	—	(0.1)	—	(0.1)
Recoveries	—	—	0.4	—	0.4
Foreign currency translation adjustment	0.1	—	—	—	0.1
Ending balance	$ 66.1	$ 0.4	$ 1.8	$ 2.7	$ 71.0

Mortgage Loans

We periodically purchase mortgage loans as well as sell mortgage loans we have originated. Mortgage loans purchased and sold were as follows:

	For the three months ended March 31,	
	2023	2022
	(in millions)	
Commercial mortgage loans:		
Purchased	**$ 33.0**	$ 32.7
Residential mortgage loans:		
Purchased (1)	**69.1**	534.3
Sold	**4.2**	7.1

(1) Includes mortgage loans purchased by residential mortgage loan VIEs in 2022.

Principal Financial Group, Inc.
Notes to Condensed Consolidated Financial Statements – (continued)
March 31, 2023
(Unaudited)

Our commercial mortgage loan portfolio is diversified by geographic region and specific collateral property type as follows:

	March 31, 2023		December 31, 2022	
	Amortized cost	Percent of total	Amortized cost	Percent of total
	($ in millions)			
Geographic distribution				
New England	**$ 508.0**	**3.0 %**	$ 512.1	3.1 %
Middle Atlantic	**4,510.8**	**27.1**	4,505.6	26.9
East North Central	**666.9**	**4.0**	652.5	3.9
West North Central	**369.4**	**2.2**	370.9	2.2
South Atlantic	**2,578.0**	**15.5**	2,558.3	15.3
East South Central	**349.0**	**2.1**	339.8	2.0
West South Central	**1,187.5**	**7.1**	1,204.9	7.2
Mountain	**954.9**	**5.7**	938.7	5.6
Pacific	**4,962.8**	**29.8**	5,115.3	30.6
International	**579.8**	**3.5**	532.2	3.2
Total	**$ 16,667.1**	**100.0 %**	$ 16,730.3	100.0 %
Property type distribution				
Office	**$ 4,103.0**	**24.6 %**	$ 4,322.0	25.9 %
Retail	**1,513.8**	**9.1**	1,499.4	9.0
Industrial	**3,227.9**	**19.4**	3,235.9	19.3
Apartments	**6,931.2**	**41.6**	6,827.1	40.8
Hotel	**71.4**	**0.4**	72.5	0.4
Mixed use/other	**819.8**	**4.9**	773.4	4.6
Total	**$ 16,667.1**	**100.0 %**	$ 16,730.3	100.0 %

Mortgage Loan Modifications

Our commercial and residential mortgage loan portfolios include loans that have been modified. We assess loan modifications that are related to our borrowers experiencing financial difficulty in the form of principal forgiveness, an interest rate reduction, an other-than-insignificant payment delay or a term extension (or a combination thereof). Generally, an assessment of whether a borrower is experiencing financial difficulty is made on the date of the modification.

The financing receivables valuation allowance utilizes an estimate of lifetime expected credit losses and it is recorded on each loan upon origination or acquisition. The starting point for the estimate of the valuation allowance is historical loss information, which includes losses from modification of receivables to borrowers experiencing financial difficulty. Because the effect of most modifications made to borrowers experiencing financial difficulty is already included in the valuation allowance because of the measurement methodologies used to estimate the allowance, a change to the valuation allowance is generally not recorded upon modification.

Occasionally, a modification of a loan from a borrower experiencing financial difficulty is in the form of principal forgiveness. When principal forgiveness is provided as a modification, the amount of the principal forgiven is deemed uncollectible. Therefore, that portion of the loan is written off, which results in a reduction of the amortized cost and a corresponding adjustment to the valuation allowance.

In some cases, we modify a loan by providing multiple types of concessions. Typically, one type of concession, such as a term extension, is granted initially. If the borrower continues to experience financial difficulty, another concession such as principal forgiveness may be granted.

We did not have any significant mortgage loans that were modified for the three months ended March 31, 2023.

Principal Financial Group, Inc.
Notes to Condensed Consolidated Financial Statements – (continued)
March 31, 2023
(Unaudited)

Troubled Debt Restructuring

Prior to the implementation of authoritative guidance in 2023, we assessed loan modifications on a case-by-case basis to evaluate whether a TDR has occurred. When we had commercial mortgage loan TDRs, they were modified to delay or reduce principal payments and to reduce or delay interest payments. The commercial mortgage loan modifications result in delayed cash receipts, a decrease in interest income and loan rates that were considered below market. When we had residential mortgage loan TDRs, they included modifications of interest-only payment periods, delays in principal balloon payments and interest rate reductions. Residential mortgage loan modifications resulted in delayed or decreased cash receipts and a decrease in interest income.

When we had commercial mortgage loan TDRs, they were reserved for in the mortgage loan valuation allowance at the estimated fair value of the underlying collateral reduced by the cost to sell.

When we had residential mortgage loan TDRs, they were specifically reserved for in the mortgage loan valuation allowance if losses resulted from the modification. Residential mortgage loans that had defaulted or had been discharged through bankruptcy were reduced to the expected collectible amount.

We did not have any significant loans that were modified and met the criteria of a TDR for the three months ended March 31, 2022.

Securities Posted as Collateral

As of March 31, 2023 and December 31, 2022, we posted $6,707.2 million and $6,411.0 million, respectively, in commercial mortgage loans and residential first lien mortgages to satisfy collateral requirements associated with our obligation under funding agreements with Federal Home Loan Bank of Des Moines ("FHLB Des Moines"). In addition, as of March 31, 2023 and December 31, 2022, we posted $4,536.7 million and $3,569.7 million, respectively, in fixed maturities, available-for-sale and trading securities to satisfy collateral requirements primarily associated with a reinsurance arrangement, our derivative credit support annex (collateral) agreements, Futures Commission Merchant ("FCM") agreements, a lending arrangement and our obligation under funding agreements with FHLB Des Moines. Since we did not relinquish ownership rights on these instruments, they are reported as mortgage loans, fixed maturities, available-for-sale and fixed maturities, trading, respectively, on our consolidated statements of financial position. Of the securities posted as collateral, as of March 31, 2023 and December 31, 2022, $681.8 million and $503.8 million, respectively, could be sold or repledged by the secured party.

Principal Financial Group, Inc.
Notes to Condensed Consolidated Financial Statements – (continued)
March 31, 2023
(Unaudited)

Balance Sheet Offsetting

Financial assets subject to master netting agreements or similar agreements were as follows:

	Gross amount of recognized assets (1)	Gross amounts not offset in the consolidated statements of financial position: Financial instruments (2)	Gross amounts not offset in the consolidated statements of financial position: Collateral received	Net amount
		(in millions)		
March 31, 2023				
Derivative assets	**$ 386.7**	**$ (149.1)**	**$ (195.6)**	**$ 42.0**
Reverse repurchase agreements	**140.0**	**—**	**(140.3)**	**(0.3)**
Total	**$ 526.7**	**$ (149.1)**	**$ (335.9)**	**$ 41.7**
December 31, 2022				
Derivative assets	$ 321.0	$ (135.7)	$ (151.9)	$ 33.4
Reverse repurchase agreements	124.4	—	(124.4)	—
Total	$ 445.4	$ (135.7)	$ (276.3)	$ 33.4

(1) The gross amount of recognized derivative and reverse repurchase agreement assets are reported with other investments and cash and cash equivalents, respectively, on the consolidated statements of financial position. The gross amounts of derivative and reverse repurchase agreement assets are not netted against offsetting liabilities for presentation on the consolidated statements of financial position.
(2) Represents amount of offsetting derivative liabilities that are subject to an enforceable master netting agreement or similar agreement that are not netted against the gross derivative assets for presentation on the consolidated statements of financial position.

Financial liabilities subject to master netting agreements or similar agreements were as follows:

	Gross amount of recognized liabilities (1)	Gross amounts not offset in the consolidated statements of financial position: Financial instruments (2)	Gross amounts not offset in the consolidated statements of financial position: Collateral pledged	Net amount
		(in millions)		
March 31, 2023				
Derivative liabilities	**$ 507.3**	**$ (149.1)**	**$ (355.3)**	**$ 2.9**
December 31, 2022				
Derivative liabilities	$ 634.2	$ (135.7)	$ (485.1)	$ 13.4

(1) The gross amount of recognized derivative liabilities is reported with other liabilities on the consolidated statements of financial position. The above excludes derivative liabilities, which are primarily embedded derivatives that are not subject to master netting agreements or similar agreements. The gross amounts of derivative liabilities are not netted against offsetting assets for presentation on the consolidated statements of financial position.
(2) Represents amount of offsetting derivative assets that are subject to an enforceable master netting agreement or similar agreement that are not netted against the gross derivative liabilities for presentation on the consolidated statements of financial position.

The financial instruments that are subject to master netting agreements or similar agreements include right of setoff provisions. Derivative instruments include provisions to setoff positions covered under the agreements with the same counterparties and provisions to setoff positions outside of the agreements with the same counterparties in the event of default by one of the parties. Derivative instruments also include collateral or variation margin provisions, which are generally settled daily with each counterparty. See Note 4, Derivative Financial Instruments, for further details.

Principal Financial Group, Inc.
Notes to Condensed Consolidated Financial Statements – (continued)
March 31, 2023
(Unaudited)

Repurchase and reverse repurchase agreements include provisions to setoff other repurchase and reverse repurchase balances with the same counterparty. Repurchase and reverse repurchase agreements also include collateral provisions with the counterparties. For reverse repurchase agreements we require the counterparties to pledge collateral with a value greater than the amount of cash transferred. We have the right but do not sell or repledge collateral received in reverse repurchase agreements. Repurchase agreements are structured as secured borrowings for all counterparties. We pledge fixed maturities available-for-sale, which the counterparties have the right to sell or repledge. Interest incurred on repurchase agreements is reported as part of operating expenses on the consolidated statements of operations. Net proceeds related to repurchase agreements are reported as a component of financing activities on the consolidated statements of cash flows. We did not have any outstanding repurchase agreements as of March 31, 2023 and December 31, 2022.

4. Derivative Financial Instruments

Derivatives are generally used to hedge or reduce exposure to market risks associated with assets held or expected to be purchased or sold and liabilities incurred or expected to be incurred. Derivatives are used to change the characteristics of our asset/liability mix consistent with our risk management activities. Derivatives are also used in asset replication strategies.

Types of Derivative Instruments

Interest Rate Contracts

Interest rate risk is the risk we will incur economic losses due to adverse changes in interest rates. Sources of interest rate risk include the difference between the maturity and interest rate changes of assets with the liabilities they support, timing differences between the pricing of liabilities and the purchase or procurement of assets and changing cash flow profiles from original projections due to prepayment options embedded within asset and liability contracts. We use various derivatives to manage our exposure to fluctuations in interest rates.

Interest rate swaps are contracts in which we agree with other parties to exchange, at specified intervals, the difference between fixed rate and/or floating rate interest amounts based upon designated market rates or rate indices and an agreed upon notional principal amount. Generally, no cash is exchanged at the outset of the contract and no principal payments are made by any party. Cash is paid or received based on the terms of the swap. We use interest rate swaps primarily to more closely match the interest rate characteristics of assets and liabilities and to mitigate the risks arising from timing mismatches between assets and liabilities (including duration mismatches). We also use interest rate swaps to hedge against changes in the value of assets we anticipate acquiring and other anticipated transactions and commitments. Interest rate swaps are used to hedge against changes in the value of the guaranteed minimum withdrawal benefit ("GMWB") MRB. The GMWB rider on our variable annuity products provides for guaranteed minimum withdrawal benefits regardless of the actual performance of various equity and/or fixed income funds available with the product. Additionally, we utilize interest rate swaps to replicate the returns of floating rate assets.

Interest rate options, including interest rate caps and interest rate floors, which can be combined to form interest rate collars, are contracts that entitle the purchaser to pay or receive the amounts, if any, by which a specified market rate exceeds a cap strike interest rate, or falls below a floor strike interest rate, respectively, at specified dates. We use interest rate options to manage prepayment risks in our assets and minimum guaranteed interest rates and lapse risks in our liabilities.

A swaption is an option to enter into an interest rate swap at a future date. We have purchased swaptions to hedge interest rate exposure for certain assets and liabilities. Swaptions not only hedge against the downside risk, but also allow us to take advantage of any upside benefits.

In exchange-traded futures transactions, we agree to purchase or sell a specified number of contracts, the values of which are determined by the values of designated classes of securities, and to post variation margin on a daily basis in an amount equal to the difference in the daily market values of those contracts. We enter into exchange-traded futures with regulated futures commissions merchants who are members of a trading exchange. We use exchange-traded futures to hedge against changes in value of the GMWB MRB.

Interest rate forwards, including to be announced ("TBA") forwards, bond forwards and treasury forwards, are contracts to take delivery of a fixed income security at a specified price at a future date. TBA forwards deliver government guaranteed mortgage-backed securities. Bond forwards and treasury forwards deliver corporate or municipal and U.S. Treasury bonds, respectively. At inception of the TBA and treasury forward contracts we do not intend to take physical delivery. We intend to take delivery of the bond forwards referencing corporate or municipal bonds. We have used TBA forwards to gain exposure to the investment risk and return of agency mortgage-backed security pools in order to reduce asset and liability duration mismatch. Treasury forwards are used to hedge against changes in the value of the GMWB MRB. Bond forwards are used to gain leverage through synthetic exposure during the forward period and fix the purchase price of a bond at a specified date in future.

Foreign Exchange Contracts

Foreign currency risk is the risk we will incur economic losses due to adverse fluctuations in foreign currency exchange rates. This risk arises from foreign currency-denominated funding agreements issued to nonqualified institutional investors in the international market, foreign currency-denominated fixed maturity and equity securities, and our international operations, including expected cash flows and potential acquisition and divestiture activity. We use various derivatives to manage our exposure to fluctuations in foreign currency exchange rates.

Currency swaps are contracts in which we agree with other parties to exchange, at specified intervals, a series of principal and interest payments in one currency for that of another currency. Generally, the principal amount of each currency is exchanged at the beginning and termination of the currency swap by each party. The interest payments are primarily fixed-to-fixed rate; however, they may also be fixed-to-floating rate or floating-to-fixed rate. These transactions are entered into pursuant to master agreements that provide for a single net payment to be made by one counterparty for payments made in the same currency at each due date. We use currency swaps to reduce market risks from changes in currency exchange rates with respect to investments or liabilities denominated in foreign currencies that we either hold or intend to acquire or sell.

Currency forwards are contracts in which we agree with other parties to deliver or receive a specified amount of an identified currency at a specified future date. Typically, the price is agreed upon at the time of the contract and payment for such a contract is made at the specified future date. We use currency forwards to reduce market risks from changes in currency exchange rates with respect to investments or liabilities denominated in foreign currencies that we either hold or intend to acquire or sell. We use currency forwards to hedge certain foreign-denominated real estate funds in our domestic operations and net equity investments in foreign operations, including certain sponsored investment funds.

Currency options are contracts that give the holder the right, but not the obligation to buy or sell a specified amount of the identified currency within a limited period of time at a contracted price. The contracts are net settled in cash, based on the differential in the current foreign exchange rate and the strike price. Purchased and sold options can be combined to form a foreign currency collar where we receive a payment if the foreign exchange rate is below the purchased option strike price and make a payment if the foreign exchange rate is above the sold option strike price. We have used currency options to hedge expected cash flows from our foreign operations.

Equity Contracts

Equity risk is the risk that we will incur economic losses due to adverse fluctuations in common stock prices. We use various derivatives to manage our exposure to equity risk, which arises from products in which the return or interest we credit is tied to an external equity index as well as products subject to minimum contractual guarantees.

We purchase equity call spreads ("option collars") to hedge the equity participation rates promised to contractholders in conjunction with our fixed deferred annuity and universal life products that credit interest based on changes in an external equity index.

We use exchange-traded futures and equity put options to hedge against changes in the value of the GMWB MRB related to the GMWB rider on our variable annuity product. The premium associated with certain options is paid quarterly over the life of the option contract. We also use exchange-traded futures to hedge against the economic exposure to certain fund closures in process.

Credit Contracts

Credit risk relates to the uncertainty associated with the continued ability of a given obligor to make timely payments of principal and interest. We use credit default swaps to enhance the return on our investment portfolio by providing comparable exposure to fixed income securities that might not be available in the primary market. They are also used to hedge credit exposures in our investment portfolio. Credit derivatives are used to sell or buy credit protection on an identified name or names on an unfunded or synthetic basis in return for receiving or paying a quarterly premium. The premium generally corresponds to a referenced name's credit spread at the time the agreement is executed. In cases where we sell protection, we also buy a quality cash bond to match against the credit default swap, thereby entering into a synthetic transaction replicating a cash security. When selling protection, if there is an event of default by the referenced name, as defined by the agreement, we are obligated to pay the counterparty the referenced amount of the contract and receive in return the referenced security in a principal amount equal to the notional value of the credit default swap.

Other Contracts

Embedded Derivatives. We purchase or issue certain financial instruments or products that contain a derivative instrument that is embedded in the financial instrument or product. When it is determined that the embedded derivative possesses economic characteristics that are not clearly or closely related to the economic characteristics of the host contract and a separate instrument with the same terms would qualify as a derivative instrument, the embedded derivative is bifurcated from the host instrument for measurement purposes. The embedded derivative, which is reported with the host instrument in the consolidated statements of financial position, is carried at fair value.

We offer group annuity contracts that have guaranteed separate accounts as an investment option. We have fixed deferred annuities and universal life products that credit interest based on changes in an external equity index.

We have a funds withheld payable associated with our coinsurance with funds withheld agreement with Talcott Life & Annuity Re. The funds withheld payable has an embedded total return swap as the total return of the funds withheld assets are transferred to Talcott Life & Annuity Re, which is not based on our own creditworthiness.

Exposure

Our risk of loss is typically limited to the fair value of our derivative instruments and not to the notional or contractual amounts of these derivatives. We are also exposed to credit losses in the event of nonperformance of the counterparties. Our current credit exposure is limited to the value of derivatives that have become favorable to us. This credit risk is minimized by purchasing such agreements from financial institutions with high credit ratings and by establishing and monitoring exposure limits. We also utilize various credit enhancements, including collateral and credit triggers to reduce the credit exposure to our derivative instruments.

Derivatives may be exchange-traded or they may be privately negotiated contracts, which are usually referred to as over-the-counter ("OTC") derivatives. Certain of our OTC derivatives are cleared and settled through central clearing counterparties ("OTC cleared"), while others are bilateral contracts between two counterparties ("bilateral OTC"). Our derivative transactions are generally documented under International Swaps and Derivatives Association, Inc. ("ISDA") Master Agreements. Management believes that such agreements provide for legally enforceable set-off and close-out netting of exposures to specific counterparties. Under such agreements, in connection with an early termination of a transaction, we are permitted to set off our receivable from a counterparty against our payables to the same counterparty arising out of all included transactions. For reporting purposes, we do not offset fair value amounts of bilateral OTC derivatives for the right to reclaim cash collateral or the obligation to return cash collateral against fair value amounts recognized for derivative instruments executed with the same counterparties under master netting agreements. OTC cleared derivatives have variation margin that is legally characterized as settlement of the derivative exposure, which reduces their fair value in the consolidated statements of financial position.

We posted $674.0 million and $750.9 million in cash and securities under collateral arrangements as of March 31, 2023 and December 31, 2022, respectively, to satisfy collateral and initial margin requirements associated with our derivative credit support agreements and FCM agreements.

Certain of our derivative instruments contain provisions that require us to maintain an investment grade rating from each of the major credit rating agencies on our debt. If the ratings on our debt were to fall below investment grade, it would be in violation of these provisions and the counterparties to the derivative instruments could request immediate payment or demand immediate and ongoing full overnight collateralization on derivative instruments in net liability positions. The aggregate fair value, inclusive of accrued interest, of all derivative instruments with credit-risk-related contingent features that were in a liability position without regard to netting under derivative credit support annex agreements as of March 31, 2023 and December 31, 2022, was $504.3 million and $632.6 million, respectively. Cleared derivatives have contingent features that require us to post excess margin as required by the FCM. The terms surrounding excess margin vary by FCM agreement. With respect to derivatives containing collateral provisions, we posted collateral and initial margin of $674.0 million and $750.9 million as of March 31, 2023 and December 31, 2022, respectively, in the normal course of business, which reflects netting under derivative agreements. If the credit-risk-related contingent features underlying these agreements were triggered on March 31, 2023, we would be required to post an additional $94.1 million of collateral to our counterparties.

As of March 31, 2023 and December 31, 2022, we had received $136.5 million and $148.8 million, respectively, of cash collateral associated with our derivative credit support annex agreements and FCM agreements, for which we recorded a corresponding liability reflecting our obligation to return the collateral.

Notional amounts are used to express the extent of our involvement in derivative transactions and represent a standard measurement of the volume of our derivative activity. Notional amounts represent those amounts used to calculate contractual flows to be exchanged and are not paid or received, except for contracts such as currency swaps. Credit exposure represents the gross amount owed to us under derivative contracts as of the valuation date. The notional amounts and credit exposure of our derivative financial instruments by type were as follows:

	March 31, 2023	December 31, 2022
	(in millions)	
Notional amounts of derivative instruments		
Interest rate contracts:		
Interest rate swaps	**$ 54,333.8**	$ 52,249.9
Interest rate options	**3,049.0**	4,418.9
Interest rate forwards	**2,370.7**	2,527.5
Interest rate futures	**960.5**	877.5
Foreign exchange contracts:		
Currency swaps	**1,617.9**	1,634.7
Currency forwards	**1,585.3**	1,123.1
Equity contracts:		
Equity options	**1,999.1**	2,049.3
Equity futures	**732.7**	574.1
Credit contracts:		
Credit default swaps	**400.0**	400.0
Other contracts:		
Embedded derivatives	**23,164.3**	23,209.3
Total notional amounts at end of period	**$ 90,213.3**	$ 89,064.3
Credit exposure of derivative instruments		
Interest rate contracts:		
Interest rate swaps	**$ 68.3**	$ 64.2
Interest rate options	**32.3**	41.7
Interest rate forwards	**5.4**	0.1
Foreign exchange contracts:		
Currency swaps	**190.8**	171.1
Currency forwards	**70.8**	34.0
Equity contracts:		
Equity options	**24.6**	16.5
Credit contracts:		
Credit default swaps	**3.7**	3.6
Total gross credit exposure	**395.9**	331.2
Less: collateral received	**219.0**	191.9
Net credit exposure	**$ 176.9**	$ 139.3

Principal Financial Group, Inc.
Notes to Condensed Consolidated Financial Statements – (continued)
March 31, 2023
(Unaudited)

The fair value of our derivative instruments classified as assets and liabilities was as follows:

	Derivative assets (1)		Derivative liabilities (2)	
	March 31, 2023	December 31, 2022	March 31, 2023	December 31, 2022
	(in millions)			
Derivatives designated as hedging instruments				
Interest rate contracts	**$ 16.7**	$ 20.0	**$ 90.2**	$ 105.1
Foreign exchange contracts	**132.8**	134.6	**28.3**	19.7
Total derivatives designated as hedging instruments	**$ 149.5**	$ 154.6	**$ 118.5**	$ 124.8
Derivatives not designated as hedging instruments				
Interest rate contracts	**$ 82.9**	$ 81.1	**$ 323.7**	$ 439.9
Foreign exchange contracts	**126.2**	65.9	**9.0**	21.9
Equity contracts	**24.5**	16.5	**55.2**	45.6
Credit contracts	**3.6**	3.5	**1.9**	2.0
Other contracts	**—**	—	**(2,970.7)**	(3,606.4)
Total derivatives not designated as hedging instruments	**237.2**	167.0	**(2,580.9)**	(3,097.0)
Total derivative instruments	**$ 386.7**	$ 321.6	**$ (2,462.4)**	$ (2,972.2)

(1) The fair value of derivative assets is reported with other investments on the consolidated statements of financial position.

(2) The fair value of derivative liabilities is reported with other liabilities on the consolidated statements of financial position, with the exception of certain embedded derivative liabilities. Embedded derivatives with a net liability fair value of $55.5 million and $46.4 million as of March 31, 2023 and December 31, 2022, respectively, are reported with contractholder funds on the consolidated statements of financial position. Embedded derivatives with a net (asset) liability fair value of $(3,026.2) million and $(3,652.8) million as of March 31, 2023 and December 31, 2022, respectively, are reported with funds withheld payable on the consolidated statements of financial position.

Credit Derivatives Sold

When we sell credit protection, we are exposed to the underlying credit risk similar to purchasing a fixed maturity security instrument. Our credit derivative contracts sold reference a single name or reference security (referred to as “single name credit default swaps”). These instruments are either referenced in an OTC credit derivative transaction or embedded within an investment structure that has been fully consolidated into our financial statements.

These credit derivative transactions are subject to events of default defined within the terms of the contract, which normally consist of bankruptcy, failure to pay, or modified restructuring of the reference entity and/or issue. If a default event occurs for a reference name or security, we are obligated to pay the counterparty an amount equal to the notional amount of the credit derivative transaction. As a result, our maximum future payment is equal to the notional amount of the credit derivative. In certain cases, we also may have purchased credit protection with identical underlyings to certain of our sold protection transactions. As of March 31, 2023 and December 31, 2022, we did not purchase credit protection relating to our sold protection transactions. In certain circumstances, our potential loss could also be reduced by any amount recovered in the default proceedings of the underlying credit name.

Principal Financial Group, Inc.
Notes to Condensed Consolidated Financial Statements – (continued)
March 31, 2023
(Unaudited)

The following tables show our credit default swap protection sold by types of contract, types of referenced/underlying asset class and external agency rating for the underlying reference security. The maximum future payments are undiscounted and have not been reduced by the effect of any offsetting transactions, collateral or recourse features described above.

	March 31, 2023			
	Notional amount	Fair value	Maximum future payments	Weighted average expected life (in years)
		(in millions)		
Single name credit default swaps				
Corporate debt				
A	**$ 40.0**	**$ 0.2**	**$ 40.0**	**2.2**
BBB	**190.0**	**2.5**	**190.0**	**2.9**
BB	**20.0**	**(0.1)**	**20.0**	**4.2**
Sovereign				
A	**20.0**	**0.3**	**20.0**	**2.2**
Total credit default swap protection sold	**$ 270.0**	**$ 2.9**	**$ 270.0**	**2.8**

	December 31, 2022			
	Notional amount	Fair value	Maximum future payments	Weighted average expected life (in years)
		(in millions)		
Single name credit default swaps				
Corporate debt				
A	$ 40.0	$ 0.4	$ 40.0	2.5
BBB	190.0	2.2	190.0	3.1
BB	20.0	(0.2)	20.0	4.5
Sovereign				
A	20.0	0.2	20.0	2.5
Total credit default swap protection sold	$ 270.0	$ 2.6	$ 270.0	3.1

Fair Value and Cash Flow Hedges

Fair Value Hedges

We use fixed-to-floating rate interest rate swaps to more closely align the interest rate characteristics of certain assets and have used them to align the interest rate characteristics of certain liabilities. In general, these swaps are used in asset and liability management to modify duration, which is a measure of sensitivity to interest rate changes.

The net interest effect of interest rate swap transactions for derivatives in fair value hedges is recorded as an adjustment to income or expense of the underlying hedged item in our consolidated statements of operations.

Principal Financial Group, Inc.
Notes to Condensed Consolidated Financial Statements – (continued)
March 31, 2023
(Unaudited)

The following amounts were recorded on the consolidated statements of financial position related to cumulative basis adjustments for fair value hedges. The amortized cost includes the amortized cost basis and the fair value hedging basis adjustment.

Line item in the consolidated statements of financial position in which the hedged item is included	Amortized cost of hedged item		Cumulative amount of fair value hedging basis adjustment increase/(decrease) included in the amortized cost of the hedged item	
	March 31, 2023	December 31, 2022	March 31, 2023	December 31, 2022
		(in millions)		
Fixed maturities, available-for-sale (1):				
Active hedging relationships	**$ 3,454.0**	$ 3,498.6	**$ (126.1)**	$ (153.4)
Discontinued hedging relationships	**75.5**	48.8	**0.3**	1.3
Total fixed maturities, available-for-sale in active or discontinued hedging relationships	**$ 3,529.5**	$ 3,547.4	**$ (125.8)**	$ (152.1)

(1) These amounts include the amortized cost basis of closed portfolios used to designate last-of-layer hedging relationships in which the hedged last layer amount is expected to remain at the end of the hedging relationship. As of March 31, 2023 and December 31, 2022, the amortized cost basis of the closed portfolios used in these hedging relationships was $3,215.0 million and $3,256.9 million, respectively, the cumulative basis adjustments associated with these hedging relationships was $(83.5) million and $(102.4) million, respectively, and the amount of the designated hedged items were $1,110.0 million and $1,110.0 million, respectively.

Cash Flow Hedges

We utilize floating-to-fixed rate interest rate swaps to eliminate the variability in cash flows of recognized financial assets and liabilities.

We enter into currency exchange swap agreements to convert both principal and interest payments of certain foreign denominated assets and liabilities into U.S. dollar denominated fixed rate instruments to eliminate the exposure to future currency volatility on those items.

We use bond forwards and have used floating-to-fixed rate interest rate swaps to hedge forecasted transactions.

The net interest effect of interest rate swap and currency swap transactions for derivatives in cash flow hedges is recorded as an adjustment to income or expense of the underlying hedged item in our consolidated statements of operations.

The maximum length of time we are hedging our exposure to the variability in future cash flows for forecasted transactions, excluding those related to the payments of variable interest on existing financial assets and liabilities, is 3.9 years. As of March 31, 2023, we had $15.9 million of net gains reported in AOCI on the consolidated statements of financial position related to active hedges of forecasted transactions. If a hedged forecasted transaction is no longer probable of occurring, cash flow hedge accounting is discontinued. If it is probable that the hedged forecasted transaction will not occur, the deferred gain or loss is immediately reclassified from AOCI into net income.

Principal Financial Group, Inc.
Notes to Condensed Consolidated Financial Statements – (continued)
March 31, 2023
(Unaudited)

The following table shows the effect of derivatives in cash flow hedging relationships on the consolidated statements of financial position.

Derivatives in cash flow hedging relationships	Related hedged item	Amount of gain (loss) recognized in AOCI on derivatives for the three months ended March 31, 2023	2022
		(in millions)	
Interest rate contracts	Fixed maturities, available-for-sale	$ 15.9	$ (44.2)
Interest rate contracts	Investment contracts	(3.3)	9.5
Foreign exchange contracts	Fixed maturities, available-for-sale	(10.1)	13.0
Total		$ 2.5	$ (21.7)

We expect to reclassify net gains of $20.8 million from AOCI into net income in the next 12 months, which includes both net deferred gains on discontinued hedges and net gains on periodic settlements of active hedges. Actual amounts may vary from this amount as a result of market conditions.

Effect of Fair Value and Cash Flow Hedges on Consolidated Statements of Operations

The following tables show the effect of derivatives in fair value and cash flow hedging relationships and the related hedged items on the consolidated statements of operations.

	For the three months ended March 31, 2023		
	Net investment income related to hedges of fixed maturities, available-for-sale	Net realized capital gains (losses) related to hedges of fixed maturities, available-for-sale	Benefits, claims and settlement expenses related to hedges of investment contracts
		(in millions)	
Total amounts of consolidated statement of operations line items in which the effects of fair value and cash flow hedges are reported	$ 986.7	$ (66.0)	$ 1,773.9
Gains on fair value hedging relationships:			
Interest rate contracts:			
Gain recognized on hedged item	$ 26.2	$ —	$ —
Loss recognized on derivatives	(22.6)	—	—
Amortization of hedged item basis adjustments	(0.1)	—	—
Amounts related to periodic settlements on derivatives	12.6	—	—
Total gain recognized for fair value hedging relationships	$ 16.1	$ —	$ —
Gains on cash flow hedging relationships:			
Interest rate contracts:			
Gain reclassified from AOCI on derivatives	$ 1.1	$ —	$ —
Gain reclassified from AOCI as a result that a forecasted transaction is no longer probable of occurring	—	1.4	—
Amounts related to periodic settlements on derivatives	—	—	3.1
Foreign exchange contracts:			
Gain reclassified from AOCI on derivatives	—	1.2	—
Amounts related to periodic settlements on derivatives	5.4	—	—
Total gain recognized for cash flow hedging relationships	$ 6.5	$ 2.6	$ 3.1

Principal Financial Group, Inc.
Notes to Condensed Consolidated Financial Statements – (continued)
March 31, 2023
(Unaudited)

	For the three months ended March 31, 2022		
	Net investment income related to hedges of fixed maturities, available-for-sale	Net realized capital gains (losses) related to hedges of fixed maturities, available-for-sale	Benefits, claims and settlement expenses related to hedges of investment contracts
		(in millions)	
Total amounts of consolidated statement of operations line items in which the effects of fair value and cash flow hedges are reported	$ 1,125.5	$ (136.6)	$ 1,490.7
Losses on fair value hedging relationships:			
Interest rate contracts:			
Loss recognized on hedged item	$ (71.1)	$ —	$ —
Gain recognized on derivatives	68.0	—	—
Amortization of hedged item basis adjustments	(0.4)	—	—
Amounts related to periodic settlements on derivatives	(4.2)	—	—
Total loss recognized for fair value hedging relationships	$ (7.7)	$ —	$ —
Gains (losses) on cash flow hedging relationships:			
Interest rate contracts:			
Gain reclassified from AOCI on derivatives	$ 3.3	$ —	$ —
Gain reclassified from AOCI as a result that a forecasted transaction is no longer probable of occurring	—	2.9	—
Amounts related to periodic settlements on derivatives	—	—	(0.2)
Foreign exchange contracts:			
Gain reclassified from AOCI on derivatives	—	0.6	—
Amounts related to periodic settlements on derivatives	2.7	—	—
Total gain (loss) recognized for cash flow hedging relationships	$ 6.0	$ 3.5	$ (0.2)

Net Investment Hedges

We may take measures to hedge our net equity investments in our foreign operations from currency risk. This is accomplished with the use of currency forwards.

Gains and losses associated with net investment hedges are recorded in AOCI and will be released into net income if our investment in the foreign operation is sold or substantially liquidated.

Principal Financial Group, Inc.
Notes to Condensed Consolidated Financial Statements – (continued)
March 31, 2023
(Unaudited)

The following table shows the effect of foreign exchange contracts used to hedge a portion of our net investment in certain sponsored investment funds on the consolidated financial statements.

Derivatives in net investment hedging relationships	Amount of loss recognized in AOCI on derivatives for the three months ended March 31, 2023	2022	Amount of loss reclassified from AOCI into net realized capital gains (losses) for the three months ended March 31, 2023	2022
	(in millions)			
Foreign exchange contracts	**$ (0.6)**	$ (0.7)	**$ —**	$ —
Total	**$ (0.6)**	$ (0.7)	**$ —**	$ —

Derivatives Not Designated as Hedging Instruments

Our use of futures, certain swaptions and swaps, option collars, options and forwards are effective from an economic standpoint, but they have not been designated as hedges for financial reporting purposes. As such, periodic changes in the market value of these instruments, which includes mark-to-market gains and losses as well as periodic and final settlements, primarily flow directly into net realized capital gains (losses) on the consolidated statements of operations. However, the change in fair value of the funds withheld embedded derivative is separately reported on the consolidated statements of operations. Additionally, mark-to-market gains and losses as well as periodic and final settlements for derivatives used to hedge market risk benefits are reported in market risk benefit (gain) loss on the consolidated statements of operations.

The following table shows the effect of derivatives not designated as hedging instruments, including fair value changes of embedded derivatives that have been bifurcated from the host contract, on the consolidated statements of operations.

Derivatives not designated as hedging instruments	Amount of gain (loss) recognized in net income on derivatives for the three months ended March 31, 2023	2022
	(in millions)	
Interest rate contracts	**$ (17.8)**	$ (229.4)
Foreign exchange contracts	**29.2**	67.9
Equity contracts	**(63.1)**	(5.3)
Credit contracts	**0.8**	0.1
Other contracts (1)	**(639.2)**	12.8
Total	**$ (690.1)**	$ (153.9)

(1) Includes the change in fair value of the funds withheld embedded derivative.

5. Deferred Acquisition Costs and Other Actuarial Balances

Deferred Acquisition Costs

Incremental direct costs of contract acquisition as well as certain costs directly related to acquisition activities (underwriting, policy issuance and processing, medical and inspection and sales force contract selling) for the successful acquisition of new and renewal insurance policies and investment contracts are capitalized in the period they are incurred. Maintenance costs and acquisition costs that are not deferrable are charged to operating expenses as incurred.

Principal Financial Group, Inc.
Notes to Condensed Consolidated Financial Statements – (continued)
March 31, 2023
(Unaudited)

For our long-duration insurance products and certain investment contracts, DAC is amortized on a constant level basis over the expected life of the contracts using groupings and assumptions consistent with those used in computing policyholder liabilities. For each of our long-duration insurance products, we select an inforce measure as a basis for amortization that will result in a constant level amortization pattern for the expected life of the contract. If our actual contract terminations differ from our expectation, the amortization pattern is adjusted on a prospective basis.

Some of our life and disability products within the Benefits and Protection segment have renewal commissions resulting in new DAC capitalizations in the years following the initial capitalization. We also have life products that allow for underwritten death benefit increases and cost of living adjustments, resulting in an immaterial amount of new DAC capitalizations each year. The new capitalizations are added to the existing DAC balance when incurred and amortized over the remaining life of the business.

DAC on short-duration group benefits contracts is amortized over the estimated life of the underlying contracts.

We review and update actuarial experience assumptions (such as mortality, surrenders, lapse, and premium persistency) serving as inputs to the models that establish the expected life for DAC and other actuarial balances during the third quarter of each year, or more frequently if evidence suggests assumptions should be revised. We make model refinements as necessary, and any changes resulting from these assumption updates are applied prospectively.

DAC amortization expense of $97.9 million and $95.8 million related to our long-duration and short-duration contracts was recorded in operating expenses on the consolidated statements of operations for the three months ended March 31, 2023 and 2022, respectively.

The following tables summarize disaggregated DAC amounts and reconcile the totals to those reported in the consolidated statements of financial position.

	March 31, 2023	December 31, 2022
	(in millions)	
Retirement and Income Solutions:		
Workplace savings and retirement solutions	**$ 500.2**	$ 498.0
Individual variable annuities	**276.8**	278.0
Pension risk transfer	**10.2**	8.1
Individual fixed deferred annuities	**124.7**	131.0
Investment only	**13.7**	14.9
Total Retirement and Income hope soSolutions	**925.6**	930.0
Benefits and Protection:		
Specialty Benefits:		
Individual disability	**635.0**	626.1
Life Insurance:		
Universal life	**1,560.4**	1,569.7
Term life	**687.1**	685.7
Participating life	**90.8**	93.0
Total Benefits and Protection	**2,973.3**	2,974.5
Short-duration contracts	**40.2**	34.7
Other balances (1)	**9.2**	8.8
Total DAC per consolidated statements of financial position	**$ 3,948.3**	$ 3,948.0

(1) Includes insignificant balances for long-duration contracts.

Principal Financial Group, Inc.
Notes to Condensed Consolidated Financial Statements – (continued)
March 31, 2023
(Unaudited)

Retirement and Income Solutions

The balances and changes in DAC were as follows:

	Workplace savings and retirement solutions	Individual variable annuities	Pension risk transfer	Individual fixed deferred annuities	Investment only
			(in millions)		
Balances as of January 1, 2022	$ 489.0	$ 281.2	$ 2.7	$ 162.2	$ 18.1
Costs deferred	48.3	22.5	5.6	—	1.4
Amortized to expense	(39.3)	(25.7)	(0.2)	(31.2)	(4.6)
Balances as of December 31, 2022	498.0	278.0	8.1	131.0	14.9
Costs deferred	**12.0**	**5.2**	**2.2**	**—**	**—**
Amortized to expense	**(9.8)**	**(6.4)**	**(0.1)**	**(6.3)**	**(1.2)**
Balances as of March 31, 2023	**$ 500.2**	**$ 276.8**	**$ 10.2**	**$ 124.7**	**$ 13.7**

Benefits and Protection

The balances and changes in DAC were as follows:

	Specialty Benefits	Life Insurance		
	Individual disability	Universal life	Term life	Participating life
		(in millions)		
Balances as of January 1, 2022	$ 580.7	$ 1,596.2	$ 678.9	$ 102.3
Costs deferred	87.6	70.6	66.7	1.4
Amortized to expense	(42.2)	(97.1)	(59.9)	(10.7)
Balances as of December 31, 2022	626.1	1,569.7	685.7	93.0
Costs deferred	**19.9**	**14.9**	**16.6**	**0.3**
Amortized to expense	**(11.0)**	**(24.2)**	**(15.2)**	**(2.5)**
Balances as of March 31, 2023	**$ 635.0**	**$ 1,560.4**	**$ 687.1**	**$ 90.8**

Unearned Revenue Liability

An unearned revenue liability is established when we collect fees or other policyholder assessments, inclusive of cost of insurance charges, administrative charges and other similar fees, for services to be provided in future periods. These unearned front-end fees are deferred and the amortization is recorded using an approach consistent with DAC.

The unearned revenue liability is included within other policyholder funds in the consolidated statements of financial position. The following table summarizes disaggregated unearned revenue liability amounts and reconciles the totals to those reported in the consolidated statements of financial position.

	March 31, 2023	December 31, 2022
	(in millions)	
Benefits and Protection - Life Insurance:		
Universal life	**$ 466.6**	$ 459.0
Other balances (1)	**8.8**	8.4
Total unearned revenue liability	**$ 475.4**	$ 467.4

(1) Includes insignificant balances for long-duration contracts.

Principal Financial Group, Inc.
Notes to Condensed Consolidated Financial Statements – (continued)
March 31, 2023
(Unaudited)

Benefits and Protection

The balances and changes in the unearned revenue liability for Life Insurance – Universal life contracts were as follows:

	For the three months ended March 31, 2023	For the year ended December 31, 2022
	(in millions)	
Balance at beginning of period	**$ 459.0**	$ 425.3
Deferrals	**15.0**	61.8
Revenue recognized	**(7.4)**	(28.1)
Balance at end of period	**466.6**	459.0
Reinsurance impact	**(227.4)**	(227.9)
Balance at end of period after reinsurance	**$ 239.2**	$ 231.1

6. Separate Account Balances

The separate accounts are legally segregated and are not subject to claims that arise out of any of our other business. The client, rather than us, directs the investments and bears the investment risk of these funds. The separate account assets represent the fair value of funds that are separately administered by us for contracts with equity, real estate and fixed income investments and are presented as a summary total within the consolidated statements of financial position. An equivalent amount is reported as separate account liabilities, which represent the obligation to return the monies to the client. Refer to Note 16, Fair Value Measurements, for further information on the valuation methodologies.

We receive fees for mortality, withdrawal and expense risks, as well as administrative, maintenance and investment advisory services that are included in the consolidated statements of operations. Net deposits, net investment income and realized and unrealized capital gains and losses of the separate accounts are not reflected in the consolidated statements of operations.

The Retirement and Income Solutions segment offers variable annuity contracts that allow the policyholder to allocate deposits into various investment options in a separate account. The variable annuity contracts can also include GMWB riders and guaranteed minimum death benefit ("GMDB") riders that are accounted for as MRBs. Retirement and Income Solutions also offers certain group annuity contracts that have separate accounts as an investment option.

The Principal Asset Management segment offers retirement pension schemes in Asia that offer various guaranteed and non-guaranteed constituent fund investment options to customers. The retirement pension schemes can include a guaranteed rate of return to the customer or a minimum guarantee on withdrawals under certain qualifying events. The minimum guarantee on withdrawals under certain qualifying events is accounted for as an MRB. Principal Asset Management separate account assets and liabilities also include certain retirement accumulation products in Latin America where the segregated funds and associated obligation to the client are consolidated within the financial statements. We have determined that summary totals are the most meaningful presentation for these funds.

The Benefits and Protection segment offers variable universal life products with separate account investment options.

Refer to Note 9, Market Risk Benefits, for further information on the MRBs associated with the contracts mentioned above.

As of March 31, 2023 and December 31, 2022, the separate accounts included a separate account valued at $98.5 million and $101.4 million, respectively, which primarily included shares of our stock that were allocated and issued to eligible participants of qualified employee benefit plans administered by us as part of the policy credits issued under our 2001 demutualization. These shares are included in both basic and diluted earnings per share calculations. In the consolidated statements of financial position, the separate account shares are recorded at fair value and are reported as separate account assets with a corresponding separate account liability. Changes in fair value of the separate account shares are reflected in both the separate account assets and separate account liabilities and do not impact our results of operations.

Principal Financial Group, Inc.
Notes to Condensed Consolidated Financial Statements – (continued)
March 31, 2023
(Unaudited)

Separate Account Assets

The aggregate fair value of assets, by major investment category, supporting separate accounts were as follows:

	March 31, 2023	December 31, 2022
	(in millions)	
Fixed maturities:		
U.S. government and agencies	**$ 7,916.9**	$ 7,339.6
Non-U.S. governments	**8,956.1**	8,424.3
States and political subdivisions	**225.9**	211.7
Corporate	**15,538.1**	14,429.7
Residential mortgage-backed securities	**3,994.7**	3,894.5
Commercial mortgage-backed securities	**199.5**	206.2
Other debt obligations	**360.8**	299.5
Total fixed maturities	**37,192.0**	34,805.5
Equity securities	**109,562.8**	105,053.3
Real estate	**604.0**	610.6
Other investments	**9,887.0**	10,278.6
Cash and cash equivalents	**3,639.9**	3,583.8
Other assets	**1,115.1**	1,043.3
Total separate account assets per consolidated statements of financial position	**$ 162,000.8**	$ 155,375.1

Separate Account Liabilities

The following tables summarize disaggregated separate account liability amounts and reconcile the totals to separate account liabilities reported in the consolidated statements of financial position.

	March 31, 2023	December 31, 2022
	(in millions)	
Retirement and Income Solutions:		
Group retirement contracts	**$ 111,275.8**	$ 107,240.1
Individual variable annuities	**8,910.3**	8,659.0
Total Retirement and Income Solutions	**120,186.1**	115,899.1
Principal Asset Management — Principal International:		
Latin America:		
Pension	**35,385.8**	33,316.7
Asia:		
Guaranteed pension	**928.8**	915.0
Total Principal Asset Management — Principal International	**36,314.6**	34,231.7
Benefits and Protection - Life Insurance:		
Universal life	**5,254.2**	5,011.0
Other balances (1)	**245.9**	233.3
Total separate account liabilities per consolidated statements of financial position	**$ 162,000.8**	$ 155,375.1

(1) Includes insignificant balances for long-duration contracts.

Principal Financial Group, Inc.
Notes to Condensed Consolidated Financial Statements – (continued)
March 31, 2023
(Unaudited)

Retirement and Income Solutions

The balances and the changes in separate account liabilities were as follows:

	For the three months ended March 31, 2023		For the year ended December 31, 2022	
	Group retirement contracts	Individual variable annuities	Group retirement contracts	Individual variable annuities
	(in millions)			
Balance at beginning of period	**$ 107,240.1**	**$ 8,659.0**	$ 131,188.6	$ 11,000.0
Premiums and deposits (1)	**2,881.3**	**94.8**	14,859.3	354.1
Policy charges	**(77.7)**	**(51.2)**	(383.7)	(211.1)
Surrenders, withdrawals and benefit payments (1)	**(2,747.8)**	**(217.3)**	(14,479.4)	(790.1)
Investment performance	**5,016.8**	**417.6**	(20,641.3)	(1,723.3)
Net transfers (to) from general account (1)	**(1,331.8)**	**7.4**	(2,571.7)	29.4
Other (2)	**294.9**	**—**	(731.7)	—
Balance at end of period	**$ 111,275.8**	**$ 8,910.3**	$ 107,240.1	$ 8,659.0
Cash surrender value (3)	**$ 109,850.4**	**$ 8,789.3**	$ 106,125.7	$ 8,538.7

(1) Within the policyholder account balances rollforwards in Note 7, Contractholder Funds, amounts in these lines for Individual variable annuities and Workplace savings and retirement solutions included in Group retirement contracts are reflected in net transfers from (to) separate account.
(2) Includes amounts to be settled between the separate account and general account due to the timing of trade settlements as of the reporting date.
(3) Cash surrender value represents the amount of the contractholders' account balances distributable at the end of the reporting period less surrender charges.

Principal Asset Management – Principal International

The balances and the changes in separate account liabilities were as follows:

	For the three months ended March 31, 2023		For the year ended December 31, 2022	
	Latin America	Asia	Latin America	Asia
	Pension	Guaranteed pension	Pension	Guaranteed pension
	(in millions)			
Balance at beginning of period	**$ 33,316.7**	**$ 915.0**	$ 33,030.6	$ 971.3
Premiums and deposits	**812.7**	**66.1**	3,620.4	276.2
Policy charges	**(4.7)**	**(4.7)**	(18.2)	(19.8)
Surrenders, withdrawals and benefit payments	**(988.9)**	**(66.7)**	(3,984.6)	(247.0)
Investment performance	**(303.8)**	**24.5**	498.8	(64.0)
Other	**(28.7)**	**(0.1)**	(0.8)	(0.4)
Foreign currency translation adjustment	**2,582.5**	**(5.3)**	170.5	(1.3)
Balance at end of period	**$ 35,385.8**	**$ 928.8**	$ 33,316.7	$ 915.0
Cash surrender value	**$ 35,385.8**	**$ 928.8**	$ 33,316.7	$ 915.0

Benefits and Protection

The balances and the changes in separate account liabilities for Life Insurance – Universal life were as follows:

	For the three months ended March 31, 2023	For the year ended December 31, 2022
	(in millions)	
Balance at beginning of period	**$ 5,011.0**	$ 5,886.1
Premiums and deposits (1)	**126.5**	514.7
Policy charges	**(31.9)**	(122.1)
Surrenders, withdrawals and benefit payments (1)	**(115.7)**	(208.6)
Investment performance	**262.0**	(1,054.5)
Net transfers (to) from general account (1)	**2.3**	(4.6)
Balance at end of period	**$ 5,254.2**	$ 5,011.0
Cash surrender value (2)	**$ 5,308.6**	$ 5,055.8

(1) Within the policyholder account balances rollforwards in Note 7, Contractholder Funds, amounts in these lines are reflected in net transfers from (to) separate account.
(2) Cash surrender value represents the amount of the contractholders' account balances distributable at the end of the reporting period less surrender charges. Certain products include surrender value enhancement riders that result in cash surrender values greater than account balances.

7. Contractholder Funds

Contractholder funds include policyholder account balances related to contracts with significant insurance risk and investment contracts.

The following tables summarize disaggregated policyholder account balance amounts and reconcile the totals to contractholder funds reported in the consolidated statements of financial position.

	March 31, 2023	December 31, 2022
	(in millions)	
Retirement and Income Solutions:		
Workplace savings and retirement solutions	**$ 12,476.6**	$ 12,154.7
Individual variable annuities	**366.1**	381.4
Individual fixed deferred annuities	**6,785.7**	7,228.3
Total Retirement and Income Solutions	**19,628.4**	19,764.4
Benefits and Protection - Life Insurance:		
Universal life	**6,915.4**	6,947.9
Corporate:		
Inter-segment eliminations	**(359.4)**	(362.7)
Total policyholder account balances for contracts with significant insurance risk or investment contracts with significant fee revenue	**26,184.4**	26,349.6
Reconciling items:		
Investment contracts without significant fee revenue (1)	**16,374.4**	16,104.0
Embedded derivatives (2)	**55.5**	46.4
Other balances (3)	**343.7**	325.3
Total contractholder funds per consolidated statements of financial position	**$ 42,958.0**	$ 42,825.3

(1) Includes GICs, funding agreements, individual fixed income annuities and guaranteed pension contracts. These contracts are not included within the disaggregated rollforward or guaranteed minimum interest rate ("GMIR") disclosures below.
(2) Refer to Note 16, Fair Value Measurements, for details on the changes in Level 3 fair value measurements of embedded derivatives.
(3) Includes insignificant balances for long-duration contracts and amounts that are not accrued to the benefit of the contractholder and, therefore, are not included within the disaggregated rollforward or GMIR disclosures below.

Principal Financial Group, Inc.
Notes to Condensed Consolidated Financial Statements – (continued)
March 31, 2023
(Unaudited)

Retirement and Income Solutions

The changes in policyholder account balances were as follows:

	For the three months ended March 31, 2023			For the year ended December 31, 2022		
	Workplace savings and retirement solutions	Individual variable annuities	Individual fixed deferred annuities (1)	Workplace savings and retirement solutions	Individual variable annuities	Individual fixed deferred annuities
	($ in millions)					
Balance at beginning of period	**$ 12,154.7**	**$ 381.4**	**$ 7,228.3**	$ 10,996.2	$ 380.9	$ 9,646.3
Premiums and deposits	**1,337.6**	**110.2**	**7.5**	3,719.5	426.5	35.9
Policy charges	**(7.5)**	**—**	**—**	(28.5)	—	—
Surrenders, withdrawals and benefit payments	**(1,960.2)**	**(243.1)**	**(492.8)**	(2,866.7)	(843.2)	(2,655.6)
Net transfers from (to) separate account (2)	**896.8**	**115.1**	**—**	164.6	406.6	—
Interest credited	**63.3**	**2.5**	**42.7**	194.3	10.6	201.7
Other	**(8.1)**	**—**	**—**	(24.7)	—	—
Balance at end of period	**$ 12,476.6**	**$ 366.1**	**$ 6,785.7**	$ 12,154.7	$ 381.4	$ 7,228.3
Weighted-average crediting rate (3)	**2.16 %**	**2.81 %**	**2.67 %**	1.94 %	2.79 %	2.63 %
Cash surrender value (4)	**$ 10,797.2**	**$ 363.3**	**$ 6,648.8**	$ 10,341.7	$ 378.6	$ 7,081.4

(1) We use the deposit method of accounting for the reinsurance of this exited business.
(2) Within the separate account liabilities rollforwards in Note 6, Separate Account Balances, these transfers for Individual variable annuities and Workplace savings and retirement solutions included in Group retirement contracts are reflected in premiums and deposits; surrenders, withdrawals and benefit payments; and net transfers (to) from general account.
(3) The weighted-average crediting rate is calculated on a year-to-date basis based on account value.
(4) Cash surrender value represents the amount of the contractholders' account balances distributable at the end of the reporting period less surrender charges.

The net amount at risk for policyholder account balances for Individual variable annuities is equal to the MRB net amount at risk, as reported in Note 9, Market Risk Benefits. Workplace savings and retirement solutions and Individual fixed deferred annuities do not have guarantees that provide for benefits in excess of the current policyholder account balances.

Principal Financial Group, Inc.
Notes to Condensed Consolidated Financial Statements – (continued)
March 31, 2023
(Unaudited)

Benefits and Protection

The changes in policyholder account balances for Life Insurance – Universal life were as follows:

	For the three months ended March 31, 2023	For the year ended December 31, 2022
	($ in millions)	
Balance at beginning of period	**$ 6,947.9**	$ 6,962.5
Premiums and deposits	**312.4**	1,267.2
Policy charges	**(213.5)**	(837.8)
Surrenders, withdrawals and benefit payments	**(170.4)**	(390.0)
Net transfers from (to) separate account (1)	**(13.1)**	(301.5)
Interest credited	**52.4**	247.5
Other	**(0.3)**	—
Balance at end of period	**6,915.4**	6,947.9
Reinsurance impact	**(3,496.8)**	(3,528.9)
Balance at end of period after reinsurance	**$ 3,418.6**	$ 3,419.0
Weighted-average crediting rate (2)	**3.33 %**	3.35 %
Net amount at risk (3)	**$ 86,335.6**	$ 86,547.9
Cash surrender value (4)	**$ 5,883.5**	$ 5,911.5

(1) Within the separate account liabilities rollforwards in Note 6, Separate Account Balances, these transfers are reflected in premiums and deposits; surrenders, withdrawals and benefit payments; and net transfers (to) from general account.
(2) The weighted-average crediting rate is calculated on a year-to-date basis based on account value, including indexed credits.
(3) For those guarantees of benefits that are payable in the event of death, the net amount at risk is generally defined as the death benefit in excess of the current account balance or the fixed death benefit at the consolidated statement of financial position date.
(4) Cash surrender value represents the amount of the contractholders' account balances distributable at the end of the reporting period less surrender charges.

Guaranteed Minimum Interest Rate

The account values, for contracts with significant insurance risk and investment contracts with significant fee revenue by range of GMIR and the related range of difference, in basis points, between rates credited to policyholders and the respective GMIR were as follows. The amounts are before reinsurance impacts of our exited U.S. retail fixed annuity and ULSG businesses.

	March 31, 2023					
	Excess of crediting rates over GMIR					
	At GMIR	Up to 0.50% above GMIR	0.51% to 1.00% above GMIR	1.01% to 2.00% above GMIR	2.01% or more above GMIR	Total
	(in millions)					
Retirement and Income Solutions						
Workplace savings and retirement solutions						
Up to 1.00%	$ 0.2	$ 4.0	$ 128.5	$ 1,119.4	$ 685.5	$ 1,937.6
1.01% - 2.00%	—	524.8	5,995.9	1,653.0	279.2	8,452.9
2.01% - 3.00%	7.7	0.1	0.7	0.5	—	9.0
3.01% - 4.00%	7.7	—	—	—	—	7.7
4.01% and above	18.5	—	—	—	—	18.5
Subtotal	34.1	528.9	6,125.1	2,772.9	964.7	10,425.7
No GMIR						2,050.9
Total						$ 12,476.6
Individual variable annuities						
Up to 1.00%	$ 28.9	$ —	$ —	$ —	$ —	$ 28.9
1.01% - 2.00%	3.6	—	—	—	—	3.6
2.01% - 3.00%	319.3	—	—	—	—	319.3
3.01% - 4.00%	—	—	—	—	—	—
4.01% and above	—	—	—	—	—	—
Subtotal	351.8	—	—	—	—	351.8
No GMIR						14.3
Total						$ 366.1
Individual fixed deferred annuities						
Up to 1.00%	$ 402.1	$ 156.5	$ 210.2	$ 747.5	$ 1,024.8	$ 2,541.1
1.01% - 2.00%	121.4	1.3	39.2	234.4	0.8	397.1
2.01% - 3.00%	3,386.6	—	—	—	—	3,386.6
3.01% - 4.00%	166.2	—	—	—	—	166.2
4.01% and above	—	—	—	—	—	—
Subtotal	4,076.3	157.8	249.4	981.9	1,025.6	6,491.0
No GMIR						294.7
Total						$ 6,785.7
Benefits and Protection - Life Insurance						
Universal life						
Up to 1.00%	$ —	$ 1.7	$ 16.2	$ —	$ 1.2	$ 19.1
1.01% - 2.00%	312.4	—	412.4	707.8	132.8	1,565.4
2.01% - 3.00%	846.9	881.9	945.0	61.0	0.4	2,735.2
3.01% - 4.00%	1,695.1	30.2	29.7	29.2	3.2	1,787.4
4.01% and above	39.7	10.9	3.4	1.5	—	55.5
Subtotal	2,894.1	924.7	1,406.7	799.5	137.6	6,162.6
No GMIR						752.8
Total						$ 6,915.4

Principal Financial Group, Inc.
Notes to Condensed Consolidated Financial Statements – (continued)
March 31, 2023
(Unaudited)

	December 31, 2022					
		Excess of crediting rates over GMIR				
	At GMIR	Up to 0.50% above GMIR	0.51% to 1.00% above GMIR	1.01% to 2.00% above GMIR	2.01% or more above GMIR	Total
	(in millions)					
Retirement and Income Solutions						
Workplace savings and retirement solutions						
Up to 1.00%	$ 3.9	$ 24.8	$ 1,188.9	$ 307.8	$ 364.9	$ 1,890.3
1.01% - 2.00%	—	549.9	6,090.2	1,477.0	9.4	8,126.5
2.01% - 3.00%	15.1	0.1	—	0.1	—	15.3
3.01% - 4.00%	7.8	—	—	—	—	7.8
4.01% and above	18.8	—	—	—	—	18.8
Subtotal	45.6	574.8	7,279.1	1,784.9	374.3	10,058.7
No GMIR						2,096.0
Total						$ 12,154.7
Individual variable annuities						
Up to 1.00%	$ 33.0	$ —	$ —	$ —	$ —	$ 33.0
1.01% - 2.00%	3.6	—	—	—	—	3.6
2.01% - 3.00%	331.8	—	—	—	—	331.8
3.01% - 4.00%	—	—	—	—	—	—
4.01% and above	—	—	—	—	—	—
Subtotal	368.4	—	—	—	—	368.4
No GMIR						13.0
Total						$ 381.4
Individual fixed deferred annuities						
Up to 1.00%	$ 426.4	$ 161.7	$ 236.2	$ 879.2	$ 993.0	$ 2,696.5
1.01% - 2.00%	139.8	1.4	39.9	250.5	0.6	432.2
2.01% - 3.00%	3,617.1	—	—	—	—	3,617.1
3.01% - 4.00%	169.7	—	—	—	—	169.7
4.01% and above	—	—	—	—	—	—
Subtotal	4,353.0	163.1	276.1	1,129.7	993.6	6,915.5
No GMIR						312.8
Total						$ 7,228.3
Benefits and Protection - Life Insurance						
Universal life						
Up to 1.00%	$ —	$ 8.4	$ 10.1	$ —	$ 0.7	$ 19.2
1.01% - 2.00%	315.7	—	407.0	695.5	155.0	1,573.2
2.01% - 3.00%	865.9	951.2	903.5	59.9	0.4	2,780.9
3.01% - 4.00%	1,698.9	35.8	21.9	25.3	3.2	1,785.1
4.01% and above	40.6	10.1	3.4	1.6	—	55.7
Subtotal	2,921.1	1,005.5	1,345.9	782.3	159.3	6,214.1
No GMIR						733.8
Total						$ 6,947.9

8. Future Policy Benefits and Claims

Future policy benefits and claims include reserves for short-duration contracts and long-duration contracts as well as certain reinsurance balances, when in a liability position.

The following tables summarize disaggregated amounts included in future policy benefit and claims and reconcile the totals to those reported in the consolidated statements of financial position.

	March 31, 2023	December 31, 2022
	(in millions)	
Liability for future policy benefits by segment (1):		
Retirement and Income Solutions:		
Pension risk transfer	**$ 22,146.1**	$ 21,211.4
Individual fixed income annuities	**5,092.3**	5,019.4
Total Retirement and Income Solutions	**27,238.4**	26,230.8
Principal Asset Management — Principal International:		
Latin America:		
Individual fixed income annuities	**5,416.9**	5,042.3
Benefits and Protection:		
Specialty Benefits:		
Individual disability	**1,815.9**	1,698.8
Life Insurance:		
Term life	**961.2**	909.0
Total Benefits and Protection	**2,777.1**	2,607.8
Corporate:		
Long-term care insurance	**188.4**	183.5
Total liability for future policy benefits	**35,620.8**	34,064.4
Additional liability for certain benefit features by segment (2):		
Benefits and Protection - Life Insurance:		
Universal life	**4,219.3**	4,095.2
Total additional liability for certain benefit features	**4,219.3**	4,095.2
Reconciling items:		
Participating contracts	**3,166.3**	3,207.2
Short-duration contracts	**1,294.0**	1,295.6
Cost of reinsurance liability	**184.5**	191.1
Reinsurance recoverable liability	**43.5**	39.4
Other (3)	**171.5**	132.4
Future policy benefits and claims per consolidated statements of financial position	**$ 44,699.9**	$ 43,025.3

(1) Amounts include the deferred profit liability.
(2) Includes reserves on certain long-duration contracts where benefit features result in gains in early years followed by losses in later years.
(3) Includes other miscellaneous reserves and the impact of unrealized gains (losses) on the additional liability for certain benefit features.

Liability for Unpaid Claims

The liability for unpaid claims is reported in future policy benefits and claims within our consolidated statements of financial position. Activity associated with unpaid claims was as follows:

	For the three months ended March 31,	
	2023	2022
	(in millions)	
Balance at beginning of period	**$ 1,395.0**	$ 1,370.9
Less: reinsurance recoverable	**68.6**	68.7
Net balance at beginning of period	**1,326.4**	1,302.2
Incurred:		
Current year	**429.4**	404.6
Prior years	**(40.8)**	(15.0)
Total incurred	**388.6**	389.6
Payments:		
Current year	**225.9**	205.3
Prior years	**162.5**	174.1
Total payments	**388.4**	379.4
Net balance at end of period	**1,326.6**	1,312.4
Plus: reinsurance recoverable	**69.6**	68.9
Balance at end of period	**$ 1,396.2**	$ 1,381.3

Incurred liability adjustments relating to prior years, which affected current operations during 2023 and 2022, resulted in part from developed claims for prior years being different than were anticipated when the liabilities for unpaid claims were originally estimated. These trends have been considered in establishing the current year liability for unpaid claims.

Principal Financial Group, Inc.
Notes to Condensed Consolidated Financial Statements – (continued)
March 31, 2023
(Unaudited)

Long-Duration Contracts

Gross Premiums or Assessments and Interest Accretion

The amount of gross premiums or assessments and interest accretion recognized by segment in the consolidated statements of operations was as follows:

	Gross premiums or assessments (1) For the three months ended March 31, 2023	Gross premiums or assessments (1) For the three months ended March 31, 2022	Interest accretion (2) For the three months ended March 31, 2023	Interest accretion (2) For the three months ended March 31, 2022
	(in millions)			
Retirement and Income Solutions:				
Pension risk transfer	**$ 577.0**	$ 116.5	**$ 245.2**	$ 232.7
Individual fixed income annuities	**8.0**	6.8	**55.7**	58.5
Total Retirement and Income Solutions	**585.0**	123.3	**300.9**	291.2
Principal Asset Management - Principal International:				
Latin America:				
Individual fixed income annuities (3)	**6.6**	10.5	**106.2**	139.1
Benefits and Protection:				
Specialty Benefits:				
Individual disability	**150.6**	144.4	**23.2**	22.3
Life Insurance:				
Universal life	**174.6**	142.5	**46.3**	42.5
Term life	**160.9**	157.2	**11.4**	10.8
Total Benefits and Protection	**486.1**	444.1	**80.9**	75.6
Corporate:				
Long-term care insurance	**1.5**	1.4	**2.5**	2.4
Total per consolidated statements of operations	**$ 1,079.2**	$ 579.3	**$ 490.5**	$ 508.3

(1) Gross premiums are included within premiums and other considerations on the consolidated statements of operations. Assessments, which are only applicable to the Life Insurance - Universal life level of aggregation, are included within fees and other revenues on the consolidated statements of operations.
(2) Interest accretion is included within benefits, claims and settlement expenses on the consolidated statements of operations.
(3) Includes inflation adjustments included within the liability for future policy benefits rollforward for interest accretion.

Liability for Future Policy Benefits

The liability for future policy benefits for individual and group annuities is generally equal to the present value of expected future policy benefit payments. The reserves are computed using assumptions for mortality and interest. Mortality rate assumptions are based on our experience and are periodically reviewed against both industry standards and experience. The liability for future policy benefits for non-participating term life insurance, individual disability income contracts and individual and group long-term care contracts is generally equal to the present value of expected future policy benefit payments less the present value of expected net premiums. The reserves are computed using assumptions for mortality, interest, morbidity and lapse.

An interest accretion rate is determined for an identified cohort and remains unchanged after the issue year. For policies issued on or prior to December 31, 2020, the interest accretion rate is based on the assumed investment yield when the business was issued. For policies issued after December 31, 2020, the interest accretion rate is based on the upper-medium grade fixed-income instrument yields, which is generally equivalent to a single-A rated bond yield matched to the duration of our insurance liabilities, when the business was issued.

Principal Financial Group, Inc.
Notes to Condensed Consolidated Financial Statements – (continued)
March 31, 2023
(Unaudited)

The liability for future policy benefits is remeasured to reflect current upper-medium grade fixed-income instrument yields as of each reporting date. The liability is calculated by discounting cash flows using rate curves reflecting the currency and duration of the insurance liabilities. For discount rate tenors, or points on the curves, where the upper-medium grade fixed-income instrument yields are not liquid or limited observable market data is available, we use various estimation techniques consistent with fair value measurement guidance.

For our individual fixed income annuities in Latin America, the discount rate methodology is designed to prioritize observable inputs based on market data available in the local debt markets where the respective policies are issued in the currency in which the policies are denominated. For discount rate tenors where upper-medium grade fixed-income instrument yields based on international rating standards are not liquid or limited observable market data is available, estimation techniques are used to determine a curve in the appropriate currency.

Further details regarding reference rates used are included under "Interest Accretion and Current Discount Rates."

Retirement and Income Solutions

The balances and the changes in the present value for expected future policy benefits were as follows:

	For the three months ended March 31, 2023		For the year ended December 31, 2022	
	Pension risk transfer	Individual fixed income annuities	Pension risk transfer	Individual fixed income annuities
	($ in millions)			
Present value of expected future policy benefit payments				
Balance at beginning of period	**$ 21,211.4**	**$ 5,019.4**	$ 25,365.8	$ 6,535.0
Effect of changes in discount rate assumptions at beginning of period	**1,799.6**	**439.0**	(3,386.5)	(812.6)
Balance at beginning of period at original discount rate	**23,011.0**	**5,458.4**	21,979.3	5,722.4
Effect of changes in cash flow assumptions	**—**	**—**	(7.9)	(3.0)
Effect of actual variances from expected experience	**(13.3)**	**(0.8)**	(3.2)	—
Adjusted beginning of period balance at original discount rate	**22,997.7**	**5,457.6**	21,968.2	5,719.4
Interest accrual	**245.2**	**55.7**	935.7	229.7
Benefit payments	**(481.5)**	**(126.9)**	(1,841.7)	(520.4)
Issuances	**578.5**	**7.9**	1,948.8	29.7
Balance at end of period at original discount rate	**23,339.9**	**5,394.3**	23,011.0	5,458.4
Effect of changes in discount rate assumptions at end of period	**(1,193.8)**	**(302.0)**	(1,799.6)	(439.0)
Future policy benefits	**22,146.1**	**5,092.3**	21,211.4	5,019.4
Reinsurance impact	**—**	**(4,782.5)**	—	(4,714.0)
Future policy benefits after reinsurance	**$ 22,146.1**	**$ 309.8**	$ 21,211.4	$ 305.4
Weighted-average duration for future policy benefits (years)(1)	**8.6**	**8.0**	8.5	7.9

(1) Represents the average of the cohort-level duration of the benefit cash flows weighted by the reserve balance for each cohort.

Upper-medium grade fixed-income instrument yields decreased during the three months ended March 31, 2023, resulting in an increase to the liability for future policy benefits of $605.8 million for Pension risk transfer and $137.0 million for Individual fixed income annuities.

Principal Financial Group, Inc.
Notes to Condensed Consolidated Financial Statements – (continued)
March 31, 2023
(Unaudited)

Upper-medium grade fixed-income instrument yields increased during the year ended December 31, 2022, resulting in a decrease to the liability for future policy benefits of $5,186.1 million for Pension risk transfer and $1,251.6 million for Individual fixed income annuities.

See "Interest Accretion and Current Discount Rates" for further details.

Principal Asset Management - Principal International

The balances and the changes in the present value for expected future policy benefits for Latin America – Individual fixed income annuities were as follows:

	For the three months ended March 31, 2023	For the year ended December 31, 2022
	($ in millions)	
Present value of expected future policy benefit payments		
Balance at beginning of period	**$ 5,042.3**	$ 4,336.8
Effect of changes in discount rate assumptions at beginning of period	**(754.6)**	(478.5)
Balance at beginning of period at original discount rate	**4,287.7**	3,858.3
Effect of actual variances from expected experience	**0.7**	(4.7)
Adjusted beginning of period balance at original discount rate	**4,288.4**	3,853.6
Interest accrual (1)	**106.2**	662.0
Benefit payments	**(90.5)**	(325.8)
Issuances	**7.1**	86.4
Foreign currency translation adjustment	**333.3**	11.5
Balance at end of period at original discount rate	**4,644.5**	4,287.7
Effect of changes in discount rate assumptions at end of period	**772.4**	754.6
Future policy benefits	**$ 5,416.9**	$ 5,042.3
Weighted-average duration for future policy benefits (years) (2)	**10.7**	10.9

(1) Includes inflation adjustments.
(2) Represents the average of the cohort-level duration of the benefit cash flows weighted by the reserve balance for each cohort.

Upper-medium grade fixed-income instrument yields impacting Latin America increased during the three months ended March 31, 2023; however, foreign currency movements offset the impact of those yields, resulting in an increase to the liability for future policy benefits of $17.8 million.

Upper-medium grade fixed-income instrument yields impacting Latin America decreased during the year ended December 31, 2022, resulting in an increase to the liability for future policy benefits of $276.1 million.

See "Interest Accretion and Current Discount Rates" for further details.

Principal Financial Group, Inc.
Notes to Condensed Consolidated Financial Statements – (continued)
March 31, 2023
(Unaudited)

Benefits and Protection

The balances and the changes in the present value for expected net premiums and expected future policy benefits were as follows:

	For the three months ended March 31, 2023		For the year ended December 31, 2022	
	Specialty Benefits	Life Insurance	Specialty Benefits	Life Insurance
	Individual disability	Term life	Individual disability	Term life
	($ in millions)			
Present value of expected net premiums				
Balance at beginning of period	**$ 2,341.8**	**$ 3,423.2**	$ 3,149.9	$ 4,193.7
Effect of changes in discount rate assumptions at beginning of period	**395.2**	**196.0**	(198.9)	(690.1)
Balance at beginning of period at original discount rate	**2,737.0**	**3,619.2**	2,951.0	3,503.6
Effect of changes in cash flow assumptions	**—**	**—**	(413.1)	—
Effect of actual variances from expected experience	**82.9**	**28.4**	235.9	128.6
Adjusted beginning of period balance at original discount rate	**2,819.9**	**3,647.6**	2,773.8	3,632.2
Interest accrual	**23.5**	**41.5**	95.2	162.9
Net premiums collected	**(66.1)**	**(86.4)**	(276.5)	(346.6)
Issuances	**23.5**	**49.6**	144.5	170.7
Balance at end of period at original discount rate	**2,800.8**	**3,652.3**	2,737.0	3,619.2
Effect of changes in discount rate assumptions at end of period	**(315.0)**	**(95.9)**	(395.2)	(196.0)
Balance at end of period	**$ 2,485.8**	**$ 3,556.4**	$ 2,341.8	$ 3,423.2
Present value of expected future policy benefit payments				
Balance at beginning of period	**$ 4,040.6**	**$ 4,332.2**	$ 5,648.3	$ 5,311.3
Effect of changes in discount rate assumptions at beginning of period	**1,021.4**	**251.6**	(501.0)	(913.9)
Balance at beginning of period at original discount rate	**5,062.0**	**4,583.8**	5,147.3	4,397.4
Effect of changes in cash flow assumptions	**—**	**—**	(476.3)	—
Effect of actual variances from expected experience	**92.4**	**32.2**	240.0	139.0
Adjusted beginning of period balance at original discount rate	**5,154.4**	**4,616.0**	4,911.0	4,536.4
Interest accrual	**46.7**	**52.9**	185.4	206.8
Benefit payments	**(49.3)**	**(87.3)**	(183.7)	(340.6)
Issuances	**24.3**	**53.5**	149.3	181.2
Balance at end of period at original discount rate	**5,176.1**	**4,635.1**	5,062.0	4,583.8
Effect of changes in discount rate assumptions at end of period	**(874.4)**	**(117.5)**	(1,021.4)	(251.6)
Balance at end of period	**$ 4,301.7**	**$ 4,517.6**	$ 4,040.6	$ 4,332.2
Future policy benefits (1)	**$ 1,815.9**	**$ 961.2**	$ 1,698.8	$ 909.0
Reinsurance impact	**(412.3)**	**43.5**	(386.8)	25.6
Future policy benefits after reinsurance	**$ 1,403.6**	**$ 1,004.7**	$ 1,312.0	$ 934.6
Weighted-average duration for future policy benefits (years) (2)	**18.5**	**9.5**	18.5	9.6

(1) Represents the present value of expected future policy benefit payments less the present value of expected net premiums.
(2) Represents the average of the cohort-level duration of the benefits less the net premium cash flows weighted by the reserve balance for each cohort.

Upper-medium grade fixed-income instrument yields decreased during the three months ended March 31, 2023, resulting in an increase to the liability for future policy benefits of $66.8 million for Individual disability and $34.0 million for Term life.

Upper-medium grade fixed-income instrument yields increased during the year ended December 31, 2022, resulting in a decrease to the liability for future policy benefits of $928.3 million for Individual disability and $279.4 million for Term life.

See “Interest Accretion and Current Discount Rates” for further details.

We updated our actuarial assumptions during the third quarter of 2022, resulting in a $63.2 million decrease in the liability for future policy benefits and a $52.4 million increase to income before taxes and pre-tax operating earnings, net of reinsurance, for our individual disability business. This was primarily due to favorable updates to claim experience assumptions.

Additional Liability for Certain Benefit Features

The liability for future policy benefits also includes an additional reserve on certain universal life contracts where benefit features result in gains in early years followed by losses in later years. The liability for these future losses is accrued in relation to estimated contract assessments. A premium deficiency exists if the net liabilities together with future premiums are determined to be insufficient to provide for expected future policy benefits. Premium deficiency testing considers, among other factors, anticipated investment income and does not include a provision for adverse deviation. We did not have a premium deficiency reserve as of March 31, 2023 or December 31, 2022.

The balances and the changes in the additional liability for certain benefits features for Life Insurance - Universal life contracts were as follows:

	For the three months ended March 31, 2023	For the year ended December 31, 2022
	($ in millions)	
Balance at beginning of period	**$ 4,095.2**	$ 3,814.2
Effect of changes in cash flow assumptions	**—**	(6.0)
Effect of actual variances from expected experience	**15.1**	54.9
Interest accrual	**46.3**	171.2
Net assessments collected	**89.2**	320.3
Benefit payments	**(26.5)**	(91.9)
Other (1)	**—**	(167.5)
Balance at end of period	**4,219.3**	4,095.2
Reinsurance impact	**(4,215.2)**	(4,091.4)
Balance at end of period after reinsurance	**$ 4.1**	$ 3.8
Weighted-average duration for additional liability (years) (2)	**27.0**	27.6

(1) Reflects the impact of re-cohorting in 2022 as a result of our decision to manage the ULSG business separately from our other universal life business following a comprehensive review of our business mix and capital management options (the “Strategic Review”).

(2) Represents the average of the cohort-level duration of the benefits less the net assessment cash flows weighted by the reserve balance for each cohort.

Principal Financial Group, Inc.
Notes to Condensed Consolidated Financial Statements – (continued)
March 31, 2023
(Unaudited)

Corporate

The balances and the changes in the present value for expected net premiums and expected future policy benefits for long-term care insurance were as follows:

	For the three months ended March 31, 2023	For the year ended December 31, 2022
	($ in millions)	
Present value of expected net premiums		
Balance at beginning of period	**$ 64.6**	$ 62.8
Effect of changes in discount rate assumptions at beginning of period	**(3.6)**	(14.0)
Balance at beginning of period at original discount rate	**61.0**	48.8
Effect of changes in cash flow assumptions	**—**	10.0
Effect of actual variances from expected experience	**(3.6)**	4.1
Adjusted beginning of period balance at original discount rate	**57.4**	62.9
Interest accrual	**0.9**	3.3
Net premiums collected	**(1.5)**	(5.2)
Balance at end of period at original discount rate	**56.8**	61.0
Effect of changes in discount rate assumptions at end of period	**4.7**	3.6
Balance at end of period	**$ 61.5**	$ 64.6
Present value of expected future policy benefit payments		
Balance at beginning of period	**$ 248.1**	$ 297.5
Effect of changes in discount rate assumptions at beginning of period	**(18.9)**	(89.5)
Balance at beginning of period at original discount rate	**229.2**	208.0
Effect of changes in cash flow assumptions	**—**	17.2
Effect of actual variances from expected experience	**(5.9)**	3.7
Adjusted beginning of period balance at original discount rate	**223.3**	228.9
Interest accrual	**3.4**	13.1
Benefit payments	**(3.3)**	(12.8)
Balance at end of period at original discount rate	**223.4**	229.2
Effect of changes in discount rate assumptions at end of period	**26.5**	18.9
Balance at end of period	**$ 249.9**	$ 248.1
Future policy benefits (1)	**$ 188.4**	$ 183.5
Reinsurance impact	**(188.4)**	(183.5)
Future policy benefits after reinsurance	**$ —**	$ —
Weighted-average duration for future policy benefits (years) (2)	**11.8**	11.8

(1) Represents the present value of expected future policy benefit payments less the present value of expected net premiums.
(2) Represents the average of cohort-level duration of the benefits less the net premium cash flows weighted by the reserve balance for each cohort.

Upper-medium grade fixed-income instrument yields decreased during the three months ended March 31, 2023, resulting in an increase to the liability for future policy benefits of $6.5 million.

Upper-medium grade fixed-income instrument yields increased during the year ended December 31, 2022, resulting in a decrease to the liability for future policy benefits of $60.2 million.

See “Interest Accretion and Current Discount Rates” for further details.

Principal Financial Group, Inc.
Notes to Condensed Consolidated Financial Statements – (continued)
March 31, 2023
(Unaudited)

Expected Future Gross Premiums and Benefit Payments

The amounts of expected undiscounted future benefit payments, expected undiscounted future gross premiums and expected discounted future gross premiums, utilizing the current upper-medium fixed-income instrument yield, were as follows:

	March 31, 2023	December 31, 2022
	(in millions)	
Retirement and Income Solutions:		
Pension risk transfer		
Expected undiscounted future benefit payments	**$ 34,085.9**	$ 33,691.4
Individual fixed income annuities		
Expected undiscounted future benefit payments	**$ 7,605.3**	$ 7,716.6
Principal Asset Management - Principal International:		
Latin America:		
Individual fixed income annuities		
Expected undiscounted future benefit payments	**$ 6,960.9**	$ 6,449.9
Benefits and Protection - Specialty Benefits:		
Individual disability		
Expected discounted future gross premiums	**$ 5,316.8**	$ 5,140.9
Expected undiscounted future gross premiums	**$ 8,035.8**	$ 7,978.7
Expected undiscounted future benefit payments	**$ 8,656.7**	$ 8,473.9
Benefits and Protection - Life Insurance:		
Term life		
Expected discounted future gross premiums	**$ 6,301.3**	$ 6,104.6
Expected undiscounted future gross premiums	**$ 10,169.3**	$ 10,146.3
Expected undiscounted future benefit payments	**$ 7,264.7**	$ 7,202.5
Corporate:		
Long-term care insurance		
Expected discounted future gross premiums	**$ 61.5**	$ 64.6
Expected undiscounted future gross premiums	**$ 89.3**	$ 96.5
Expected undiscounted future benefit payments	**$ 468.6**	$ 483.4

Interest Accretion and Current Discount Rates

The interest accretion rate shown for each level of aggregation is an average of the cohort-level accretion rates weighted by the reserve balance for each cohort within that level of aggregation. The current discount rate is calculated at a cohort-level based on current upper-medium fixed-income instrument yields and weighted by the reserve balance for each cohort within each level of aggregation. The weighted-average rates were as follows:

	Interest accretion rate		Current discount rate	
	March 31, 2023	December 31, 2022	March 31, 2023	December 31, 2022
Retirement and Income Solutions:				
Pension risk transfer	**4.40 %**	4.38 %	**4.96 %**	5.31 %
Individual fixed income annuities	**4.21 %**	4.22 %	**4.94 %**	5.30 %
Principal Asset Management - Principal International (1):				
Latin America:				
Individual fixed income annuities	**4.24 %**	4.24 %	**2.50 %**	2.43 %
Benefits and Protection:				
Specialty Benefits:				
Individual disability	**4.01 %**	4.03 %	**5.01 %**	5.36 %
Life Insurance:				
Universal life	**4.73 %**	4.73 %	**See note (2)**	See note (2)
Term life	**4.85 %**	4.89 %	**4.83 %**	5.22 %
Corporate:				
Long-term care insurance	**6.16 %**	6.16 %	**5.00 %**	5.34 %

(1) The interest accretion rate and current discount rate are Chilean real rates, excluding inflation, in the local currency.
(2) The additional liability for certain benefit features for Life Insurance – Universal life is measured using the discount rate at contract inception. Therefore, the current discount rate is not applicable for this product.

9. Market Risk Benefits

Contracts or contract features that provide protection to the policyholder from capital market risk, including equity, interest rate or foreign exchange risk, and expose us to other-than-nominal capital market risk are classified as MRBs. We issue certain annuity contracts and other investment contracts that include MRBs that have been bifurcated from the host contract. The Retirement and Income Solutions segment offers variable annuity products with GMWB riders and GMDB riders. The Principal Asset Management segment offers defined contribution plans in Asia with a guarantee on the minimum account balance under certain qualifying events.

MRBs are measured at fair value at the contract level and can be in either an asset or liability position, depending on certain inputs at the reporting date. MRB assets and liabilities are presented separately within the consolidated statements of financial position. Increases to an asset or decreases to a liability are described as favorable changes to fair value.

Changes in fair value are reported in MRB remeasurement gain (loss) on the consolidated statements of operations. However, the change in fair value related to our own nonperformance risk is reported in OCI. For contracts that contain multiple MRB features, the MRBs are valued on a combined basis using an integrated model.

MRBs are classified as Level 3 fair value measurements as the fair value is based on unobservable inputs. The key assumptions for calculating the fair value of the MRBs are market assumptions such as equity market returns, interest rate levels, market volatility and correlations and policyholder behavior assumptions such as lapse, mortality, utilization and withdrawal patterns. Risk margins are included in the policyholder behavior assumptions. The assumptions are based on a combination of historical data and actuarial judgment. The MRBs are valued using stochastic models that incorporate a spread reflecting our nonperformance risk.

Principal Financial Group, Inc.
Notes to Condensed Consolidated Financial Statements – (continued)
March 31, 2023
(Unaudited)

The assumption for our own nonperformance risk for MRBs is based on the current market credit spreads for debt-like instruments we have issued and are available in the market. Increases (decreases) in our own nonperformance risk, which impacts the rates used to discount future cash flows, could lead to favorable (unfavorable) changes in the fair value of the MRBs.

Long-term interest rates are used as the mean return when projecting the growth in the value of the associated account value and impact the discount rate used in the discounted future cash flows valuation. The amount of claims will increase if account value is not sufficient to cover guaranteed withdrawals. An increase (decrease) in risk-free rates could cause a favorable (unfavorable) change in the fair value of the MRBs. A decrease (increase) in market volatilities could cause a favorable (unfavorable) change in the fair value of the MRBs.

An increase (decrease) in mortality rates or the overall lapse rate assumptions could cause a favorable (unfavorable) change in the fair value of the MRBs. The lapse rate assumption may vary dynamically based on the relationship between the guarantee and associated account value. A weaker (stronger) dynamic lapse rate assumption could lead to favorable (unfavorable) changes in the fair value of the MRBs.

The utilization rate assumption includes how many contractholders will take withdrawals, when they will take them and how much of their benefit they will take. A decrease (increase) in the number of contractholders taking withdrawals, contractholders taking withdrawals earlier versus later, or contractholders taking more versus less of their benefit could lead to favorable (unfavorable) changes in the fair value of the MRBs.

The following tables summarize disaggregated MRB amounts in an asset and liability position and reconcile the totals to those reported in the consolidated statements of financial position.

	March 31, 2023			**December 31, 2022**		
	Asset	**Liability**	**Net asset (liability)**	**Asset**	**Liability**	**Net asset (liability)**
			(in millions)			
Retirement and Income Solutions:						
Individual variable annuities	**$ 107.3**	**$ 170.4**	**$ (63.1)**	$ 109.2	$ 181.4	$ (72.2)
Principal Asset Management - Principal International:						
Asia:						
Guaranteed pension	**—**	**24.0**	**(24.0)**	—	26.0	(26.0)
Total MRB per consolidated statements of financial position	**$ 107.3**	**$ 194.4**	**$ (87.1)**	$ 109.2	$ 207.4	$ (98.2)

Principal Financial Group, Inc.
Notes to Condensed Consolidated Financial Statements – (continued)
March 31, 2023
(Unaudited)

Retirement and Income Solutions

The net asset (liability) balances and the changes in the valuation of the MRBs for Individual variable annuities were as follows:

	For the three months ended March 31, 2023	For the year ended December 31, 2022
	($ in millions)	
Balance at beginning of period	**$ (72.2)**	$ (494.7)
Effect of changes in nonperformance risk at beginning of period	**(31.7)**	109.5
Adjusted balance at beginning of period	**(103.9)**	(385.2)
Effect of:		
Interest accrual and expected policyholder behavior	**(19.8)**	(90.1)
Benefit payments	**0.2**	1.3
Changes in interest rates	**(54.2)**	539.1
Changes in equity markets	**46.4**	(112.4)
Changes in equity index volatility	**30.6**	(50.2)
Actual policyholder behavior different from expected behavior	**(2.0)**	1.5
Changes in future expected policyholder behavior	**—**	(6.1)
Changes in other future expected assumptions	**—**	(1.8)
Adjusted balance at end of period	**(102.7)**	(103.9)
Effect of changes in nonperformance risk at end of period	**39.6**	31.7
Balance at end of period	**$ (63.1)**	$ (72.2)
Weighted-average attained age of policyholders (years) (1)	**67.5**	67.4
Net amount at risk (2)	**$ 299.8**	$ 415.5

(1) The weighted-average attained age is calculated at the contract level using the total contributions since inception and the age of the contractholders.
(2) The net amount at risk for our GMDB riders is defined as the current GMDB amount in excess of the current account balance. The net amount at risk for our GMWB riders is defined as the greater of the present value of the GMWB payments less the current account balance or zero. For contracts with both GMDB and GMWB riders, the net amount at risk is the greater of the GMDB or GMWB net amount at risk. Increases in the equity markets and decreases in interest rates resulted in a decrease in the net amount at risk in 2023. Decreases in the equity markets and increases in interest rates resulted in an increase in the net amount at risk in 2022.

Significant changes to inputs and assumptions that impacted the change in the MRB fair value measurement shown above were as follows:

	For the three months ended March 31, 2023		For the year ended December 31, 2022	
	Change in input	**Change in net MRB liability**	**Change in input**	**Change in net MRB liability**
Long-term interest rate	Decreased	Unfavorable	Increased	Favorable
Equity markets	Increased	Favorable	Decreased	Unfavorable
Equity market volatilities	Decreased	Favorable	Increased	Unfavorable
Own nonperformance risk	Increased	Favorable	Increased	Favorable

See “Unobservable Inputs for Fair Value Measurement” for additional details on the inputs.

Principal Financial Group, Inc.
Notes to Condensed Consolidated Financial Statements – (continued)
March 31, 2023
(Unaudited)

Principal Asset Management - Principal International

The net asset (liability) balances and the changes in the valuation of the MRBs for Asia – Guaranteed pension were as follows:

	For the three months ended March 31, 2023	For the year ended December 31, 2022
	($ in millions)	
Balance at beginning of period	**$ (26.0)**	$ (35.1)
Effect of changes in nonperformance risk at beginning of period	**1.2**	4.3
Adjusted balance at beginning of period	**(24.8)**	(30.8)
Effect of:		
Interest accrual and expected policyholder behavior	**(2.8)**	(7.1)
Benefit payments	**3.7**	9.5
Changes in interest rates	**0.7**	3.9
Changes in equity markets	**0.1**	(1.0)
Actual policyholder behavior different from expected behavior	**0.4**	0.7
Foreign currency translation adjustment	**0.1**	—
Adjusted balance at end of period	**(22.6)**	(24.8)
Effect of changes in nonperformance risk at end of period	**(1.4)**	(1.2)
Balance at end of period	**$ (24.0)**	$ (26.0)
Weighted-average attained age of policyholders (years) (1)	**50.0**	50.0
Net amount at risk (2)	**$ 87.4**	$ 91.0

(1) The weighted-average attained age is calculated at the contract level using the guarantee amounts and the age of the underlying members of the contracts.
(2) The net amount at risk for the minimum guarantee on withdrawal is defined as the current guaranteed balance in excess of the current account balance.

Principal Financial Group, Inc.
Notes to Condensed Consolidated Financial Statements – (continued)
March 31, 2023
(Unaudited)

Unobservable Inputs for Fair Value Measurement

The following table provides quantitative information about the significant unobservable inputs used for fair value measurements of MRBs. The utilization rate and mortality rate inputs are omitted from the table as a range does not provide meaningful presentation. The utilization rate represents the number of contractholders taking withdrawals in addition to the amount and timing of the withdrawals. The mortality rate is an input based on an appropriate industry mortality table.

	March 31, 2023		December 31, 2022	
	Range of inputs	Weighted-Average	Range of inputs	Weighted-Average
Retirement and Income Solutions:				
Individual variable annuities				
Long-term interest rate (1)	**3.67 - 3.80 %**	**3.73 %**	3.97 - 4.12 %	4.04 %
Long-term equity market volatility	**18.10 - 31.76 %**	**21.37 %**	18.10 - 34.15 %	22.07 %
Nonperformance risk	**0.93 - 2.00 %**	**1.71 %**	0.90 - 1.96 %	1.65 %
Lapse rate	**1.25 - 24.75 %**	**5.76 %**	1.25 - 24.75 %	5.76 %
Principal Asset Management - Principal International:				
Asia:				
Guaranteed pension				
Long-term interest rate (1)	**3.93 - 4.08 %**	**4.00 %**	3.80 - 3.98 %	3.88 %
Long-term equity market volatility	**18.07 - 24.09 %**	**19.98 %**	18.06 - 25.16 %	20.69 %
Nonperformance risk	**0.66 - 1.63 %**	**1.35 %**	0.90 - 1.98 %	1.68 %
Lapse rate	**4.95 - 19.35 %**	**13.40 %**	4.95 - 19.35 %	13.40 %

(1) Represents the range of rate curves used in the valuation analysis that we have determined market participants would use when pricing the instrument. The rate curves are derived from an interpolation between various observable swap rates.

10. Reinsurance

We reinsure a portion of the insurance risks associated with our individual disability, traditional life, universal life, medical and long-term care insurance as well as retail fixed annuity contracts with significant life insurance risk through reinsurance agreements with unaffiliated reinsurance companies, primarily on a quota share, excess loss, yearly renewable term or coinsurance basis. During the second quarter of 2022, we closed a coinsurance with funds withheld reinsurance transaction with Talcott Life & Annuity Re in which we ceded our in-force U.S. retail fixed annuity and ULSG blocks of business. The economics of the transaction were effective as of January 1, 2022. We use both the reinsurance and deposit methods of accounting for this transaction. For further information about this transaction, refer to Note 1, Nature of Operations and Significant Accounting Policies.

We are contingently liable with respect to reinsurance ceded to other companies in the event the reinsurer is unable to meet the obligations it has assumed. As of March 31, 2023, and December 31, 2022, we had $13,458.1 million and $13,252.8 million of reinsurance recoverable assets, respectively, included in reinsurance recoverable and deposit receivable on the consolidated statements of financial position, which does not reflect potentially offsetting impacts of collateral. As of March 31, 2023, and December 31, 2022, we had $43.5 million and $39.4 million of reinsurance recoverable liabilities, respectively, included in future policy benefits and claims on the consolidated statements of financial condition.

Principal Financial Group, Inc.
Notes to Condensed Consolidated Financial Statements – (continued)
March 31, 2023
(Unaudited)

The effects of reinsurance on premiums and other considerations and policy and contract benefits were as follows:

	For the three months ended March 31,	
	2023	2022
	(in millions)	
Premiums and other considerations:		
Direct	**$ 1,563.3**	$ 1,040.5
Ceded	**(114.7)**	(153.1)
Net premiums and other considerations	**$ 1,448.6**	$ 887.4
Benefits, claims and settlement expenses:		
Direct	**$ 2,107.8**	$ 1,629.5
Ceded	**(333.9)**	(138.8)
Net benefits, claims and settlement expenses	**$ 1,773.9**	$ 1,490.7
Liability for future policy benefits remeasurement (gain) loss:		
Direct	**$ 12.7**	$ 20.3
Ceded	**(18.3)**	(6.9)
Net liability for future policy benefits remeasurement (gain) loss	**$ (5.6)**	$ 13.4

As of March 31, 2023 and December 31, 2022, we had a$7,423.4 million and $7,901.0 reinsurance deposit receivable, respectively.

Refer to Note 3, Investments, for information on our financing receivables valuation allowance related to the reinsurance recoverable and deposit receivable.

Cost of Reinsurance

A reinsurance asset or liability is established to spread the expected net reinsurance costs or profits over the expected term of the contracts. The cost of reinsurance asset and liability are reported in premiums due and other receivables and liability for future policy benefits and claims, respectively, on the consolidated statements of financial position. The cost of reinsurance asset and liability included on the consolidated statements of financial position were as follows:

	March 31, 2023	December 31, 2022
	(in millions)	
Cost of reinsurance asset	**$ 3,315.0**	$ 3,339.1
Cost of reinsurance liability	**$ 184.5**	$ 191.1

Cost of reinsurance amortization, including the impacts of remeasurement, of $17.8 million and $(5.5) million for the three months ended March 31, 2023 and 2022, respectively, was reported in benefits, claims and settlement expenses and liability for future policy benefits remeasurement (gain) loss on the consolidated statements of operations.

Principal Financial Group, Inc.
Notes to Condensed Consolidated Financial Statements – (continued)
March 31, 2023
(Unaudited)

Funds Withheld

The following assets were held in support of our reserves associated with our coinsurance with funds withheld agreement and are reported in the line items shown on the consolidated statements of financial position.

	March 31, 2023	December 31, 2022
	(in millions)	
Fixed maturities, available-for-sale	**$ 16,231.7**	$ 15,693.5
Fixed maturities, trading	**103.2**	100.8
Equity securities	**0.3**	11.0
Mortgage loans	**2,735.1**	2,810.8
Other investments	**203.0**	179.8
Cash and cash equivalents	**1,522.8**	1,762.9
Accrued interest income	**200.0**	178.7
Net other liabilities	**(223.7)**	(33.6)
Net assets	**$ 20,772.4**	$ 20,703.9

Certain assets are reported at amortized cost while the fair value of those assets is reflected in the funds withheld payable. As of March 31, 2023 and December 31, 2022, we had a $20,524.4 million and $20,436.1 million funds withheld payable, which was net of a $3,026.2 million and $3,652.8 million embedded derivative asset, respectively. The change in fair value of the embedded derivative was a gain (loss) of $(626.6) million and $0.0 million for the three months ended March 31, 2023 and 2022, respectively.

While the economic benefits of the funds withheld assets flow to Talcott Life & Annuity Re, we retain legal ownership of the assets within the funds withheld account. Guidelines are in place to ensure the investment risk is appropriately managed. Net investment income and net realized capital gains (losses) related to the assets on the consolidated statements of operations is reported net of the amounts that flow to Talcott Life & Annuity Re. The realized gains and losses that do not flow to Talcott Life & Annuity Re are reported in net realized capital gains (losses) on funds withheld assets on the consolidated statements of operations.

Following are the components of net realized capital gains (losses) on the funds withheld assets that were passed to Talcott Life & Annuity Re.

	For the three months ended March 31, 2023
	(in millions)
Fixed maturities, available-for-sale	**$ (57.0)**
Fixed maturities, trading	**(0.1)**
Equity securities	**(1.2)**
Derivatives	**2.9**
Net realized capital losses	**$ (55.4)**

Principal Financial Group, Inc.
Notes to Condensed Consolidated Financial Statements – (continued)
March 31, 2023
(Unaudited)

11. Long-Term Debt

	March 31, 2023		
	Principal	Net unamortized discount, premium and debt issuance costs	Carrying amount
		(in millions)	
3.125% notes payable, due 2023	**$ 300.0**	**$ —**	**$ 300.0**
3.4% notes payable, due 2025	**400.0**	**(1.1)**	**398.9**
3.1% notes payable, due 2026	**350.0**	**(1.3)**	**348.7**
3.7% notes payable, due 2029	**500.0**	**(4.2)**	**495.8**
2.125% notes payable, due 2030	**600.0**	**(3.6)**	**596.4**
5.375% notes payable, due 2033	**400.0**	**(4.0)**	**396.0**
6.05% notes payable, due 2036	**505.6**	**(2.2)**	**503.4**
4.625% notes payable, due 2042	**300.0**	**(3.0)**	**297.0**
4.35% notes payable, due 2043	**300.0**	**(2.9)**	**297.1**
4.3% notes payable, due 2046	**300.0**	**(3.0)**	**297.0**
5.5% notes payable, due 2053	**300.0**	**(4.4)**	**295.6**
Floating rate notes payable, due 2055	**400.0**	**(4.5)**	**395.5**
Non-recourse mortgages and notes payable	**66.5**	**0.7**	**67.2**
Total long-term debt	**$ 4,722.1**	**$ (33.5)**	**$ 4,688.6**

	December 31, 2022		
	Principal	Net unamortized discount, premium and debt issuance costs	Carrying amount
		(in millions)	
3.125% notes payable, due 2023	$ 300.0	$ (0.1)	$ 299.9
3.4% notes payable, due 2025	400.0	(1.2)	398.8
3.1% notes payable, due 2026	350.0	(1.4)	348.6
3.7% notes payable, due 2029	500.0	(4.3)	495.7
2.125% notes payable, due 2030	600.0	(3.6)	596.4
6.05% notes payable, due 2036	505.6	(2.3)	503.3
4.625% notes payable, due 2042	300.0	(2.9)	297.1
4.35% notes payable, due 2043	300.0	(3.0)	297.0
4.3% notes payable, due 2046	300.0	(3.1)	296.9
Floating rate notes payable, due 2055	400.0	(4.5)	395.5
Non-recourse mortgages and notes payable	67.1	0.7	67.8
Total long-term debt	$ 4,022.7	$ (25.7)	$ 3,997.0

Net discount, premium and issuance costs associated with issuing these notes are amortized to expense over the respective terms using the interest method.

On March 8, 2023, we issued $700.0 million of senior notes. We issued a $400.0 million series of notes that bear interest at 5.375% and will mature in 2033 and a $300.0 million series of notes that bear interest at 5.5% and will mature in 2053. Interest on the notes is payable semi-annually on March 15 and September 15 each year, beginning on September 15, 2023. The proceeds from these notes will be used to redeem our floating rate notes payable due in 2055, with the remainder available to repay at maturity our 3.125% notes payable due in the second quarter of 2023.

12. Income Taxes

Effective Income Tax Rate

Our provision for income taxes may not have the customary relationship of taxes to income. A reconciliation between the U.S. corporate income tax rate and the effective income tax rate was as follows:

	For the three months ended March 31,	
	2023	2022
U.S. corporate income tax rate	**21 %**	21 %
Dividends received deduction	**9**	(5)
Tax credits	**6**	(4)
Employee compensation	**4**	(2)
Interest exclusion from taxable income	**3**	(2)
Impact of equity method presentation	**3**	(2)
Local country permanent tax adjustments	**2**	—
Global Intangible Low-Taxed Income	**(6)**	1
Low income housing tax credit amortization	**(5)**	1
Foreign country statutory rate differential	**(2)**	1
State income taxes	**—**	(2)
Other	**2**	2
Effective income tax rate	**37 %**	9 %

Effects of Tax Legislation

The Inflation Reduction Act of 2022 (“The Act”) was enacted by the U.S. government on August 16, 2022. The Act implements a new corporate alternative minimum tax (“CAMT”) effective January 1, 2023. We are an “Applicable Corporation,” which requires computation of the U.S. federal income tax liability under two systems, the U.S. regular corporate tax (“RCT”) and the CAMT. Although the CAMT may apply in any given year when tentative minimum tax (“TMT”) then exceeds the RCT liability, as a “prepayment” the CAMT generates a corresponding alternative minimum tax credit (“AMTC”). We made an accounting policy election in 2022 to recognize the CAMT as a current period tax expense when incurred, along with recording an offsetting AMTC related deferred tax asset. No CAMT accrual was made for the first quarter of 2023, as TMT did not exceed the calculated RCT liability.

13. Employee and Agent Benefits

Components of Net Periodic Benefit Cost

	Pension benefits		Other postretirement benefits	
	For the three months ended March 31,		For the three months ended March 31,	
	2023	2022	2023	2022
	(in millions)			
Service cost	**$ 14.0**	$ 20.2	**$ —**	$ —
Interest cost	**39.7**	28.1	**0.8**	0.6
Expected return on plan assets	**(40.7)**	(44.7)	**(1.1)**	(1.2)
Amortization of prior service benefit	**(4.2)**	(4.2)	**(0.3)**	(0.3)
Recognized net actuarial (gain) loss	**9.8**	13.8	**(0.2)**	(0.3)
Net periodic benefit cost (income)	**$ 18.6**	$ 13.2	**$ (0.8)**	$ (1.2)

The components of net periodic benefit cost including the service cost component are included in operating expenses on the consolidated statements of operations.

Contributions

Our funding policy for our qualified pension plan is to fund the plan annually in an amount at least equal to the minimum annual contribution required under the Employee Retirement Income Security Act ("ERISA") and, generally, not greater than the maximum amount that can be deducted for U.S. federal income tax purposes. It is too early to determine, but we do not anticipate that we will be required to fund a minimum required contribution under ERISA. Regardless, it is possible that we may fund the qualified and nonqualified pension plans in 2023 for a combined total of up to $70.0 million. During the three months ended March 31, 2023, we contributed $30.0 million to these plans.

14. Contingencies, Guarantees and Indemnifications

Litigation and Regulatory Contingencies

We are regularly involved in litigation, both as a defendant and as a plaintiff, but primarily as a defendant. Litigation naming us as a defendant ordinarily arises out of our business operations as a provider of asset management and accumulation products and services, individual life insurance, specialty benefits insurance and our investment activities. Some of the lawsuits may be class actions, or purport to be, and some may include claims for unspecified or substantial punitive and treble damages.

We may discuss such litigation in one of three ways. We accrue a charge to income and disclose legal matters for which the chance of loss is probable and for which the amount of loss can be reasonably estimated. We may disclose contingencies for which the chance of loss is reasonably possible and provide an estimate of the possible loss or range of loss or a statement that such an estimate cannot be made. Finally, we may voluntarily disclose loss contingencies for which the chance of loss is remote in order to provide information concerning matters that potentially expose us to possible losses.

In addition, regulatory bodies such as state insurance departments, the SEC, the Financial Industry Regulatory Authority ("FINRA"), the Department of Labor ("DOL") and other regulatory agencies in the U.S. and in international locations in which we do business, regularly make inquiries and conduct examinations or investigations concerning our compliance with, among other things, insurance laws, securities laws, ERISA and laws governing the activities of broker-dealers. We receive requests from regulators and other governmental authorities relating to industry issues and may receive additional requests, including subpoenas and interrogatories, in the future.

While the outcome of any pending or future litigation or regulatory matter cannot be predicted, management does not believe any such matter will have a material adverse effect on our business or financial position. To the extent such matters present a reasonably possible chance of loss, we are generally not able to estimate the possible loss or range of loss associated therewith. The outcome of such matters is always uncertain and unforeseen results can occur. It is possible that such outcomes could require us to pay damages or make other expenditures or establish accruals in amounts that we could not estimate as of March 31, 2023.

Guarantees and Indemnifications

In the normal course of business, we have provided guarantees to third parties primarily related to former subsidiaries and joint ventures. The terms of these agreements range in duration and often are not explicitly defined. The maximum exposure under these agreements as of March 31, 2023, was approximately $77.0 million. At inception, the fair value of such guarantees was insignificant. In addition, we believe the likelihood is remote that material payments will be required. Therefore, any liability accrued within our consolidated statements of financial position is insignificant. Should we be required to perform under these guarantees, we generally could recover a portion of the loss from third parties through recourse provisions included in agreements with such parties, the sale of assets held as collateral that can be liquidated in the event performance is required under the guarantees or other recourse generally available to us; therefore, such guarantees would not result in a material adverse effect on our business or financial position. While the likelihood is remote, such outcomes could materially affect net income in a particular quarter or annual period. Furthermore, in connection with our contingent funding agreements, we are required to purchase any principal and interest strips of U.S. Treasury securities that are due and not paid from the associated unconsolidated trusts. The maximum exposure under these agreements as of March 31, 2023, was $750.0 million.

We manage mandatory privatized social security funds in Chile. By regulation, we have a required minimum guarantee on the funds' relative return. Because the guarantee has no limitation with respect to duration or amount, the maximum exposure of the guarantee in the future is indeterminable.

We are also subject to various other indemnification obligations issued in conjunction with divestitures, acquisitions, financing and reinsurance transactions whose terms range in duration and often are not explicitly defined. Certain portions of these indemnifications may be capped, while other portions are not subject to such limitations; therefore, the overall maximum amount of the obligation under the indemnifications cannot be reasonably estimated. At inception, the fair value of such indemnifications was insignificant. In addition, we believe the likelihood is remote that material payments will be required. Therefore, any liability accrued within our consolidated statements of financial position is insignificant. While we are unable to estimate with certainty the ultimate legal and financial liability with respect to these indemnifications, we believe that performance under these indemnifications would not result in a material adverse effect on our business or financial position. While the likelihood is remote, performance under these indemnifications could materially affect net income in a particular quarter or annual period.

15. Stockholders' Equity

Common Stock Dividends

	For the three months ended March 31,	
	2023	**2022**
Dividends declared per common share	**$ 0.64**	$ 0.64

Reconciliation of Outstanding Common Shares

	For the three months ended March 31,	
	2023	**2022**
	(in millions)	
Beginning balance	**243.5**	261.7
Shares issued	**1.7**	1.7
Treasury stock acquired	**(2.1)**	(11.2)
Ending balance	**243.1**	252.2

Principal Financial Group, Inc.
Notes to Condensed Consolidated Financial Statements – (continued)
March 31, 2023
(Unaudited)

In June 2021, our Board of Directors (“Board”) authorized a share repurchase program of up to $1.2 billion of our outstanding common stock, which was completed in August 2022. In January 2022, our Board authorized a $1.6 billion increase to the June 2021 share repurchase program authorization, which has no expiration date. Shares repurchased under these programs are accounted for as treasury stock, carried at cost and reflected as a reduction to stockholders’ equity.

In March 2022, we entered into an accelerated share repurchase program with a third party financial institution to repurchase $700.0 million of common stock. We received approximately 8.5 million shares at an initial cost of $560.0 million from our counterparty as of March 31, 2022, which was recorded in treasury stock. The associated $140.0 million forward contract was recorded in additional paid-in capital. This program closed in June 2022, at which time an additional 1.4 million shares were delivered based on the $70.53 daily volume-weighted average price of our common stock, less a discount, during the term of the program.

In August 2022, we entered into an accelerated share repurchase program with a third party financial institution to repurchase $400.0 million of common stock. We received approximately 4.1 million shares at an initial cost of $320.0 million from our counterparty as of August 16, 2022, which was recorded in treasury stock. This program closed in September 2022, at which time an additional 1.2 million shares were delivered based on the $76.48 daily volume-weighted average price of our common stock, less a discount, during the term of the program.

Other Comprehensive Income (Loss)

	For the three months ended March 31, 2023		
	Pre-Tax	**Tax**	**After-Tax**
		(in millions)	
Net unrealized gains on available-for-sale securities during the period	$ 1,280.8	$ (264.9)	$ 1,015.9
Reclassification adjustment for losses included in net income (1)	78.5	(16.4)	62.1
Adjustments for assumed changes in amortization patterns	0.2	—	0.2
Adjustments for assumed changes in policyholder liabilities	(0.1)	—	(0.1)
Net unrealized gains on available-for-sale securities	1,359.4	(281.3)	1,078.1
Net unrealized gains on derivative instruments during the period	3.7	(0.8)	2.9
Reclassification adjustment for gains included in net income (2)	(3.7)	0.8	(2.9)
Net unrealized gains on derivative instruments	—	—	—
Liability for future policy benefits discount rate remeasurement loss (3)	(682.4)	141.5	(540.9)
Market risk benefit nonperformance risk gain (4)	7.7	(1.7)	6.0
Foreign currency translation adjustment	132.2	(0.1)	132.1
Amortization of amounts included in net periodic benefit cost (5)	5.1	(1.3)	3.8
Net unrecognized postretirement benefit obligation	5.1	(1.3)	3.8
Other comprehensive income	$ 822.0	$ (142.9)	$ 679.1

Principal Financial Group, Inc.
Notes to Condensed Consolidated Financial Statements – (continued)
March 31, 2023
(Unaudited)

	For the three months ended March 31, 2022		
	Pre-Tax	Tax	After-Tax
		(in millions)	
Net unrealized losses on available-for-sale securities during the period	$ (5,535.5)	$ 1,172.0	$ (4,363.5)
Reclassification adjustment for gains included in net income (1)	(40.6)	5.2	(35.4)
Adjustments for assumed changes in amortization patterns	(0.1)	—	(0.1)
Adjustments for assumed changes in policyholder liabilities	363.1	(76.3)	286.8
Net unrealized losses on available-for-sale securities	(5,213.1)	1,100.9	(4,112.2)
Net unrealized losses on derivative instruments during the period	(21.0)	4.4	(16.6)
Reclassification adjustment for gains included in net income (2)	(6.8)	1.4	(5.4)
Adjustments for assumed changes in policyholder liabilities	3.9	(0.7)	3.2
Net unrealized losses on derivative instruments	(23.9)	5.1	(18.8)
Liability for future policy benefits discount rate remeasurement gain (3)	3,190.9	(671.8)	2,519.1
Market risk benefit nonperformance risk gain (4)	93.2	(19.5)	73.7
Foreign currency translation adjustment	156.6	(1.5)	155.1
Amortization of amounts included in net periodic benefit cost (5)	9.0	(2.3)	6.7
Net unrecognized postretirement benefit obligation	9.0	(2.3)	6.7
Other comprehensive loss	$ (1,787.3)	$ 410.9	$ (1,376.4)

(1) Pre-tax reclassification adjustments relating to available-for-sale securities are reported in net realized capital gains (losses) on the consolidated statements of operations.
(2) See Note 4, Derivative Financial Instruments, under the caption “Effect of Fair Value and Cash Flow Hedges on Consolidated Statements of Operations” for further details.
(3) Includes the discount rate remeasurement gain (loss) associated with the liability for future policy benefits and the associated reinsurance recoverable. See Note 8, Future Policy Benefits and Claims, under the caption “Liability for Future Policy Benefits” for further details.
(4) See Note 9, Market Risk Benefits, for further details.
(5) Amount is comprised of amortization of prior service cost (benefit) and recognized net actuarial (gain) loss, which is reported in operating expenses on the consolidated statements of operations. See Note 13, Employee and Agent Benefits, under the caption “Components of Net Periodic Benefit Cost” for further details.

Principal Financial Group, Inc.
Notes to Condensed Consolidated Financial Statements – (continued)
March 31, 2023
(Unaudited)

Accumulated Other Comprehensive Loss

	Net unrealized gains (losses) on available-for-sale securities (1)	Net unrealized gains on derivative instruments	LFPB discount rate remeasurement gain (loss)	MRB nonperformance risk gain (loss)	Foreign currency translation adjustment	Unrecognized postretirement benefit obligation	Accumulated other comprehensive loss
				(in millions)			
Balances as of January 1, 2022	$ 3,880.4	$ 56.6	$ (4,037.6)	$ (90.1)	$ (1,548.7)	$ (344.7)	$ (2,084.1)
Other comprehensive loss during the period, net of adjustments	(4,076.8)	(13.4)	2,519.1	73.7	153.7	—	(1,343.7)
Amounts reclassified to AOCI	(35.4)	(5.4)	—	—	—	6.7	(34.1)
Other comprehensive loss	(4,112.2)	(18.8)	2,519.1	73.7	153.7	6.7	(1,377.8)
Balances as of March 31, 2022	$ (231.8)	$ 37.8	$ (1,518.5)	$ (16.4)	$ (1,395.0)	$ (338.0)	$ (3,461.9)
Balances as of January 1, 2023	**$ (5,857.9)**	**$ 39.7**	**$ 740.9**	**$ 24.0**	**$ (1,571.6)**	**$ (254.1)**	**$ (6,879.0)**
Other comprehensive income during the period, net of adjustments	**1,016.0**	**2.9**	**(540.9)**	**6.0**	**130.7**	**—**	**614.7**
Amounts reclassified from AOCI	**62.1**	**(2.9)**	**—**	**—**	**—**	**3.8**	**63.0**
Other comprehensive income	**1,078.1**	**—**	**(540.9)**	**6.0**	**130.7**	**3.8**	**677.7**
Balances as of March 31, 2023	**$ (4,779.8)**	**$ 39.7**	**$ 200.0**	**$ 30.0**	**$ (1,440.9)**	**$ (250.3)**	**$ (6,201.3)**

(1) Net unrealized gains on available-for-sale securities for which an allowance for credit loss has been recorded were $0.6 million and $6.2 million as of March 31, 2023 and 2022, respectively.

Noncontrolling Interest

Interests held by unaffiliated parties in consolidated entities are reflected in noncontrolling interest, which represents the noncontrolling partners' share of the underlying net assets of our consolidated subsidiaries. Noncontrolling interest that is not redeemable is reported in the equity section of the consolidated statements of financial position.

The noncontrolling interest holders in certain of our consolidated entities maintain an equity interest that is redeemable at the option of the holder, which may be exercised on varying dates. Since redemption of the noncontrolling interest is outside of our control, this interest is excluded from stockholders' equity and reported separately as redeemable noncontrolling interest on the consolidated statements of financial position. Our redeemable noncontrolling interest primarily relates to consolidated sponsored investment funds for which interests are redeemed at fair value from the net assets of the funds.

For our redeemable noncontrolling interest related to other consolidated subsidiaries, redemptions are required to be purchased at fair value or a value based on a formula that management intended to reasonably approximate fair value based on a fixed multiple of earnings over a measurement period. The carrying value of the redeemable noncontrolling interest is compared to the redemption value at each reporting period. Any adjustments to the carrying amount of the redeemable noncontrolling interest for changes in redemption value prior to exercise of the redemption option are determined after the attribution of net income or loss of the subsidiary and are recognized in the redemption value as they occur. Adjustments to the carrying value of redeemable noncontrolling interest result in adjustments to additional paid-in capital and/or retained earnings. Adjustments are recorded in retained earnings to the extent the redemption value of the redeemable noncontrolling interest exceeds its fair value and will impact the numerator in our earnings per share calculations. All other adjustments to the redeemable noncontrolling interest are recorded in additional paid-in capital.

Following is a reconciliation of the changes in the redeemable noncontrolling interest:

	For the three months ended March 31,	
	2023	2022
	(in millions)	
Balance at beginning of period	**$ 262.0**	$ 332.5
Net income (loss) attributable to redeemable noncontrolling interest	**4.5**	(10.3)
Redeemable noncontrolling interest of deconsolidated entities (1)	**(2.4)**	—
Contributions from redeemable noncontrolling interest	**19.0**	24.0
Distributions to redeemable noncontrolling interest	**(8.4)**	(39.6)
Purchase of subsidiary shares from redeemable noncontrolling interest	**(1.6)**	—
Change in redemption value of redeemable noncontrolling interest	**(0.6)**	0.1
Other comprehensive income attributable to redeemable noncontrolling interest	**0.2**	0.1
Balance at end of period	**$ 272.7**	$ 306.8

16. Fair Value Measurements

We use fair value measurements to record fair value of certain assets and liabilities and to estimate fair value of financial instruments not recorded at fair value but required to be disclosed at fair value. Certain financial instruments, particularly policyholder liabilities other than investment contracts, are excluded from these fair value disclosure requirements.

Valuation Hierarchy

Fair value is defined as the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date (an exit price). The fair value hierarchy prioritizes the inputs to valuation techniques used to measure fair value into three levels. The level in the fair value hierarchy within which the fair value measurement in its entirety falls is determined based on the lowest level input that is significant to the fair value measurement in its entirety considering factors specific to the asset or liability.

- **Level 1** – Fair values are based on unadjusted quoted prices in active markets for identical assets or liabilities.
- **Level 2** – Fair values are based on inputs other than quoted prices within Level 1 that are observable for the asset or liability, either directly or indirectly.
- **Level 3** – Fair values are based on at least one significant unobservable input for the asset or liability.

Determination of Fair Value

The following discussion describes the valuation methodologies and inputs used for assets and liabilities measured at fair value on a recurring basis. The techniques utilized in estimating the fair value of financial instruments are reliant on the assumptions used. Care should be exercised in deriving conclusions about our business, its value or financial position based on the fair value information of financial instruments presented below.

Fair value estimates are made based on available market information and judgments about the financial instrument at a specific point in time. Such estimates do not consider the tax impact of the realization of unrealized gains or losses. In addition, the disclosed fair value may not be realized in the immediate settlement of the financial instrument. We validate prices through an investment analyst review process, which includes validation through direct interaction with external sources, review of recent trade activity or use of internal models. In circumstances where broker quotes are used to value an instrument, we generally receive one non-binding quote. Broker quotes are validated through an investment analyst review process, which includes validation through direct interaction with external sources and use of internal models or other relevant information. We did not make any significant changes to our valuation processes during 2023.

Fixed Maturities

Fixed maturities include bonds, ABS, redeemable preferred stock and certain non-redeemable preferred securities. When available, the fair value of fixed maturities is based on quoted prices of identical assets in active markets. These are reflected in Level 1 and primarily include U.S. Treasury bonds and actively traded redeemable corporate preferred securities.

When quoted prices of identical assets in active markets are not available, our first priority is to obtain prices from third party pricing vendors. We have regular interaction with these vendors to ensure we understand their pricing methodologies and to confirm they are utilizing observable market information. Their methodologies vary by asset class and include inputs such as estimated cash flows, benchmark yields, reported trades, broker quotes, credit quality, industry events and economic events. Fixed maturities with validated prices from pricing services, which includes the majority of our public fixed maturities in all asset classes, are generally reflected in Level 2. Also included in Level 2 are corporate bonds when quoted market prices are not available, for which an internal model using substantially all observable inputs or a matrix pricing valuation approach is used. In the matrix approach, securities are grouped into pricing categories that vary by sector, rating and average life. Each pricing category is assigned a risk spread based on studies of observable public market data from the investment professionals assigned to specific security classes. The expected cash flows of the security are then discounted back at the current Treasury curve plus the appropriate risk spread. Although the matrix valuation approach provides a fair valuation of each pricing category, the valuation of an individual security within each pricing category may also be impacted by company specific factors.

If we are unable to price a fixed maturity security using prices from third party pricing vendors or other sources specific to the asset class, we may obtain a broker quote or utilize an internal pricing model specific to the asset utilizing relevant market information, to the extent available and where at least one significant unobservable input is utilized. These are reflected in Level 3 in the fair value hierarchy and can include fixed maturities across all asset classes. As of March 31, 2023, less than 4% of our total fixed maturities were Level 3 securities valued using internal pricing models.

The primary inputs, by asset class, for valuations of the majority of our Level 2 investments from third party pricing vendors or our internal pricing valuation approach are described below.

U.S. Government and Agencies/Non-U.S. Governments. Inputs include recently executed market transactions, interest rate yield curves, maturity dates, market price quotations and credit spreads relating to similar instruments.

States and Political Subdivisions. Inputs include Municipal Securities Rulemaking Board reported trades, U.S. Treasury and other benchmark curves, material event notices, new issue data and obligor credit ratings.

Corporate. Inputs include recently executed transactions, market price quotations, benchmark yields, issuer spreads and observations of equity and credit default swap curves related to the issuer. For private placement corporate securities valued through the matrix valuation approach inputs include the current Treasury curve and risk spreads based on sector, rating and average life of the issuance.

RMBS, CMBS, Collateralized Debt Obligations and Other Debt Obligations. Inputs include cash flows, priority of the tranche in the capital structure, expected time to maturity for the specific tranche, reinvestment period remaining and performance of the underlying collateral including prepayments, defaults, deferrals, loss severity of defaulted collateral and, for RMBS, prepayment speed assumptions. Other inputs include market indices and recently executed market transactions.

Equity Securities

Equity securities include mutual funds, common stock, non-redeemable preferred stock and required regulatory investments. Fair values of equity securities are determined using quoted prices in active markets for identical assets when available, which are reflected in Level 1. When quoted prices are not available, we may utilize internal valuation methodologies appropriate for the specific asset that use observable inputs such as underlying share prices or the NAV, which are reflected in Level 2. Fair values might also be determined using broker quotes or through the use of internal models or analysis that incorporate significant assumptions deemed appropriate given the circumstances and consistent with what other market participants would use when pricing such securities, which are reflected in Level 3.

Derivatives

The fair values of exchange-traded derivatives are determined through quoted market prices, which are reflected in Level 1. Exchange-traded derivatives include futures that are settled daily, which reduces their fair value in the consolidated statements of financial position. The fair values of OTC cleared derivatives are determined through market prices published by the clearinghouses, which are reflected in Level 2. The clearinghouses utilize the secured overnight financing rate ("SOFR") curve in their valuation. Variation margin associated with OTC cleared derivatives is settled daily, which reduces their fair value in the consolidated statements of financial position. The fair values of bilateral OTC derivative instruments are determined using either pricing valuation models that utilize market observable inputs or broker quotes. The majority of our bilateral OTC derivatives are valued with models that use market observable inputs, which are reflected in Level 2. Significant inputs include contractual terms, interest rates, currency exchange rates, credit spread curves, equity prices and volatilities. These valuation models consider projected discounted cash flows, relevant swap curves and appropriate implied volatilities. Certain bilateral OTC derivatives utilize unobservable market data, primarily independent broker quotes that are nonbinding quotes based on models that do not reflect the result of market transactions, which are reflected in Level 3.

Our non-cleared derivative contracts are generally documented under ISDA Master Agreements, which provide for legally enforceable set-off and close-out netting of exposures to specific counterparties. Collateral arrangements are bilateral and based on current ratings of each entity. We utilize the SOFR curve to value our positions. Counterparty credit risk is routinely monitored to ensure our adjustment for nonperformance risk is appropriate. Our centrally cleared derivative contracts are conducted with regulated centralized clearinghouses, which provide for daily exchange of cash collateral or variation margin equal to the difference in the daily market values of those contracts that eliminates the nonperformance risk on these trades.

Interest Rate Contracts. For non-cleared contracts, which include interest rate swaps and have included swaptions, we use discounted cash flow valuation techniques to determine the fair value using observable swap curves as the inputs. These are reflected in Level 2. We have forward contracts for which we obtain prices from third party pricing vendors. These are reflected in Level 2. For centrally cleared contracts we use published prices from clearinghouses. These are reflected in Level 2. In addition, we had interest rate options that were valued using broker quotes. These were reflected in Level 3.

Foreign Exchange Contracts. We use discounted cash flow valuation techniques that utilize observable swap curves and exchange rates as the inputs to determine the fair value of foreign currency swaps. These are reflected in Level 2. Currency forwards are and currency options were valued using observable market inputs, including forward currency exchange rates. These are reflected in Level 2. In addition, we had a limited number of non-standard currency swaps that were valued using broker quotes. These were reflected within Level 3.

Equity Contracts. We use an option pricing model using observable implied volatilities, dividend yields, index prices and swap curves as the inputs to determine the fair value of equity options. These are reflected in Level 2.

Credit Contracts. We use either the ISDA Credit Default Swap Standard discounted cash flow model that utilizes observable default probabilities and recovery rates as inputs to determine the fair value of credit default swaps. These are reflected in Level 2. In addition, we have a limited number of credit default swaps that are valued using broker quotes. These are reflected within Level 3.

Other Investments

Other investments reported at fair value include invested assets of consolidated sponsored investment funds, unconsolidated sponsored investment funds, other investment funds reported at fair value, equity method real estate investments for which the fair value option was elected and certain redeemable and nonredeemable preferred stock.

Invested assets of consolidated sponsored investment funds include equity securities, fixed maturities and derivative assets, for which fair values are determined as previously described, and are reflected in Level 1 and Level 2.

The fair value of unconsolidated sponsored investment funds and other investment funds is determined using the NAV of the fund. The NAV of the fund represents the price at which we would be able to initiate a transaction. Investments for which the NAV represents a quoted price in an active market for identical assets are reflected in Level 1. Investments that do not have a quoted price in an active market are reflected in Level 2.

Cash Equivalents

Certain cash equivalents are reported at fair value on a recurring basis and include money market instruments and other short-term investments with maturities of three months or less. Fair values of these cash equivalents may be determined using public quotations, when available, which are reflected in Level 1. When public quotations are not available, because of the highly liquid nature of these assets, carrying amounts may be used to approximate fair values, which are reflected in Level 2.

Separate Account Assets

Separate account assets include equity securities, debt securities, cash equivalents and derivative instruments, for which fair values are determined as previously described, and are reflected in Level 1, Level 2 and Level 3. Separate account assets also include commercial mortgage loans, for which the fair value is estimated by discounting the expected total cash flows using market rates that are applicable to the yield, credit quality and maturity of the loans. The market clearing spreads vary based on mortgage type, weighted average life, rating and liquidity. These are reflected in Level 3. Finally, separate account assets include real estate, for which the fair value is estimated using discounted cash flow valuation models that utilize various public real estate market data inputs. In addition, each property is appraised annually by an independent appraiser. The real estate included in separate account assets is recorded net of related mortgage encumbrances for which the fair value is estimated using discounted cash flow analysis based on our incremental borrowing rate for similar borrowing arrangements. The real estate within the separate accounts is reflected in Level 3.

Market Risk Benefits

MRBs are measured at fair value at the contract level on a recurring basis and are reflected in Level 3 as either an asset or a liability, depending on certain inputs at the reporting date. The key assumptions for calculating the fair value are market assumptions and policyholder behavior. Risk margins are included in the policyholder behavior assumptions. The assumptions are based on a combination of historical data and actuarial judgment. The MRBs are valued using stochastic models that incorporate a spread reflecting our own nonperformance risk.

The assumption for our own nonperformance risk is based on current market credit spreads for debt-like instruments we have issued and are available in the market. Refer to Note 9, Market Risk Benefits, for further information on the determination of fair value measurement of MRBs.

Investment and Universal Life Contracts

Certain universal life, annuity and other investment contracts include embedded derivatives that have been bifurcated from the host contract and are measured at fair value on a recurring basis, which are reflected in Level 3. The key assumptions for calculating the fair value of the embedded derivative liabilities are market assumptions (such as equity market returns, interest rate levels, market volatility and correlations) and policyholder behavior assumptions (such as lapse and mortality). Risk margins are included in the policyholder behavior assumptions. The assumptions are based on a combination of historical data and actuarial judgment. The embedded derivative liabilities are valued using models that incorporate a spread reflecting our own creditworthiness.

The assumption for our own nonperformance risk for investment contracts and any embedded derivatives bifurcated from certain universal life, annuity and investment contracts is based on the current market credit spreads for debt-like instruments we have issued and are available in the market.

Funds Withheld Payable

The funds withheld payable includes an embedded derivative that has been bifurcated from the host contract and is measured at fair value on a recurring basis, which is reflected in Level 3. The fair value is determined based on the change in the estimated fair value of the underlying funds withheld investments. The fair value of these assets is determined as previously described.

Other Liabilities

Derivative liabilities of consolidated sponsored investment funds are reported at fair value within other liabilities. Fair values of these derivatives are determined as previously described and are reflected in Level 2.

Principal Financial Group, Inc.
Notes to Condensed Consolidated Financial Statements – (continued)
March 31, 2023
(Unaudited)

Assets and Liabilities Measured at Fair Value on a Recurring Basis

Assets and liabilities measured at fair value on a recurring basis were as follows:

	March 31, 2023				
	Assets/ (liabilities) measured at fair value	Amount measured at net asset value (5)	Fair value hierarchy level		
			Level 1	Level 2	Level 3
			(in millions)		
Assets					
Fixed maturities, available-for-sale:					
U.S. government and agencies	$ 1,829.9	$ —	$ 1,443.9	$ 386.0	$ —
Non-U.S. governments	549.2	—	0.6	548.6	—
States and political subdivisions	6,173.4	—	—	6,101.3	72.1
Corporate	37,296.6	—	29.6	35,612.5	1,654.5
Residential mortgage-backed pass-through securities	2,794.9	—	—	2,794.9	—
Commercial mortgage-backed securities	4,927.8	—	—	4,924.5	3.3
Collateralized debt obligations (1)	4,902.3	—	—	4,740.1	162.2
Other debt obligations	6,922.8	—	—	6,056.3	866.5
Total fixed maturities, available-for-sale	65,396.9	—	1,474.1	61,164.2	2,758.6
Fixed maturities, trading	787.9	—	129.2	502.6	156.1
Equity securities	1,733.3	—	506.9	1,226.4	—
Derivative assets (2)	386.7	—	—	381.7	5.0
Other investments	722.9	79.1	304.2	337.7	1.9
Cash equivalents	3,235.1	—	565.4	2,669.7	—
Market risk benefit asset (3)	107.3	—	—	—	107.3
Sub-total excluding separate account assets	72,370.1	79.1	2,979.8	66,282.3	3,028.9
Separate account assets	162,000.8	8,830.1	97,181.5	55,095.4	893.8
Total assets	$ 234,370.9	$ 8,909.2	$ 100,161.3	$ 121,377.7	$ 3,922.7
Liabilities					
Investment and universal life contracts (4)	$ (55.5)	$ —	$ —	$ —	$ (55.5)
Market risk benefit liability (3)	(194.4)	—	—	—	(194.4)
Funds withheld payable embedded derivative (4)	3,026.2	—	—	—	3,026.2
Derivative liabilities (2)	(508.4)	—	—	(507.4)	(1.0)
Other liabilities	(1.0)	—	—	(1.0)	—
Total liabilities	$ 2,266.9	$ —	$ —	$ (508.4)	$ 2,775.3
Net assets	$ 236,637.8	$ 8,909.2	$ 100,161.3	$ 120,869.3	$ 6,698.0

Principal Financial Group, Inc.
Notes to Condensed Consolidated Financial Statements – (continued)
March 31, 2023
(Unaudited)

	December 31, 2022				
	Assets/ (liabilities) measured at fair value	Amount measured at net asset value (5)	Fair value hierarchy level		
			Level 1	Level 2	Level 3
			(in millions)		
Assets					
Fixed maturities, available-for-sale:					
U.S. government and agencies	$ 1,739.8	$ —	$ 1,359.1	$ 380.7	$ —
Non-U.S. governments	567.3	—	1.4	565.9	—
States and political subdivisions	6,232.3	—	—	6,161.4	70.9
Corporate	36,183.2	—	26.6	34,588.3	1,568.3
Residential mortgage-backed pass-through securities	2,228.7	—	—	2,228.7	—
Commercial mortgage-backed securities	4,864.6	—	—	4,861.2	3.4
Collateralized debt obligations (1)	4,566.4	—	—	4,510.2	56.2
Other debt obligations	6,507.6	—	—	6,039.8	467.8
Total fixed maturities, available-for-sale	62,889.9	—	1,387.1	59,336.2	2,166.6
Fixed maturities, trading	760.7	—	78.6	548.1	134.0
Equity securities	1,708.6	—	492.4	1,216.2	—
Derivative assets (2)	321.6	—	—	320.9	0.7
Other investments	701.1	81.4	311.7	306.1	1.9
Cash equivalents	3,604.1	—	973.5	2,630.6	—
Market risk benefit asset (3)	109.2	—	—	—	109.2
Sub-total excluding separate account assets	70,095.2	81.4	3,243.3	64,358.1	2,412.4
Separate account assets	155,375.1	9,120.9	92,010.7	53,208.6	1,034.9
Total assets	$ 225,470.3	$ 9,202.3	$ 95,254.0	$ 117,566.7	$ 3,447.3
Liabilities					
Investment and universal life contracts (4)	$ (46.4)	$ —	$ —	$ —	$ (46.4)
Market risk benefit liability (3)	(207.4)	—	—	—	(207.4)
Funds withheld payable embedded derivative(4)	3,652.8	—	—	—	3,652.8
Derivative liabilities (2)	(634.2)	—	—	(630.1)	(4.1)
Other liabilities	(0.4)	—	—	(0.4)	—
Total liabilities	$ 2,764.4	$ —	$ —	$ (630.5)	$ 3,394.9
Net assets	$ 228,234.7	$ 9,202.3	$ 95,254.0	$ 116,936.2	$ 6,842.2

(1) Primarily consists of collateralized loan obligations backed by secured corporate loans.
(2) Within the consolidated statements of financial position, derivative assets are reported with other investments and derivative liabilities are reported with other liabilities. The amounts are presented gross in the tables above to reflect the presentation on the consolidated statements of financial position; however, are presented net for purposes of the rollforward in the Changes in Level 3 Fair Value Measurements tables. Refer to Note 4, Derivative Financial Instruments, for further information on fair value by class of derivative instruments.
(3) Refer to Note 9, Market Risk Benefits, for further information on the change in the Level 3 fair value measurements of MRBs.
(4) Includes bifurcated embedded derivatives that are reported at net asset (liability) fair value within the same line item in the consolidated statements of financial position in which the host contract is reported. The funds withheld payable embedded derivative could be in either an asset or (liability) position.
(5) Certain investments are measured at fair value using the NAV per share (or its equivalent) practical expedient and have not been classified in the fair value hierarchy. Other investments using the NAV practical expedient consist of certain fund interests that are restricted until maturity with unfunded commitments totaling $7.8 million and $7.8 million as of March 31, 2023 and December 31, 2022, respectively. Separate account assets using the NAV practical expedient consist of hedge funds and a real estate fund with varying investment strategies that also have a variety of redemption terms and conditions. We do not have unfunded commitments associated with these funds.

Table of Contents

Changes in Level 3 Fair Value Measurements

The reconciliation for all assets and liabilities measured at fair value on a recurring basis using significant unobservable inputs (Level 3) was as follows:

	For the three months ended March 31, 2023						
	Beginning asset/ (liability) balance as of January 1, 2023	Total realized/unrealized gains (losses)		Net purchases, sales, issuances and settlements (4)	Transfers into Level 3	Transfers out of Level 3	Ending asset/ (liability) balance as of March 31, 2023
		Included in net income (2)	Included in other comprehensive income (3)				
				(in millions)			
Assets							
Fixed maturities, available-for-sale:							
States and political subdivisions	$ 70.9	$ —	$ 1.6	$ (0.4)	$ —	$ —	$ 72.1
Corporate	1,568.3	—	(6.6)	125.3	10.4	(42.9)	1,654.5
Commercial mortgage-backed securities	3.4	—	0.1	(0.2)	—	—	3.3
Collateralized debt obligations	56.2	—	1.1	120.1	—	(15.2)	162.2
Other debt obligations	467.8	—	(6.5)	186.9	218.3	—	866.5
Total fixed maturities, available-for-sale	2,166.6	—	(10.3)	431.7	228.7	(58.1)	2,758.6
Fixed maturities, trading	134.0	(0.4)	—	22.5	—	—	156.1
Other investments	1.9	—	—	—	—	—	1.9
Separate account assets (1)	1,034.9	15.0	—	(156.1)	—	—	893.8
Liabilities							
Investment and universal life contracts	(46.4)	(5.3)	—	(3.8)	—	—	(55.5)
Funds withheld payable embedded derivative	3,652.8	(626.6)	—	—	—	—	3,026.2
Derivatives							
Net derivative assets (liabilities)	(3.4)	7.4	—	—	—	—	4.0

Principal Financial Group, Inc.
Notes to Condensed Consolidated Financial Statements – (continued)
March 31, 2023
(Unaudited)

	For the three months ended March 31, 2022						
	Beginning asset/ (liability) balance as of January 1, 2022	Total realized/unrealized gains (losses)		Net purchases, sales, issuances and settlements (4)	Transfers into Level 3	Transfers out of Level 3	Ending asset/ (liability) balance as of March 31, 2022
		Included in net income (2)	Included in other comprehensive income (3)				
				(in millions)			
Assets							
Fixed maturities, available-for-sale:							
States and political subdivisions	$ 94.8	$ —	$ 0.1	$ (0.4)	$ —	$ —	$ 94.5
Corporate	834.3	(3.0)	(4.7)	139.0	175.2	—	1,140.8
Commercial mortgage-backed securities	19.2	—	(0.9)	(0.2)	—	—	18.1
Collateralized debt obligations	85.8	—	(0.3)	55.5	—	(84.0)	57.0
Other debt obligations	42.1	—	(0.6)	(0.3)	—	(20.0)	21.2
Total fixed maturities, available-for-sale	1,076.2	(3.0)	(6.4)	193.6	175.2	(104.0)	1,331.6
Fixed maturities, trading	4.9	—	—	28.5	29.0	—	62.4
Other investments	2.1	—	(0.7)	—	—	—	1.4
Separate account assets (1)	945.3	71.4	—	(1.3)	—	—	1,015.4
Liabilities							
Investment and universal life contracts	(83.2)	8.1	—	6.4	—	—	(68.7)
Derivatives							
Net derivative assets (liabilities)	—	(1.4)	—	0.7	—	—	(0.7)

(1) Gains and losses for separate account assets do not impact net income as the change in value of separate account assets is offset by a change in value of separate account liabilities. Foreign currency translation adjustments related to the Principal International separate account assets are recorded in AOCI and are offset by foreign currency translation adjustments of the corresponding separate account liabilities.

(2) Both realized gains (losses) and mark-to-market unrealized gains (losses) are generally reported in net realized capital gains (losses), net realized capital gains (losses) on funds withheld assets or change in fair value of funds withheld embedded derivative within the consolidated statements of operations. Realized and unrealized gains (losses) on certain securities with an investment objective to realize economic value through mark-to-market changes are reported in net investment income within the consolidated statements of operations. Changes in unrealized gains (losses) included in net income relating to positions still held were:

	For the three months ended March 31,	
	2023	2022
	(in millions)	
Assets		
Fixed maturities, available-for-sale:		
Corporate	**$ —**	$ (3.0)
Total fixed maturities, available-for-sale	**—**	(3.0)
Fixed maturities, trading	**(0.3)**	—
Separate account assets	**(21.8)**	68.3
Liabilities		
Investment and universal life contracts	**(7.1)**	7.4
Funds withheld payable embedded derivative	**(626.6)**	—
Derivatives		
Net derivative assets (liabilities)	**7.3**	(1.3)

Principal Financial Group, Inc.
Notes to Condensed Consolidated Financial Statements – (continued)
March 31, 2023
(Unaudited)

(3) Changes in unrealized gains (losses) included in OCI, including foreign currency translation adjustments related to Principal International, relating to positions still held were:

	For the three months ended March 31, 2023	For the three months ended March 31, 2022
	(in millions)	
Assets		
Fixed maturities, available-for-sale:		
States and political subdivisions	**$ 1.6**	$ 0.1
Corporate	**(6.6)**	(4.7)
Commercial mortgage-backed securities	**0.1**	(1.0)
Collateralized debt obligations	**1.1**	(0.4)
Other debt obligations	**(6.5)**	(0.6)
Total fixed maturities, available-for-sale	**(10.3)**	(6.6)

(4) Gross purchases, sales, issuances and settlements were:

	For the three months ended March 31, 2023				
	Purchases	Sales	Issuances	Settlements	Net purchases, sales, issuances and settlements
			(in millions)		
Assets					
Fixed maturities, available-for-sale:					
States and political subdivisions	**$ —**	**$ —**	**$ —**	**$ (0.4)**	**$ (0.4)**
Corporate	**150.9**	**(3.6)**	**—**	**(22.0)**	**125.3**
Commercial mortgage-backed securities	**—**	**—**	**—**	**(0.2)**	**(0.2)**
Collateralized debt obligations	**121.3**	**—**	**—**	**(1.2)**	**120.1**
Other debt obligations	**190.9**	**—**	**—**	**(4.0)**	**186.9**
Total fixed maturities, available-for-sale	**463.1**	**(3.6)**	**—**	**(27.8)**	**431.7**
Fixed maturities, trading	**26.4**	**(3.5)**	**—**	**(0.4)**	**22.5**
Separate account assets (5)	**—**	**(202.0)**	**(4.1)**	**50.0**	**(156.1)**
Liabilities					
Investment and universal life contracts	**—**	**—**	**(8.2)**	**4.4**	**(3.8)**

	For the three months ended March 31, 2022				
	Purchases	Sales	Issuances	Settlements	Net purchases, sales, issuances and settlements
			(in millions)		
Assets					
Fixed maturities, available-for-sale:					
States and political subdivisions	$ —	$ —	$ —	$ (0.4)	$ (0.4)
Corporate	190.9	(20.4)	—	(31.5)	139.0
Commercial mortgage-backed securities	—	—	—	(0.2)	(0.2)
Collateralized debt obligations	55.5	—	—	—	55.5
Other debt obligations	—	—	—	(0.3)	(0.3)
Total fixed maturities, available-for-sale	246.4	(20.4)	—	(32.4)	193.6
Fixed maturities, trading	28.5	—	—	—	28.5
Separate account assets (5)	—	—	(1.1)	(0.2)	(1.3)
Liabilities					
Investment and universal life contracts	—	—	(6.7)	13.1	6.4
Derivatives					
Net derivative assets (liabilities)	—	0.7	—	—	0.7

(5) Issuances and settlements include amounts related to mortgage encumbrances associated with real estate in our separate accounts.

Principal Financial Group, Inc.
Notes to Condensed Consolidated Financial Statements – (continued)
March 31, 2023
(Unaudited)

Transfers

Transfers of assets and liabilities measured at fair value on a recurring basis between fair value hierarchy levels were as follows:

	For the three months ended March 31, 2023			
	Transfers out of Level 1 into Level 3	Transfers out of Level 2 into Level 3	Transfers out of Level 3 into Level 1	Transfers out of Level 3 into Level 2
	(in millions)			
Assets				
Fixed maturities, available-for-sale:				
Corporate	$ —	$ 10.4	$ —	$ 42.9
Collateralized debt obligations	—	—	—	15.2
Other debt obligations	—	218.3	—	—
Total fixed maturities, available-for-sale	—	228.7	—	58.1

	For the three months ended March 31, 2022			
	Transfers out of Level 1 into Level 3	Transfers out of Level 2 into Level 3	Transfers out of Level 3 into Level 1	Transfers out of Level 3 into Level 2
	(in millions)			
Assets				
Fixed maturities, available-for-sale:				
Corporate	$ —	$ 175.2	$ —	$ —
Collateralized debt obligations	—	—	—	84.0
Other debt obligations	—	—	—	20.0
Total fixed maturities, available-for-sale	—	175.2	—	104.0
Fixed maturities, trading	—	29.0	—	—

Assets transferred into Level 3 during the three months ended March 31, 2023 and 2022, primarily included those assets for which we are now unable to obtain pricing from a recognized third party pricing vendor as well as assets that were previously priced using a matrix valuation approach that may no longer be relevant when applied to asset-specific situations.

Assets transferred out of Level 3 during the three months ended March 31, 2023, primarily included those assets for which we are now able to obtain pricing from a recognized third party pricing vendor or from internal models using substantially all market observable information.

Quantitative Information about Level 3 Fair Value Measurements

The following table provides quantitative information about the significant unobservable inputs used for recurring fair value measurements categorized within Level 3, excluding assets and liabilities for which significant quantitative unobservable inputs are not developed internally, which primarily consists of those valued using broker quotes. The MRB asset and liability are excluded from the table. Refer to Note 9, Market Risk Benefits, for information on the unobservable inputs used for fair value measurement of MRBs. The funds withheld payable embedded derivative is excluded from the table as the determination of its fair value incorporates the fair value of the invested assets supporting the reinsurance agreement. Refer to "Assets and liabilities measured at fair value on a recurring basis" for a complete valuation hierarchy summary.

	March 31, 2023				
	Assets / (liabilities) measured at fair value	Valuation technique(s)	Unobservable input description	Input/range of inputs	Weighted average
	(in millions)				
Assets					
Fixed maturities, available-for-sale:					
Corporate	**$ 1,569.7**	Discounted cash flow	Discount rate (1)	5.0 % - 24.9 %	12.0 %
			Illiquidity premium	0 basis points (“bps”)- 480 bps	80 bps
			Comparability adjustment	(3) bps	(3)bps
Collateralized debt obligations	**40.0**	Discounted cash flow	Discount rate (1)	5.4 %	5.4 %
			Comparability adjustment	52 bps	52 bps
Other debt obligations	**625.7**	Discounted cash flow	Discount rate (1)	5.7 % - 9.1 %	8.2 %
			Illiquidity premium	0 bps- 415 bps	239 bps
			Comparability adjustment	32 bps- 152 bps	86 bps
Fixed maturities, trading	**128.6**	Discounted cash flow	Discount rate (1)	10.0 % - 16.6 %	12.3 %
Separate account assets	**894.2**	Discounted cash flow - real estate	Discount rate (1)	6.0 % - 10.0 %	7.3 %
			Terminal capitalization rate	5.0 % - 9.5 %	6.0 %
			Average market rent growth rate	2.0 % - 3.8 %	3.0 %
		Discounted cash flow - real estate debt	Loan to value	43.4 % - 64.9 %	52.2 %
			Market interest rate	5.5 % - 8.6 %	7.0 %

Liabilities

Investment and universal life contracts (4)	**(55.5)**	Discounted cash flow	Long duration interest rate	2.3 % - 4.6 % (2)	3.3 %
			Long-term equity market volatility	15.1 % - 25.4 %	19.2 %
			Nonperformance risk	0.9 %	0.9 %
			Lapse rate	0.0 %	0.0 %
			Mortality rate	See note (3)	

Principal Financial Group, Inc.
Notes to Condensed Consolidated Financial Statements – (continued)
March 31, 2023
(Unaudited)

	December 31, 2022				
	Assets / (liabilities) measured at fair value	**Valuation technique(s)**	**Unobservable input description**	**Input/range of inputs**	**Weighted average**
	(in millions)				
Assets					
Fixed maturities, available-for-sale:					
Corporate	$ 1,479.9	Discounted cash flow	Discount rate (1)	2.7 % - 33.1 %	11.0 %
			Illiquidity premium	0 bps- 467 bps	50 bps
			Comparability adjustment	(16)bps- 0 bps	(11)bps
Collateralized debt obligations	39.5	Discounted cash flow	Discount rate (1)	4.4 %	4.4 %
			Comparability adjustment	55 bps	55 bps
Other debt obligations	467.8	Discounted cash flow	Discount rate (1)	5.6 % - 8.2 %	7.6 %
			Illiquidity premium	0 bps- 260 bps	220 bps
			Comparability adjustment	1 bps- 139 bps	77 bps
Fixed maturities, trading	119.7	Discounted cash flow	Discount rate (1)	9.6 % - 15.2 %	11.0 %
Separate account assets	1,034.1	Discounted cash flow - real estate	Discount rate (1)	5.5 % - 10.0 %	7.0 %
			Terminal capitalization rate	4.5 % - 9.5 %	5.8 %
			Average market rent growth rate	2.0 % - 3.8 %	3.0 %
		Discounted cash flow - real estate debt	Loan to value	43.6 % - 62.2 %	50.6 %
			Market interest rate	5.3 % - 8.6 %	6.6 %
Liabilities					
Investment and universal life contracts (4)	(46.4)	Discounted cash flow	Long duration interest rate	2.4 % - 4.7 % (2)	3.1 %
			Long-term equity market volatility	17.8 % - 36.9 %	22.0 %
			Nonperformance risk	0.9 %	0.9 %
			Lapse rate	0.0 %	0.0 %
			Mortality rate	See note (3)	

(1) Represents market comparable interest rate or an index adjusted rate used as the base rate in the discounted cash flow analysis prior to any illiquidity or other adjustments, where applicable.
(2) Represents the range of rate curves used in the valuation analysis that we have determined market participants would use when pricing the instrument. Derived from interpolation between various observable swap rates.
(3) This input is based on an appropriate industry mortality table and a range does not provide a meaningful presentation.
(4) Includes bifurcated embedded derivatives that are reported at net asset (liability) fair value within the same line item in the consolidated statements of financial position in which the host contract is reported.

Market comparable discount rates are used as the base rate in the discounted cash flows used to determine the fair value of certain assets. The use of a higher or lower discount rate would have caused the fair value of the assets to significantly decrease or increase, respectively. Additionally, we may adjust the base discount rate or the modeled price by applying an illiquidity premium given the highly structured nature of certain assets. The use of a higher or lower illiquidity premium would have caused significant decreases or increases, respectively, in the fair value of the asset.

Principal Financial Group, Inc.
Notes to Condensed Consolidated Financial Statements – (continued)
March 31, 2023
(Unaudited)

Embedded derivatives within our investment and universal life contracts liability can be in either an asset or liability position, depending on certain inputs at the reporting date. Increases to an asset or decreases to a liability are described as increases to fair value. The use of a higher or lower market volatility would have caused significant decreases or increases, respectively, in the fair value of embedded derivatives in investment and universal life contracts. Long duration interest rates are used as the mean return when projecting the growth in the value of associated account value and impact the discount rate used in the discounted future cash flows valuation. The use of higher or lower risk-free rates would have caused the fair value of the embedded derivative to significantly increase or decrease, respectively. The use of a higher or lower rate for our own credit risks, which impact the rates used to discount future cash flows, would have significantly increased or decreased, respectively, the fair value of the embedded derivative. The use of a lower or higher mortality rate assumption would have caused the fair value of the embedded derivative to decrease or increase, respectively. The use of a lower or higher overall lapse rate assumption would have caused the fair value of the embedded derivative to decrease or increase, respectively.

Assets and Liabilities Measured at Fair Value on a Nonrecurring Basis

No significant assets and liabilities were measured at fair value on a nonrecurring basis for the three months ended March 31, 2023 and 2022.

Financial Instruments Not Reported at Fair Value

The carrying value and estimated fair value of financial instruments not recorded at fair value on a recurring basis but required to be disclosed at fair value were as follows:

	March 31, 2023				
			Fair value hierarchy level		
	Carrying amount	Fair value	Level 1	Level 2	Level 3
			(in millions)		
Assets (liabilities)					
Mortgage loans	$ 20,603.5	$ 18,967.6	$ —	$ —	$ 18,967.6
Policy loans	788.0	828.5	—	—	828.5
Other investments	286.7	287.1	—	159.7	127.4
Cash and cash equivalents	1,405.8	1,405.8	1,391.7	14.1	—
Reinsurance deposit receivable	7,423.4	6,539.5	—	—	6,539.5
Cash collateral receivable	17.1	17.1	17.1	—	—
Investment contracts	(35,551.8)	(33,041.4)	—	(7,373.8)	(25,667.6)
Short-term debt	(24.2)	(24.2)	—	(24.2)	—
Long-term debt	(4,688.6)	(4,420.8)	—	(4,361.3)	(59.5)
Separate account liabilities	(147,577.5)	(146,631.4)	—	—	(146,631.4)
Bank deposits (1)	(372.6)	(355.6)	—	(355.6)	—
Cash collateral payable	(279.0)	(279.0)	(279.0)	—	—

Principal Financial Group, Inc.
Notes to Condensed Consolidated Financial Statements – (continued)
March 31, 2023
(Unaudited)

	December 31, 2022				
			Fair value hierarchy level		
	Carrying amount	Fair value	Level 1	Level 2	Level 3
			(in millions)		
Assets (liabilities)					
Mortgage loans	$ 20,629.8	$ 18,754.5	$ —	$ —	$ 18,754.5
Policy loans	784.7	804.0	—	—	804.0
Other investments	250.6	238.0	—	133.5	104.5
Cash and cash equivalents	1,243.9	1,243.9	1,232.5	11.4	—
Reinsurance deposit receivable	7,901.0	6,859.9	—	—	6,859.9
Cash collateral receivable	281.0	281.0	281.0	—	—
Investment contracts	(35,380.1)	(32,367.4)	—	(7,279.0)	(25,088.4)
Short-term debt	(80.7)	(80.7)	—	(80.7)	—
Long-term debt	(3,997.0)	(3,680.6)	—	(3,620.1)	(60.5)
Separate account liabilities	(141,459.3)	(140,533.9)	—	—	(140,533.9)
Bank deposits (1)	(352.4)	(336.3)	—	(336.3)	—
Cash collateral payable	(291.3)	(291.3)	(291.3)	—	—

(1) Excludes deposit liabilities without defined or contractual maturities.

17. Segment Information

We provide financial products and services through the following segments: Retirement and Income Solutions, Principal Asset Management and Benefits and Protection. In addition, we have a Corporate segment. The segments are managed and reported separately because they provide different products and services, have different strategies or have different markets and distribution channels.

Prior to 2023, we separately reported Principal Global Investors and Principal International as segments. Those are now integrated into our Principal Asset Management segment. The new segment presentation has been applied retrospectively to our segment results, which have been recast for LDTI, but did not impact our consolidated financial statements.

The Retirement and Income Solutions segment provides retirement and related financial products and services primarily to businesses, their employees and other individuals. The segment includes workplace savings and retirement solutions, banking, trust and custodial services, individual variable annuities, pension risk transfer, investment only and our exited retail fixed annuities business.

The Principal Asset Management segment provides global investment solutions to institutional, retirement, retail and high net worth investors in the U.S. and select emerging markets. The segment is organized into Principal Global Investors, which provides public, multi-asset and private market capabilities across all asset classes, including equity, fixed income, real estate and alternatives, to serve a breadth of client investment objectives; and Principal International, which provides long-term savings and retirement solutions through pension accumulation, mutual funds and income annuities, along with retail asset management services in Asia and Latin America.

The Benefits and Protection (formerly known as U.S. Insurance Solutions) segment focuses on solutions for small-to-mid sized businesses and their employees. The segment is organized into Specialty Benefits, which provides group dental, group life insurance, group disability insurance (including short-term disability, long-term disability and paid family and medical leave), supplemental health products (including vision, critical illness, accident and hospital indemnity) and individual disability insurance; and Life Insurance, which provides life insurance, with a focus on the business market customer, including universal life and variable universal life (including indexed universal life) and traditional life insurance (including term life insurance). All remaining customers are part of the legacy life block of business, including universal and variable universal life insurance (including indexed universal life), traditional life insurance (including participating whole life, adjustable life products and term life insurance) and our exited ULSG business.

Principal Financial Group, Inc.
Notes to Condensed Consolidated Financial Statements – (continued)
March 31, 2023
(Unaudited)

Our Corporate segment manages the assets representing capital that has not been allocated to any other segment. Financial results of the Corporate segment primarily reflect our financing activities (including financing costs), income on capital not allocated to other segments, inter-segment eliminations, income tax risks and certain income, expenses and other adjustments not allocated to the segments based on the nature of such items. Results of Principal Securities, Inc. ("PSI"), our retail broker-dealer and registered investment advisor ("RIA"); and our exited group medical and long-term care insurance businesses are reported in this segment.

Management uses segment pre-tax operating earnings in evaluating performance, which is consistent with the financial results provided to and discussed with securities analysts. We determine segment pre-tax operating earnings by adjusting U.S. GAAP income before income taxes for pre-tax net realized capital gains (losses), as adjusted, pre-tax income (loss) from exited business, pre-tax other adjustments that management believes are not indicative of overall operating trends and certain adjustments related to equity method investments and noncontrolling interest. While these items may be significant components in understanding and assessing the consolidated financial performance, management believes the presentation of pre-tax operating earnings enhances the understanding of our results of operations by highlighting pre-tax earnings attributable to the normal, ongoing operations of the business.

The pre-tax net realized capital gains (losses), as adjusted, excluded from pre-tax operating earnings reflects consolidated U.S. GAAP pre-tax net realized capital gains (losses) excluding the following items that are included in pre-tax operating earnings:

- Periodic settlements and accruals on derivative instruments not designated as hedging instruments,
- Certain market value adjustments of derivatives and embedded derivatives and
- Certain market value adjustments of derivative instruments used to economically hedge embedded derivatives.

Pre-tax income (loss) from exited business includes amounts associated with our exited U.S. retail fixed annuity and ULSG businesses, including the change in fair value of the funds withheld embedded derivative, net realized capital gains (losses) on funds withheld assets, strategic review costs and impacts, amortization of reinsurance gain (loss) and other impacts of reinsured business. The strategic review costs and impacts primarily include actuarial balance re-cohorting impacts resulting from the Strategic Review and costs to close the Reinsurance Transaction. Other impacts of reinsured business primarily include DAC amortization.

Pre-tax net realized capital gains (losses), as adjusted, are further adjusted for:

- Amortization of hedge accounting book value adjustments for certain discontinued hedges,
- Certain hedge accounting market value revenue adjustments,
- Certain market value adjustments to fee revenues,
- Pre-tax net realized capital gains (losses) adjustments related to equity method investments,
- Pre-tax net realized capital gains (losses) adjustments related to sponsored investment funds,
- Certain variable annuity fees,
- Market value adjustments of market risk benefits,
- Related changes in the amortization pattern of actuarial balances,
- Certain hedge accounting market value expense adjustments and
- Net realized capital gains (losses) distributed.

Segment operating revenues reflect consolidated U.S. GAAP total revenues excluding:

- Net realized capital gains (losses), except periodic settlements and accruals on derivatives not designated as hedging instruments and certain market value adjustments of derivative instruments used to economically hedge embedded derivatives, and their impact on:
    - Amortization of hedge accounting book value adjustments for certain discontinued hedges,
    - Certain hedge accounting market value revenue adjustments,
    - Certain variable annuity fees,
    - Certain market value adjustments to fee revenues,
    - Pre-tax net realized capital gains (losses) adjustments related to equity method investments and

Principal Financial Group, Inc.
Notes to Condensed Consolidated Financial Statements – (continued)
March 31, 2023
(Unaudited)

- Pre-tax net realized capital gains (losses) adjustments related to sponsored investment funds.
- Pre-tax revenues from exited business,
- Pre-tax other adjustments and income taxes of equity method investments and
- Pre-tax other adjustments management believes are not indicative of overall operating trends.

The accounting policies of the segments are consistent with the accounting policies for the consolidated financial statements, with the exception of: (1) pension and other postretirement employee benefits ("OPEB") cost allocations, (2) certain expenses deemed to benefit the entire organization and (3) income tax allocations. For purposes of determining pre-tax operating earnings, the segments are allocated the service component of pension and other postretirement benefit costs. The Corporate segment reflects the non-service components of pension and other postretirement benefit costs as assumptions are established and funding decisions are managed from a company-wide perspective. Additionally, the Corporate segment reflects expenses that benefit the entire organization for which the segments are not able to influence the spend. This includes expenses such as public company costs, executive management costs, acquisition and disposition costs, among others. The Corporate segment functions to absorb the risk inherent in interpreting and applying tax law. For purposes of determining non-GAAP operating earnings, the segments are allocated tax adjustments consistent with the positions we took on tax returns. The Corporate segment results reflect any differences between the tax returns and the estimated resolution of any disputes.

The following tables summarize select financial information by segment, including operating revenues for our products and services, and reconcile segment totals to those reported in the consolidated financial statements:

	March 31, 2023	December 31, 2022
	(in millions)	
Assets:		
Retirement and Income Solutions	**$ 207,109.0**	$ 202,294.2
Principal Asset Management	**48,462.3**	45,950.7
Benefits and Protection	**41,082.2**	40,048.3
Corporate	**2,754.7**	2,285.1
Total consolidated assets	**$ 299,408.2**	$ 290,578.3

Principal Financial Group, Inc.
Notes to Condensed Consolidated Financial Statements – (continued)
March 31, 2023
(Unaudited)

	For the three months ended March 31,	
	2023	**2022**
	(in millions)	
Operating revenues by segment:		
Retirement and Income Solutions (1)	**$ 1,616.1**	$ 1,263.0
Principal Asset Management:		
Principal Global Investors	**392.7**	435.3
Principal International	**305.1**	327.2
Eliminations	**(5.3)**	(6.6)
Total Principal Asset Management (2)	**692.5**	755.9
Benefits and Protection:		
Specialty Benefits	**782.2**	717.7
Life Insurance	**321.4**	525.7
Eliminations	**(0.2)**	(0.1)
Total Benefits and Protection	**1,103.4**	1,243.3
Corporate	**27.6**	6.3
Total segment operating revenues	**3,439.6**	3,268.5
Net realized capital losses, net of related revenue adjustments	**(39.2)**	(146.4)
Revenues from exited business (3)	**(547.6)**	—
Adjustments related to equity method investments	**(22.6)**	(18.5)
Market risk benefit derivative settlements	**(11.2)**	(8.1)
Total revenues per consolidated statements of operations	**$ 2,819.0**	$ 3,095.5
Pre-tax operating earnings (losses) by segment:		
Retirement and Income Solutions	**$ 249.8**	$ 294.2
Principal Asset Management	**187.8**	211.0
Benefits and Protection	**99.3**	92.8
Corporate	**(96.1)**	(129.0)
Total segment pre-tax operating earnings	**440.8**	469.0
Pre-tax net realized capital losses, as adjusted (4)	**(24.3)**	(87.9)
Pre-tax loss from exited business (5)	**(608.3)**	—
Adjustments related to equity method investments and noncontrolling interest	**(20.7)**	(2.7)
Income (loss) before income taxes per consolidated statements of operations	**$ (212.5)**	$ 378.4

(1) Reflects inter-segment revenues of $94.8 million and $97.4 million for the three months ended March 31, 2023 and 2022, respectively.
(2) Reflects inter-segment revenues of $70.7 million and $76.5 million for the three months ended March 31, 2023 and 2022, respectively.

Principal Financial Group, Inc.
Notes to Condensed Consolidated Financial Statements – (continued)
March 31, 2023
(Unaudited)

(3) Revenues from exited business is derived as follows:

	For the three months ended March 31,	
	2023	2022
	(in millions)	
Revenues from exited business:		
Change in fair value of funds withheld embedded derivative	**$ (626.6)**	$ —
Net realized capital gains on funds withheld assets	**81.0**	—
Amortization of reinsurance gain	**1.4**	—
Other impacts of reinsured business	**(3.4)**	—
Total revenues from exited business	**$ (547.6)**	$ —

(4) Pre-tax net realized capital gains (losses), as adjusted, is derived as follows:

	For the three months ended March 31,	
	2023	2022
	(in millions)	
Net realized capital losses:		
Net realized capital losses	**$ (66.0)**	$ (136.6)
Derivative and hedging-related revenue adjustments	**2.1**	(32.0)
Certain variable annuity fees	**18.4**	20.0
Adjustments related to equity method investments	**0.2**	(3.6)
Adjustments related to sponsored investment funds	**6.1**	5.8
Net realized capital losses, net of related revenue adjustments	**(39.2)**	(146.4)
Amortization of deferred acquisition costs and other actuarial balances	**—**	6.6
Capital losses distributed	**18.4**	91.0
Market value adjustments of market risk benefits	**(6.5)**	(22.7)
Market value adjustments of embedded derivatives	**3.0**	(16.4)
Pre-tax net realized capital losses, as adjusted (a)	**$ (24.3)**	$ (87.9)

(a) As adjusted before noncontrolling interest capital gains (losses).

(5) Pre-tax income (loss) from exited business included:

	For the three months ended March 31,	
	2023	2022
	(in millions)	
Pre-tax loss from exited business		
Change in fair value of funds withheld embedded derivative	**$ (626.6)**	$ —
Net realized capital gains on funds withheld assets	**81.0**	—
Amortization of reinsurance loss	**(22.1)**	—
Other impacts of reinsured business	**(40.6)**	—
Total pre-tax loss from exited business	**$ (608.3)**	$ —

18. Revenues from Contracts with Customers

The following tables summarize disaggregation of revenues from contracts with customers, including select financial information by segment, and reconcile totals to those reported in the consolidated financial statements. Revenues from contracts with customers are included in fees and other revenues on the consolidated statements of operations.

	For the three months ended March 31, 2023	For the three months ended March 31, 2022
	(in millions)	
Revenue from contracts with customers by segment:		
Retirement and Income Solutions	**$ 130.2**	$ 144.4
Principal Asset Management:		
Principal Global Investors	**381.3**	429.6
Principal International	**113.2**	110.4
Eliminations	**(5.3)**	(6.6)
Total Principal Asset Management	**489.2**	533.4
Benefits and Protection:		
Specialty Benefits	**3.9**	4.0
Life Insurance	**16.7**	15.4
Total Benefits and Protection	**20.6**	19.4
Corporate	**45.1**	53.0
Total segment revenue from contracts with customers	**685.1**	750.2
Adjustments for fees and other revenues not within the scope of revenue recognition guidance (1)	**290.4**	449.0
Pre-tax other adjustments (2)	**19.8**	20.0
Total fees and other revenues per consolidated statements of operations	**$ 995.3**	$ 1,219.2

(1) Fees and other revenues not within the scope of the revenue recognition guidance primarily represent revenue on contracts accounted for under the financial instruments or insurance contracts standards.
(2) Pre-tax other adjustments relate to revenues from exited business, certain variable annuity fees and market value adjustments to fee revenues.

Retirement and Income Solutions

Retirement and Income Solutions offers service and trust agreements for defined contribution retirement plans, including 401(k) plans, 403(b) plans, and employee stock ownership plans. The investment components of these service agreements are in the form of mutual fund offerings. In addition, plan sponsor retirement plan trust and custody services are also available through our trust company. Individual retirement accounts (“IRAs”) are offered through Principal Bank. Furthermore, services and trust agreements are offered to non-retirement customers including insurance companies, endowments and other financial institutions.

Administrative service fee revenues are earned for administrative activities performed for the defined contribution retirement plans including recordkeeping and reporting as well as trust and custody, asset management and investment services. Administrative service fee revenues are earned for administrative activities performed for non-retirement plan customers including trust and custody services, defined benefit administration and investment management activities. The majority of these activities are performed daily over time. Fee-for-service transactions are also provided upon client request. These services are considered distinct or grouped into a bundle until a distinct performance obligation is identified. Some performance obligations are considered a series of distinct services, which are substantially the same and have the same pattern of transfer to the customer.

Administrative service fee revenues can be based on a fixed contractual rate for these services or can be variable based upon contractual rates applied to the market value of the client's investments or assets under administration. If the consideration for this series of performance obligations is based on market value, it is considered variable during the billing period as the services are performed over time. The consideration becomes unconstrained and thus recognized as revenue for each billing period's series of distinct services once the market value of the client's investments or assets under administration is determined at market close. Additionally, fixed fees and other revenues are recognized point-in-time as fee-for-service transactions upon completion.

IRAs are primarily funded by retirement savings rolled over from qualified retirement plans. The IRAs are held in savings accounts, money market accounts and certificates of deposit. Deposit account fee revenues are earned as the performance of establishing and maintaining IRA accounts is completed. Fee-for-service transactions are also provided upon client request. The establishment fees and annual maintenance fees are accrued into earnings over a period of time using the average account life. Upfront and recurring bank fees are related to performance obligations that have the same pattern of transfer to the customer and are recognized in income over time with control transferred to the customers utilizing the output method. These fees are based on a fixed contractual rate. Fixed fees and other revenues are also recognized point-in-time as fee-for-service transactions upon completion. Additionally, commission income is earned on advisory services provided to customers. The revenues are earned over time as the service is performed based upon contractual rates applied to the market value of the clients' portfolios.

The types of revenues from contracts with customers were as follows:

	For the three months ended March 31,	
	2023	**2022**
	(in millions)	
Administrative service fee revenue	**$ 126.5**	$ 141.5
Deposit account fee revenue	**2.9**	2.5
Commission income	**0.4**	0.2
Other fee revenue	**0.4**	0.2
Total revenues from contracts with customers	**130.2**	144.4
Fees and other revenues not within the scope of revenue recognition guidance	**278.3**	299.4
Total fees and other revenues	**408.5**	443.8
Premiums and other considerations	**582.7**	123.3
Net investment income	**624.9**	695.9
Total operating revenues	**$ 1,616.1**	$ 1,263.0

Principal Asset Management

Fees and other revenues earned for asset management, investment advisory and distribution services provided to institutional and retail clients in addition to trustee and/or administrative services performed for retirement savings plans. Fees are based largely upon contractual rates applied to the specified amounts of the clients' portfolios. Each service is a distinct performance obligation; however, if the services are not distinct on their own, we combine them into a distinct bundle or we have a series of distinct services that are substantially the same and have the same pattern of transfer to the customer. Fees and other revenues received for performance obligations such as asset management and other services are typically recognized over time utilizing the output method as the service is performed. Performance fees and transaction fees on certain accounts are recognized in income when the probability of significant reversal will not occur upon resolution of the uncertainty, which could be based on a variety of factors such as market performance or other internal metrics. Asset management fees are accrued each month based on the fee terms within the applicable agreement and are generally billed quarterly when values used for the calculation are available. Management fees and performance fees are variable consideration as they are subject to fluctuation based on assets under management ("AUM") and other constraints. These fees are not recognized until unconstrained at the end of each reporting period.

Incentive-based fees are recognized in income when the probability of significant reversal will not occur upon the resolution of the uncertainty, which is based on market performance.

Principal Financial Group, Inc.
Notes to Condensed Consolidated Financial Statements – (continued)
March 31, 2023
(Unaudited)

Fees for managing customers' mandatory retirement savings accounts in Latin America are collected with each monthly deposit made by our customers. If a customer stops contributing before retirement age, we collect no fees but services are still provided. We recognize revenue from these contracts as services are performed over the life of the contract and review annually.

The types of revenues from contracts with customers were as follows:

	For the three months ended March 31,	
	2023	**2022**
	(in millions)	
Principal Global Investors:		
Management fee revenue	**$ 339.7**	$ 379.0
Other fee revenue	**41.6**	50.6
Total revenues from contracts with customers	**381.3**	429.6
Fees and other revenues not within the scope of revenue recognition guidance	**4.6**	5.3
Total fees and other revenues	**385.9**	434.9
Net investment income	**6.8**	0.4
Total operating revenues	**$ 392.7**	$ 435.3

	For the three months ended March 31,	
	2023	**2022**
	(in millions)	
Principal International:		
Management fee revenue	**$ 110.9**	$ 107.7
Other fee revenue	**2.3**	2.7
Total revenues from contracts with customers	**113.2**	110.4
Fees and other revenues not within the scope of revenue recognition guidance	**1.4**	1.2
Total fees and other revenues	**114.6**	111.6
Premiums and other considerations	**6.4**	10.3
Net investment income	**184.1**	205.3
Total operating revenues	**$ 305.1**	$ 327.2
Revenues from contracts with customers by region:		
Latin America	**$ 85.9**	$ 82.1
Asia	**27.5**	28.5
Eliminations	**(0.2)**	(0.2)
Total revenues from contracts with customers	**$ 113.2**	$ 110.4

Benefits and Protection

Fees and other revenues are earned for administrative services performed including recordkeeping and reporting services for fee-for-service products, nonqualified benefit plans, separate accounts and dental networks. Services within contracts are not distinct on their own; however, we combine the services into a distinct bundle and account for the bundle as a single performance obligation, which is satisfied over time utilizing the output method as services are rendered. The transaction price corresponds with the performance completed to date, for which the value is recognized as revenue during the period. Variability of consideration is resolved at the end of each period and payments are due when billed.

Commission income is earned through sponsored brokerage services. Performance obligations are satisfied at a point in time, upon delivery of a placed case, and the transaction price calculated per the compensation schedule is recognized as revenue.

Principal Financial Group, Inc.
Notes to Condensed Consolidated Financial Statements – (continued)
March 31, 2023
(Unaudited)

The types of revenues from contracts with customers were as follows:

	For the three months ended March 31, 2023	For the three months ended March 31, 2022
	(in millions)	
Specialty Benefits:		
Administrative service fees	**$ 3.9**	$ 4.0
Total revenues from contracts with customers	**3.9**	4.0
Fees and other revenues not within the scope of revenue recognition guidance	**4.6**	4.7
Total fees and other revenues	**8.5**	8.7
Premiums and other considerations	**733.6**	665.6
Net investment income	**40.1**	43.4
Total operating revenues	**$ 782.2**	$ 717.7

	For the three months ended March 31, 2023	For the three months ended March 31, 2022
	(in millions)	
Life Insurance:		
Administrative service fees	**$ 7.2**	$ 6.8
Commission income	**9.5**	8.6
Total revenues from contracts with customers	**16.7**	15.4
Fees and other revenues not within the scope of revenue recognition guidance	**77.3**	228.3
Total fees and other revenues	**94.0**	243.7
Premiums and other considerations	**130.8**	88.8
Net investment income	**96.6**	193.2
Total operating revenues	**$ 321.4**	$ 525.7

Corporate

Fees and other revenues are earned on the performance of selling and servicing of securities and related products offered through PSI, an introducing broker-dealer registered with the FINRA.

PSI enters into selling and distribution agreements with the obligation to sell or distribute the securities products, such as mutual funds, annuities and products sold through RIAs, to individual clients in return for front-end sales charges, 12b-1 service fees, annuity fees and asset-based fees. Front-end sales charges, 12b-1 fees and annuity fees are related to a single sale and are earned at the time of sale. PSI also enters into agreements with individual customers to provide securities trade execution and custody through a brokerage services platform in return for ticket charge and other service fee revenue. These services are bundled as one single distinct service referred to as brokerage services. This revenue is related to distinct transactions and is earned at a point in time.

PSI also enters into agreements with individual customers to provide trade execution, clearing services, custody services and investment research services through our proprietary offered fee-based products. These services are bundled as one single distinct service referred to as advisory services. In addition, for outside RIA business PSI performs sales and distribution services only. The revenues are earned over time as the service is performed utilizing the output method.

A majority of our revenue is based upon contractual rates applied to the market value of the clients' portfolios and considered variable consideration.

Principal Financial Group, Inc.
Notes to Condensed Consolidated Financial Statements – (continued)
March 31, 2023
(Unaudited)

The Corporate segment also includes inter-segment eliminations of fees and other revenues. The types of revenues from contracts with customers were as follows:

	For the three months ended March 31,	
	2023	**2022**
	(in millions)	
Commission income	**$ 87.9**	$ 97.2
Other fee revenue	**20.5**	19.8
Eliminations	**(63.3)**	(64.0)
Total revenues from contracts with customers	**45.1**	53.0
Fees and other revenues not within the scope of revenue recognition guidance	**(75.6)**	(89.7)
Total fees and other revenues	**(30.5)**	(36.7)
Premiums and other considerations	**(1.3)**	(0.5)
Net investment income	**59.4**	43.5
Total operating revenues	**$ 27.6**	$ 6.3

Contract Costs

Sales compensation and other incremental costs of obtaining a contract are capitalized and amortized over the period of contract benefit if the costs are expected to be recovered. The contract cost asset, which is included in other assets on the consolidated statements of financial position, was $215.6 million and $204.9 million as of March 31, 2023 and December 31, 2022, respectively.

We apply the practical expedient for certain costs where we recognize the incremental costs of obtaining these contracts as an expense when incurred if the amortization period of the assets is one year or less. These costs, along with costs that are not deferrable, are included in operating expenses on the consolidated statements of operations.

Deferred contract costs consist primarily of commissions and variable compensation. We amortize capitalized contract costs on a straight-line basis over the expected contract life, reflecting lapses as they are incurred. Deferred contract costs are subject to impairment testing on an annual basis, or when a triggering event occurs that could warrant an impairment. To the extent future revenues less future maintenance expenses are not adequate to cover the asset balance, an impairment is recognized. For the three months ended March 31, 2023 and 2022, $8.3 million and $9.6 million, respectively, of amortization expense was recorded in operating expenses on the consolidated statements of operations and no impairment loss was recognized in relation to the costs capitalized.

19. Stock-Based Compensation Plans

As of March 31, 2023, we had the 2021 Stock Incentive Plan, the 2020 Directors Stock Plan, the 2014 Stock Incentive Plan, the Employee Stock Purchase Plan, the 2014 Directors Stock Plan, the Amended and Restated 2010 Stock Incentive Plan, the 2005 Directors Stock Plan, the Stock Incentive Plan and the Directors Stock Plan ("Stock-Based Compensation Plans"). No new grants will be made under the 2020 Directors Stock Plan, the 2014 Stock Incentive Plan, the 2014 Directors Stock Plan, the Amended and Restated 2010 Stock Incentive Plan, the 2005 Directors Stock Plan, the Stock Incentive Plan or the Directors Stock Plan. Under the terms of the 2021 Stock Incentive Plan, grants may be nonqualified stock options, incentive stock options qualifying under Section 422 of the Internal Revenue Code, restricted stock, restricted stock units, stock appreciation rights, performance shares, performance units or other stock-based awards. To date, we have not granted any incentive stock options, restricted stock or performance units under any plans. As part of our fair value process, we assess the impact of material nonpublic information on our share price or expected volatility, as applicable, at the time of grant. No awards in 2023 required a fair value adjustment.

As of March 31, 2023, the maximum number of new shares of common stock available for grant under the 2021 Stock Incentive Plan was 23.0 million.

Principal Financial Group, Inc.
Notes to Condensed Consolidated Financial Statements – (continued)
March 31, 2023
(Unaudited)

For awards with graded vesting, we use an accelerated expense attribution method. The compensation cost that was charged against net income for stock-based awards granted under the Stock-Based Compensation Plans was as follows:

	For the three months ended March 31,	
	2023	2022
	(in millions)	
Compensation cost	**$ 28.2**	$ 28.4
Related income tax benefit	**7.0**	6.4
Capitalized as part of an asset	**0.4**	0.4

Nonqualified Stock Options

No nonqualified stock options were granted to employees during the three months ended March 31, 2023.

As of March 31, 2023, we had $0.5 million of total unrecognized compensation cost related to nonvested stock options. The cost is expected to be recognized over a weighted-average service period of approximately 0.8 years.

Performance Share Awards

Performance share awards were granted to certain employees under the 2021 Stock Incentive Plan. Total performance share awards granted were 0.3 million for the three months ended March 31, 2023. The performance share awards granted represent initial target awards and do not reflect potential increases or decreases resulting from the final performance results to be determined at the end of the performance period. The actual number of common shares to be awarded at the end of each performance period will range between 0% and 180% of the initial target awards. Effective in 2022, we added a relative total shareholder return modifier to the performance share awards under which the number of shares ultimately granted is also impacted by our actual shareholder return relative to our S&P 500 Financial Sector Index peer group. The fair value of performance share awards is determined using a Monte Carlo simulation model. The weighted-average grant date fair value of these performance share awards granted was $91.47 per common share.

As of March 31, 2023, we had $31.5 million of total unrecognized compensation cost related to nonvested performance share awards granted. The cost is expected to be recognized over a weighted-average service period of approximately 1.9 years.

Restricted Stock Units

Restricted stock units were issued to certain employees and non-employee directors pursuant to the 2021 Stock Incentive Plan. Total restricted stock units granted were 0.9 million for the three months ended March 31, 2023. The fair value of restricted stock units is determined based on the closing stock price of our common shares on the grant date. The weighted-average grant date fair value of these restricted stock units granted was $88.66 per common share.

As of March 31, 2023, we had $123.9 million of total unrecognized compensation cost related to nonvested restricted stock unit awards granted. The cost is expected to be recognized over a weighted-average period of approximately 2.0 years.

Employee Stock Purchase Plan

Under the Employee Stock Purchase Plan, employees purchased 0.2 million shares for the three months ended March 31, 2023. The weighted average fair value of the discount on the stock purchased was $7.43 per share.

As of March 31, 2023, a total of 3.3 million of new shares were available to be made issuable by us for this plan.

Principal Financial Group, Inc.
Notes to Condensed Consolidated Financial Statements – (continued)
March 31, 2023
(Unaudited)

20. Earnings Per Common Share

The computations of the basic and diluted per share amounts were as follows:

	For the three months ended March 31,	
	2023	**2022**
	(in millions, except per share data)	
Net income (loss)	**$ (134.5)**	$ 343.2
Subtract:		
Net income attributable to noncontrolling interest	**5.6**	4.5
Total	**$ (140.1)**	$ 338.7
Weighted-average shares outstanding:		
Basic	**243.4**	259.4
Dilutive effects:		
Stock options	—	1.6
Restricted stock units	—	2.3
Performance share awards	—	0.5
Diluted	**243.4**	263.8
Net income (loss) per common share:		
Basic	**$ (0.58)**	$ 1.31
Diluted	**$ (0.58)**	$ 1.28

The calculation of diluted earnings per share for the three months ended March 31, 2023 and 2022, excludes the incremental effects related to certain outstanding stock-based compensation grants and an accelerated share repurchase program due to their anti-dilutive effect.

21. Subsequent Event

On April 7, 2023, we extinguished our floating rate notes payable due in 2055. The notes were redeemed in whole by paying a redemption price equal to the original principal amount of $400.0 million. During the second quarter of 2023, we incurred a one-time cost to extinguish this debt before the scheduled maturity, which was recorded in operating expenses on the consolidated statements of operations.

Item 2. Management's Discussion and Analysis of Financial Condition and Results of Operations

The following analysis discusses our financial condition as of March 31, 2023, compared with December 31, 2022, and our consolidated results of operations for the three months ended March 31, 2023 and 2022, prepared in conformity with U.S. GAAP. The discussion and analysis includes, where appropriate, factors that may affect our future financial performance. The discussion should be read in conjunction with our Form 10-K, for the year ended December 31, 2022, filed with the SEC and the unaudited condensed consolidated financial statements and the related notes to the financial statements and the other financial information included elsewhere in this Form 10-Q. On January 1, 2023, we adopted the guidance commonly referred to as LDTI. As such, results for 2022 have been recast and are also presented under the new LDTI guidance.

Forward-Looking Information

Our narrative analysis below contains forward-looking statements intended to enhance the reader's ability to assess our future financial performance. Forward-looking statements include, but are not limited to, statements that represent our beliefs concerning future operations, strategies, financial results or other developments, and contain words and phrases such as "anticipate," "believe," "plan," "estimate," "expect," "intend" and similar expressions. Forward-looking statements are made based upon management's current expectations and beliefs concerning future developments and their potential effects on us. Such forward-looking statements are not guarantees of future performance.

Actual results may differ materially from those included in the forward-looking statements as a result of risks and uncertainties including, but not limited to, the following: (1) adverse capital and credit market conditions may significantly affect our ability to meet liquidity needs, as well as our access to capital and cost of capital; (2) conditions in the global capital markets and the economy generally may materially and adversely affect our business and results of operations; (3) volatility or declines in the equity, bond or real estate markets could reduce our AUM and assets under administration and may result in investors withdrawing from the markets or decreasing their rates of investment, all of which could reduce our revenues and net income; (4) changes in interest rates or credit spreads or a prolonged low interest rate environment may adversely affect our results of operations, financial condition and liquidity, and our net income can vary from period to period; (5) the elimination of London Inter-Bank Offered Rate may affect the value of certain derivatives and floating rate securities we hold or have issued and the profitability of certain real estate lending activity or businesses; (6) our investment portfolio is subject to several risks that may diminish the value of our invested assets and the investment returns credited to customers, which could reduce our sales, revenues, AUM and net income; (7) our valuation of investments and the determinations of the amount of allowances and impairments taken on our investments may include methodologies, estimations and assumptions that are subject to differing interpretations and, if changed, could materially adversely affect our results of operations or financial condition; (8) any impairments of or valuation allowances against our deferred tax assets could adversely affect our results of operations and financial condition; (9) we may face losses on our insurance and annuity products if our actual experience differs significantly from our pricing and reserving assumptions; (10) the pattern of amortizing our DAC asset and other actuarial balances may change, impacting both the level of our DAC asset and other actuarial balances and the timing of our net income; (11) changes in laws or regulations may reduce our profitability or impact how we do business; (12) our ability to pay stockholder dividends, make share repurchases and meet our obligations may be constrained by the limitations on dividends or other distributions Iowa insurance laws impose on Principal Life; (13) changes in accounting standards may adversely affect our reported results of operations and financial condition; (14) litigation and regulatory investigations may affect our financial strength or reduce our profitability; (15) from time to time, we may become subject to tax audits, tax litigation or similar proceedings, and as a result we may owe additional taxes, interest and penalties in amounts that may be material; (16) applicable laws and our certificate of incorporation and by-laws may discourage takeovers and business combinations that some stockholders might consider in their best interests; (17) competition, including from companies that may have greater financial resources, broader arrays of products, higher ratings and stronger financial performance, may impair our ability to retain existing customers, attract new customers and maintain our profitability; (18) a downgrade in our financial strength or credit ratings may increase policy surrenders and withdrawals, reduce new sales, terminate relationships with distributors, impact existing liabilities and increase our cost of capital, any of which could adversely affect our profitability and financial condition; (19) client terminations or withdrawals or changes in investor preferences may lead to a reduction in revenues for our asset management and accumulation businesses; (20) guarantees within certain of our products that protect policyholders may decrease our net income or increase the volatility of our results of operations or financial position under U.S. GAAP if our hedging or risk management strategies prove ineffective or insufficient; (21) our international businesses face political, legal, operational and other risks that could reduce our profitability in those businesses; (22) we face risks arising from fraudulent activities; (23) we face risks arising from our participation in joint ventures; (24) we may need to fund deficiencies in our Closed Block assets; (25) our reinsurers could default on their obligations or increase their rates, which could adversely impact our net income and financial condition; (26) we face risks arising from future acquisitions of businesses; (27) we face risks in administering the closed Reinsurance Transaction; (28) a pandemic, terrorist attack, military action or other catastrophic event could adversely affect our operations, net income or financial condition; (29) our financial results may be adversely impacted by global climate changes; (30) technological and societal changes may disrupt our business model and impair our ability to retain existing customers, attract new customers and maintain our profitability; (31) damage to our reputation may adversely affect our revenues and profitability; (32) we may not be able to protect our intellectual property and may be subject to infringement claims; (33) if we are unable to attract, develop and retain qualified employees and sales representatives and develop new distribution sources, our results of operations, financial condition and sales of our products may be adversely impacted; (34) interruptions in information technology, infrastructure or other internal or external systems used for our business operations, or a failure to maintain the confidentiality, integrity or availability of data residing on such systems, could disrupt our business, damage our reputation and adversely impact our profitability; (35) loss of key vendor relationships or failure of a vendor to protect information of our customers or employees could adversely affect our business or result in losses and (36) our enterprise risk management framework may not be fully effective in identifying or mitigating all of the risks to which we are exposed.

Overview

We provide financial products and services through the following reportable segments:

- Retirement and Income Solutions provides retirement and related financial products and services primarily to businesses, their employees, and other individuals. This segment includes workplace savings and retirement solutions, banking, trust and custodial services, individual variable annuities, pension risk transfer, investment only, our exited retail fixed annuities business, and all of the Institutional Retirement & Trust ("IRT") integration and acquisition expenses. We offer a comprehensive portfolio of products and services for retirement savings and retirement income:
    - To businesses of all sizes, we offer products and services for defined contribution plans, including 401(k) and 403(b) plans, defined benefit pension plans, nonqualified executive benefit plans, employee stock ownership plan services and pension closeout services. For more basic retirement services, we offer SIMPLE IRAs and payroll deduction plans;
    - To large institutional clients, we also offer investment only products, including investment only guaranteed investment contracts ("GICs");
    - To employees of businesses and other individuals, we offer the ability to accumulate savings for retirement and other purposes through mutual funds, individual variable annuities and bank products, along with retirement income options; and
    - To non-retirement businesses, we offer trust and custody services.
- Principal Asset Management provides global investment solutions to institutional, retirement, retail and high net worth investors in the U.S. and select emerging markets. The segment is organized into Principal Global Investors, which provides public, multi-asset and private market capabilities across all asset classes, including equity, fixed income, real estate and alternatives, to service a breadth of client investment objectives; and Principal International, which provides long-term savings and retirement solutions through pension accumulation, mutual funds, and income annuities, along with retail asset management services in Asia and Latin America.
- Benefits and Protection is organized into Specialty Benefits, which provides group dental, group life insurance, group disability insurance (including short-term disability, long-term disability and paid family and medical leave), supplemental health products (including vision, critical illness, accident and hospital indemnity) and individual disability insurance; and Life Insurance, which provides life insurance, with a focus on the business market customer, including universal life and variable universal life (including indexed universal life), and traditional life insurance (including participating whole life, adjustable life products and term life insurance) and our exited ULSG business. We focus our solutions on small-to-mid sized businesses and their employees with an emphasis on business owners, executives and key employees.
- Corporate, which manages the assets representing capital that has not been allocated to any other segment. Financial results of the Corporate segment primarily reflect our financing activities (including financing costs), income on capital not allocated to other segments, inter-segment eliminations, income tax risks and certain income, expenses and other adjustments not allocated to the segments based on the nature of such items. Results of PSI, our retail broker-dealer and RIA, and our exited group medical and long-term care insurance businesses are reported in this segment.

In the first quarter of 2023 we implemented changes to our organizational structure to better align businesses, distribution teams and product offerings for future growth. We integrated our global asset management and international pension businesses under one segment, Principal Asset Management. Results of our historically reported Principal Global Investors and Principal International segments are reported within this segment. Additionally, we are now reporting results for our Retirement and Income Solutions segment in total and not separated into Fee and Spread components. Finally, we updated the name of our U.S. Insurance Solutions segment to Benefits and Protection and will continue to report the results of Specialty Benefits and Life Insurance within this segment. Our segment results have been modified to reflect these changes, which did not have an impact on our consolidated financial statements.

Critical Accounting Policies and Estimates

Some of our critical accounting policies were impacted when we implemented LDTI accounting guidance in January 2023. See Item 1. "Financial Statements, Notes to Unaudited Condensed Consolidated Financial Statements, Note 1, Nature of Operations and Significant Accounting Policies" under the captions "Recent Accounting Pronouncements" and "Adoption of Targeted Improvements to the Accounting for Long-Duration Insurance Contracts Guidance" for information about that guidance. Below is a discussion of our updated critical accounting policies.

Market Risk Benefits

MRBs are contracts or contract features that provide protection to the policyholder from capital market risk such as equity, interest rate or foreign exchange risk and expose us to other-than-nominal capital market risk. We have certain annuity and other investment contracts that have GMWB and GMDB riders or a guarantee on the minimum account balance under certain qualifying events. These MRBs have been bifurcated from the host contract and are measured at fair value. The change in fair value is recognized in net income, with the exception of the change in fair value related to our own nonperformance risk, which is recognized in OCI. We use various derivative instruments to hedge against changes in fair value of MRBs related to market risk.

MRBs are valued using a combination of historical data and actuarial judgment. See Item 1. “Financial Statements, Notes to Unaudited Condensed Consolidated Financial Statements, Note 9, Market Risk Benefits and Note 16, Fair Value Measurements” for further discussion. We include our assumption for own nonperformance risk in the valuation of these MRBs, which is based on the current market credit spreads for debt-like instruments we have issued and are available in the market. As our credit spreads widen or tighten, the fair value of MRB assets increase or decrease and the fair value of MRB liabilities decrease or increase, leading to an increase or decrease in OCI, respectively. If the current market credit spreads reflecting our own creditworthiness move to zero (tighten), the reduction to OCI would be approximately $197.5 million, net of income taxes, based on March 31, 2023, reported amounts. In addition, the policyholder behavior assumptions used in the valuation of MRBs include risk margins, which decrease the fair value of MRB assets and increase the fair value of MRB liabilities.

Insurance Reserves

Reserves are liabilities representing estimates of the amounts that will come due, at some point in the future, to or on behalf of our policyholders. U.S. GAAP, allowing for some degree of managerial judgment, provides guidance for establishing reserves.

Future policy benefits and claims include reserves for individual traditional and group life insurance, disability, medical and long-term care insurance and individual and group annuities that provide periodic income payments. These reserves are computed using assumptions of mortality, interest, morbidity and lapse. These assumptions are based on our experience, industry results, emerging trends and future expectations.

For long-duration insurance contracts, reserves for individual and group annuities are generally equal to the present value of expected future policy benefit payments, while the reserves for non-participating term life insurance, individual disability income contracts and individual and group long-term care contracts is generally equal to the present value of expected future policy benefits less the present value of expected net premiums. Issue-year cohorts are used for the reserve calculation and assumptions are periodically reviewed and updated. Separate cohorts are used for the calculation of ceded reserves. An interest accretion rate is determined for an identified cohort and remains unchanged after the issue year. Reserves are remeasured as of each reporting date to reflect the current upper-medium grade fixed income instruments yields, with the impact reported in OCI. If the current upper-medium grade yields used to remeasure reserves decrease 100 basis points, the reduction in OCI would be approximately $2.3 billion, net of income taxes, based on March 31, 2023, reported amounts.

Reserves for participating life insurance contracts are based on the net level premium reserve for death and endowment policy benefits. This net level premium reserve is calculated based on dividend fund interest rates and mortality rates guaranteed in calculating the cash surrender values described in the contract.

For short-duration contracts, significant changes in experience or assumptions may require us to provide for expected future losses on a product by establishing premium deficiency reserves. Our reserve levels are reviewed throughout the year using internal analysis including, among other things, experience studies, claim development analysis and annual loss recognition analysis. To the extent experience indicates potential loss recognition, we recognize losses on certain lines of business. The ultimate accuracy of the assumptions on these insurance products cannot be determined until the obligation of the entire block of business on which the assumptions were made is extinguished. Short-term variances of actual results from the assumptions used in the computation of the reserves are reflected in current period net income and can impact quarter-to-quarter net income.

Future policy benefits and claims also include reserves for incurred but unreported disability, medical, dental, vision, critical illness, accident, PFML and life insurance claims. We recognize claims costs in the period the service was provided to our policyholders. However, claims costs incurred in a particular period are not known with certainty until after we receive, process and pay the claims. We determine the amount of this liability using actuarial methods based on historical claim payment patterns as well as emerging cost trends, where applicable, to determine our estimate of claim liabilities. We also look back to assess how our prior periods' estimates developed. To the extent appropriate, changes in such development are recorded as a change to current period claim expense. Historically, the amount of the claim reserve adjustment made in subsequent reporting periods for prior period estimates have been within a reasonable range given our normal claim fluctuations.

Future policy benefits and claims also include benefit reserves that are established for universal life-type contracts that provide benefit features that are expected to produce gains in early years followed by losses in later years. The liabilities are accrued in relation to estimated contract assessments.

See Item 1. "Financial Statements, Notes to Unaudited Condensed Consolidated Financial Statements, Note 8, Future Policy Benefits and Claims" for further discussion.

We periodically review and update actuarial assumptions that are used to project cash flows that are used to compute reserves.

Transactions Affecting Comparability of Results of Operations

Acquisition

China Pension Joint Venture. On December 28, 2022, we finalized the acquisition of a 17.647% interest in CCB Pension Management Co., Ltd. ("CCBP"), China Construction Bank's pension business with the Social Security Fund of China. CCBP is the first and only asset manager to be permitted to run all types of pension investment portfolios within the country. The joint venture investment is reported within the Principal Asset Management segment.

Other

Reinsurance Transaction. During the second quarter of 2022, we closed a coinsurance with funds withheld reinsurance transaction with Talcott Life & Annuity Re, a limited liability company organized under the laws of the Cayman Islands and an affiliate of Talcott Resolution Life, Inc., a subsidiary of Sixth Street, pursuant to which we ceded our in-force U.S. retail fixed annuity and ULSG blocks of business. The economics of the Reinsurance Transaction were effective as of January 1, 2022.

Factors Affecting Comparability of Results of Operations

Fluctuations in Foreign Currency to U.S. Dollar Exchange Rates

Fluctuations in foreign currency to U.S. dollar exchange rates for locations in which we have operations can affect reported financial results. In years when foreign currencies weaken against the U.S. dollar, translating foreign currencies into U.S. dollars results in fewer U.S. dollars to be reported. When foreign currencies strengthen, translating foreign currencies into U.S. dollars results in more U.S. dollars to be reported.

Foreign currency exchange rate fluctuations create variances in our financial statement line items. The most significant impact occurs within our Principal International operations where pre-tax operating earnings were negatively impacted $1.4 million for the three months ended March 31, 2023, as a result of fluctuations in foreign currency to U.S. dollar exchange rates. This impact was calculated by comparing (a) the difference between current year results and prior year results to (b) the difference between current year results and prior year results translated using current year exchange rates for both periods. We use this approach to calculate the impact of exchange rates on all revenue and expense line items. For a discussion of our approaches to managing foreign currency exchange rate risk, see Item 3 "Quantitative and Qualitative Disclosures About Market Risk — Foreign Currency Risk."

Variable Investment Income

Variable investment income includes certain types of investment returns such as prepayment fees and income (loss) from certain elements of our other alternative asset classes, including results of value-add real estate sales activity. Due to its unpredictable nature, variable investment income may or may not be material to our financial results for a given reporting period and may create variances when comparing different reporting periods. For additional information, see "Investment Results."

Recent Accounting Changes

For recent accounting changes, see Item 1. "Financial Statements, Notes to Unaudited Condensed Consolidated Financial Statements, Note 1, Nature of Operations and Significant Accounting Policies" under the captions, "Recent Accounting Pronouncements" and "Adoption of Targeted Improvements to the Accounting for Long-Duration Insurance Contracts Guidance."

Results of Operations

The following table presents summary consolidated financial information for the periods indicated:

	For the three months ended March 31,		
	2023	**2022**	**Increase (decrease)**
		(in millions)	
Revenues:			
Premiums and other considerations	**$ 1,448.6**	$ 887.4	$ 561.2
Fees and other revenues	**995.3**	1,219.2	(223.9)
Net investment income	**986.7**	1,125.5	(138.8)
Net realized capital losses	**(66.0)**	(136.6)	70.6
Net realized capital gains on funds withheld assets	**81.0**	—	81.0
Change in fair value of funds withheld embedded derivative	**(626.6)**	—	(626.6)
Total revenues	**2,819.0**	3,095.5	(276.5)
Expenses:			
Benefits, claims and settlement expenses	**1,773.9**	1,490.7	283.2
Liability for future policy benefits remeasurement (gain) loss	**(5.6)**	13.4	(19.0)
Market risk benefit remeasurement (gain) loss	**(2.9)**	8.9	(11.8)
Dividends to policyholders	**23.2**	23.1	0.1
Operating expenses	**1,242.9**	1,181.0	61.9
Total expenses	**3,031.5**	2,717.1	314.4
Income (loss) before income taxes	**(212.5)**	378.4	(590.9)
Income taxes (benefits)	**(78.0)**	35.2	(113.2)
Net income (loss)	**(134.5)**	343.2	(477.7)
Net income attributable to noncontrolling interest	**5.6**	4.5	1.1
Net income (loss) attributable to Principal Financial Group, Inc.	**$ (140.1)**	$ 338.7	$ (478.8)

Three Months Ended March 31, 2023 Compared to Three Months Ended March 31, 2022

Net Income Attributable to Principal Financial Group, Inc.

Net income (loss) attributable to Principal Financial Group, Inc. decreased primarily due to the change in the fair value of the funds withheld embedded derivative.

Total Revenues

Premiums increased $459.4 million for the Retirement and Income Solutions segment primarily due to higher sales of single premium group annuities with life contingencies. The single premium group annuity product, which is typically used to fund defined benefit plan terminations, can generate large premiums from very few customers and therefore premiums tend to vary from period to period.

Fees and other revenues decreased $149.9 million for the Benefits and Protection segment primarily due to the impact of our exited ULSG business in our Life Insurance business. Fees and other revenues decreased $44.7 million for the Principal Asset Management segment primarily due to lower management fee revenue as a result of decreased average AUM in our Principal Global Investors operations.

For net investment income and net realized capital gains (losses) variance information, see “Investments — Investment Results” under the captions “Net Investment Income” and “Net Realized Capital Gains (Losses),” respectively.

Net realized capital gains on funds withheld assets increased as a result of the sale of funds withheld assets associated with the Reinsurance Transaction, which closed in the second quarter of 2022.

The change in the fair value of the funds withheld embedded derivative was driven by a decrease in interest rates.

Total Expenses

Benefits, claims and settlement expenses increased $446.8 million for the Retirement and Income Solutions segment primarily due to an increase in reserves, stemming from higher sales of single premium group annuities with life contingencies. Benefits, claims and settlement expenses decreased $141.9 million for the Benefits and Protection segment primarily due to the impact of our exited ULSG business in our Life Insurance business.

Operating expenses increased for the Corporate segment primarily due to a $35.0 million increase in amounts credited to employee accounts in a nonqualified defined contribution pension plan and a $12.0 million increase in pension and OPEB expenses.

Income Taxes

The effective income tax rate of 37% for the three months ended March 31, 2023, changed from 9% for the three months ended March 31, 2022, primarily due to a decrease in pre-tax income with no proportionate change in beneficial permanent tax differences. See Item 1. “Financial Statements, Notes to Unaudited Condensed Consolidated Financial Statements, Note 12, Income Taxes” for a reconciliation of the corporate income tax rate to the effective income tax rate.

Results of Operations by Segment

For results of operations by segment see Item 1. “Financial Statements, Notes to Unaudited Condensed Consolidated Financial Statements, Note 17, Segment Information.” Beginning in the second quarter of 2022, segment pre-tax operating earnings excludes amounts associated with our exited U.S. retail fixed annuity and ULSG businesses, including the change in fair value of the funds withheld embedded derivative, net realized capital gains (losses) on funds withheld assets, strategic review costs and impacts, amortization of reinsurance gain (loss) and other impacts of reinsured business.

Retirement and Income Solutions Segment

Retirement and Income Solutions Segment Summary Financial Data

Net revenue and average monthly account values are key metrics used to understand Retirement and Income Solutions earnings growth. Net revenue, which is used only at the segment level, is defined as operating revenues less benefits, claims and settlement expenses; liability for future policy benefits remeasurement (gain) loss; market risk benefit remeasurement (gain) loss and dividends to policyholders. Net revenue is impacted by: (1) changes in the equity markets and interest rates and (2) the difference between investment income earned on the underlying general account assets and the interest rate credited to the contracts. Average monthly account values include the net balances that customers have accumulated within their account, along with future policy benefits for retirement payout products. Average monthly account values are primarily impacted by net customer cash flows and credit market performance.

The following table presents the Retirement and Income Solutions net revenue and average monthly account values for the periods indicated:

	For the three months ended March 31,		
	2023	2022	Increase (decrease)
Net revenue (in millions)	**$ 650.1**	$ 732.5	$ (82.4)
Average monthly account values (in billions)	**$ 463.5**	$ 518.2	$ (54.7)

The following table presents certain summary financial data relating to the Retirement and Income Solutions segment for the periods indicated:

	For the three months ended March 31,		
	2023	2022	Increase (decrease)
		(in millions)	
Operating revenues:			
Premiums and other considerations	**$ 582.7**	$ 123.3	$ 459.4
Fees and other revenues	**408.5**	443.8	(35.3)
Net investment income	**624.9**	695.9	(71.0)
Total operating revenues	**1,616.1**	1,263.0	353.1
Expenses:			
Benefits, claims and settlement expenses, including dividends to policyholders	**977.5**	539.0	438.5
Liability for future policy benefits remeasurement gain	**(13.3)**	(2.8)	(10.5)
Market risk benefit remeasurement (gain) loss	**1.8**	(5.7)	7.5
Operating expenses	**400.3**	438.3	(38.0)
Total expenses	**1,366.3**	968.8	397.5
Pre-tax operating earnings	**$ 249.8**	$ 294.2	$ (44.4)

Three Months Ended March 31, 2023 Compared to Three Months Ended March 31, 2022

Pre-Tax Operating Earnings

Pre-tax operating earnings decreased due to a decrease in our net revenue partially offset by a decrease in operating expenses as described below.

Net Revenue

Net revenue decreased primarily due to a $58.4 million decrease in variable investment income and a $35.3 million decrease in fee revenue primarily resulting from a decline in average monthly account values stemming from unfavorable financial markets in 2022.

Operating Expenses

Operating expenses decreased primarily due to a $25.0 million decrease associated with the integration of the IRT business of Wells Fargo Bank, N.A. and a $14.4 million impact from our exited retail fixed annuity business.

Principal Asset Management Segment

Principal Global Investors AUM

AUM is the base by which we generate management fee revenues. Market performance and net cash flow are the two main drivers of AUM growth. Market performance reflects equity, fixed income, real estate and other alternative investment performance. Net cash flow reflects client deposits and withdrawals. The fee levels on these client deposits and withdrawals are increasingly becoming the more important factor to revenue growth and will vary widely based on business and/or product mix.

The following table presents the AUM rollforward for assets managed by Principal Global Investors for the periods indicated. The amounts include assets managed by Principal Global Investors on behalf of Principal International, which are also reported in the Principal International AUM table below.

	For the three months ended March 31,	
	2023	**2022**
	(in billions)	
AUM, beginning of period	**$ 464.7**	$ 546.5
Net cash flow	**0.4**	3.2
Market performance	**13.4**	(29.1)
Other	**0.2**	(1.8)
Operations acquired (1)	**—**	18.6
AUM, end of period	**$ 478.7**	$ 537.4

(1) Effective in the first quarter of 2022, includes the integration of Institutional Asset Advisory, which is associated with our IRT business.

Principal International AUM

AUM is generally a key indicator of earnings growth for Principal International, as AUM is the base by which we can generate local currency profits. The Cuprum business in Chile differs in that the majority of fees are collected with each deposit by the mandatory retirement customers, based on a capped salary level, as opposed to asset levels. Net customer cash flow and market performance are the two main drivers of local currency AUM growth. Net customer cash flow reflects our ability to attract and retain client deposits. Market performance reflects the investment returns on our underlying AUM. Our financial results are also impacted by fluctuations of the foreign currency to U.S. dollar exchange rates for the locations in which we have business. AUM of our foreign subsidiaries is translated into U.S. dollar equivalents at the end of the reporting period using the spot foreign exchange rates. Revenue and expenses for our foreign subsidiaries are translated into U.S. dollar equivalents at the average foreign exchange rates for the reporting period.

The following table presents the Principal International AUM rollforward for the periods indicated. The amounts include assets managed by Principal Global Investors on behalf of Principal International, which are also reported in the Principal Global Investors AUM table above, as well as assets managed by other managers.

	For the three months ended March 31,	
	2023	**2022**
	(in billions)	
AUM, beginning of period	**$ 156.5**	$ 152.1
Net cash flow	**0.8**	(0.5)
Market performance	**2.5**	(1.4)
Effect of exchange rates	**7.4**	13.6
Other	**(0.1)**	(0.3)
AUM, end of period	**$ 167.1**	$ 163.5

The following table presents certain summary financial data relating to the Principal Asset Management segment for the periods indicated:

	For the three months ended March 31,		
	2023	2022	Increase (decrease)
		(in millions)	
Operating revenues:			
Premiums and other considerations	**$ 6.4**	$ 10.3	$ (3.9)
Fees and other revenues	**495.0**	539.7	(44.7)
Net investment income	**191.1**	205.9	(14.8)
Total operating revenues	**692.5**	755.9	(63.4)
Expenses:			
Benefits, claims and settlement expenses	**115.9**	152.7	(36.8)
Liability for future policy benefits remeasurement (gain) loss	**0.7**	(1.8)	2.5
Operating expenses	**386.3**	392.1	(5.8)
Total expenses	**502.9**	543.0	(40.1)
Pre-tax operating earnings attributable to noncontrolling interest	**1.8**	1.9	(0.1)
Pre-tax operating earnings	**$ 187.8**	$ 211.0	$ (23.2)

Three Months Ended March 31, 2023 Compared to Three Months Ended March 31, 2022

Pre-Tax Operating Earnings

Pre-tax operating earnings decreased $34.3 million in our Principal Global Investors operations primarily due to lower management fee revenue as a result of decreased average AUM. Pre-tax operating earnings increased in our Principal International operations primarily due to $18.3 million favorable relative market performance on our required regulatory investments. This increase was partially offset by $8.5 million lower variable investment income in Latin America.

Benefits and Protection Segment

Benefits and Protection Segment Summary Financial Data

Premium and fees are a key metric for growth in the Benefits and Protection segment. We receive premiums on our specialty benefits insurance products as well as our traditional life insurance products. Fees are generated from our universal life, variable universal life and indexed universal life insurance products. We use several reinsurance programs to help manage the mortality and morbidity risk. Premium and fees are reported net of reinsurance premiums.

The following table presents the Benefits and Protection segment premium and fees for the periods indicated:

	For the three months ended March 31,		
	2023	2022	Increase (decrease)
		(in millions)	
Premium and fees:			
Specialty Benefits	**$ 742.1**	$ 674.3	$ 67.8
Life Insurance	**224.8**	332.5	(107.7)

The following table presents certain summary financial data relating to the Benefits and Protection segment for the periods indicated:

	For the three months ended March 31,		
	2023	2022	Increase (decrease)
		(in millions)	
Operating revenues:			
Premiums and other considerations	**$ 864.2**	$ 754.3	$ 109.9
Fees and other revenues	**102.5**	252.4	(149.9)
Net investment income	**136.7**	236.6	(99.9)
Total operating revenues	**1,103.4**	1,243.3	(139.9)
Expenses:			
Benefits, claims and settlement expenses	**638.9**	792.5	(153.6)
Dividends to policyholders	**23.1**	23.1	—
Liability for future policy benefits remeasurement loss	**7.6**	18.0	(10.4)
Operating expenses	**334.5**	316.9	17.6
Total expenses	**1,004.1**	1,150.5	(146.4)
Pre-tax operating earnings	**$ 99.3**	$ 92.8	$ 6.5

Three Months Ended March 31, 2023 Compared to Three Months Ended March 31, 2022

Pre-Tax Operating Earnings

Pre-tax operating earnings increased in our Specialty Benefits business primarily due to $9.4 million growth in the business. Pre-tax operating earnings in our Life Insurance business decreased $16.9 million due to lower variable investment income and $5.9 million due to lower surrender fees, partially offset by $19.0 million in lower Coronavirus disease 2019 (“COVID-19”) claims in 2023 compared to 2022.

Operating Revenues

Premium and fees in our Specialty Benefits business increased $67.8 primarily due to growth in business. Premium and fees decreased $107.7 million in our Life Insurance business primarily due to the impact of our exited ULSG business.

Net investment income in our Life Insurance business decreased $87.4 million primarily due to the impact of our exited ULSG business and $16.9 million due to lower variable investment income.

Total Expenses

Benefits, claims and settlement expenses in our Specialty Benefits business increased $42.1 million from growth in the business, partially offset by $25.9 million in lower COVID-19 claims in 2023 compared to 2022. Benefits, claims and settlement expenses in our Life Insurance business decreased $163.9 million primarily due to the impact of our exited ULSG business and $19.0 million in lower COVID-19 claims in 2023 compared to 2022.

Liability for future policy benefits remeasurement loss increased $6.7 million in our Specialty Benefits business due to model refinements. Liability for future policy benefits remeasurement loss decreased by $17.2 million in our Life Insurance business primarily due to the impact of our exited ULSG business.

Operating expenses in our Specialty Benefits business increased $20.6 million due to growth in the business.

Corporate Segment

Corporate Segment Summary Financial Data

The following table presents certain summary financial data relating to the Corporate segment for the periods indicated:

	For the three months ended March 31,		
	2023	**2022**	**Increase (decrease)**
		(in millions)	
Operating revenues:			
Total operating revenues	**$ 27.6**	$ 6.3	$ 21.3
Expenses:			
Total expenses	**123.6**	121.4	2.2
Pre-tax operating earnings attributable to noncontrolling interest	**0.1**	13.9	(13.8)
Pre-tax operating losses	**$ (96.1)**	$ (129.0)	$ 32.9

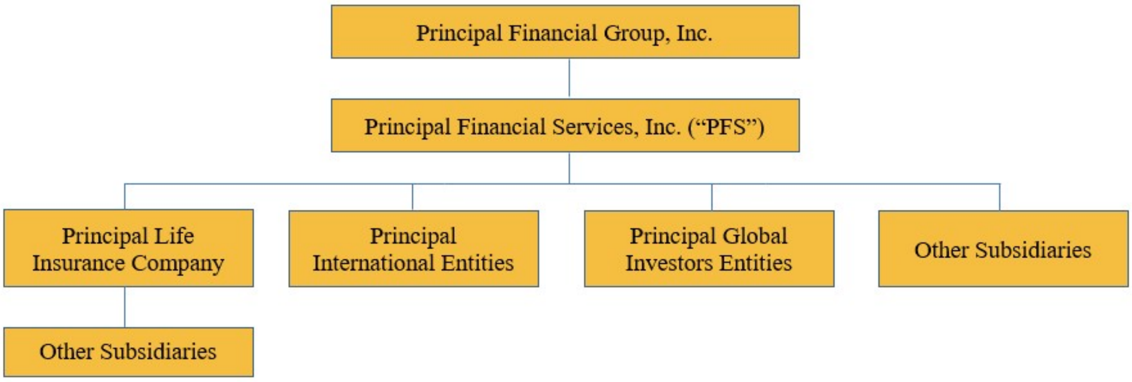
Three Months Ended March 31, 2023 Compared to Three Months Ended March 31, 2022

Pre-Tax Operating Losses

Pre-tax operating losses decreased primarily due to higher net investment income largely resulting from mark-to-market gains on investments.

Liquidity and Capital Resources

Liquidity and capital resources represent the overall strength of a company and its ability to generate strong cash flows, borrow funds at a competitive rate and raise new capital to meet operating and growth needs. We are in a strong capital and liquidity position as we face the uncertain, adverse economic disruptions to our business brought on by the banking sector events in 2023. We are not materially impacted by the bank failures of Silicon Valley Bank and Signature Bank of New York. We are closely tracking additional banks that may be at risk and keeping an eye on exposure across the company. There is also no direct, material impact to Principal Bank, whose deposits are well-diversified across sources and customers and primarily support our retirement plan participants. We are monitoring our liquidity closely and feel confident in our ability to meet all long-term obligations to customers, policyholders and debt holders. Our sources of strength include our laddered long-term debt maturities with the next maturity occurring May 2023, access to revolving credit facility and contingent funding arrangements, a strong risk-based capital position and our available cash and liquid assets. The combination of these financial levers will enable us to manage through this period of banking sector uncertainty. Our legal entity structure has an impact on our ability to meet cash flow needs as an organization. Following is a simplified organizational structure.



Liquidity

Our liquidity requirements have been and will continue to be met by funds from consolidated operations as well as the issuance of commercial paper, common stock, debt or other capital securities and borrowings from credit facilities. We believe the cash flows from these sources are sufficient to satisfy the current liquidity requirements of our operations, including reasonably foreseeable contingencies.

We maintain a level of cash and securities which, combined with expected cash inflows from investments and operations, we believe to be adequate to meet anticipated short-term and long-term payment obligations. We will continue our prudent capital management practice of regularly exploring options available to us to maximize capital flexibility, including accessing the capital markets and careful attention to and management of expenses.

We perform rigorous liquidity stress testing to ensure our asset portfolio includes sufficient high quality liquid assets that could be utilized to bolster our liquidity position under increasingly stressed market conditions. These assets could be utilized as collateral for secured borrowing transactions with various third parties or by selling the securities in the open market if needed.

We also manage liquidity risk by limiting the sales of liabilities with features such as puts or other options that can be exercised at inopportune times. For example, as of March 31, 2023, approximately $14.9 billion, or 99%, of our institutional guaranteed investment contracts and funding agreements cannot be redeemed by contractholders prior to maturity. Our individual annuity liabilities also contain surrender charges and other provisions limiting early surrenders.

The following table summarizes the withdrawal characteristics of our domestic general account investment contracts as of March 31, 2023.

	Contractholder funds, net of reinsurance	Percentage
	(in millions)	
Not subject to discretionary withdrawal	$ 15,990.1	58.3 %
Subject to discretionary withdrawal with adjustments:		
Specified surrender charges	7,501.3	27.4
Market value adjustments	3,913.3	14.3
Subject to discretionary withdrawal without adjustments	0.6	—
Total domestic investment contracts	$ 27,405.3	100.0 %

Universal life insurance and certain traditional life insurance policies are also subject to discretionary withdrawals by policyholders. However, life insurance policies tend to be less susceptible to withdrawal than our investment contracts because policyholders may be subject to a new underwriting process in order to obtain a new life insurance policy. In addition, our life insurance liabilities include surrender charges to discourage early surrenders.

We had the following short-term credit facilities with various financial institutions as of March 31, 2023:

Obligor/Applicant	Financing structure	Maturity	Capacity	Amount outstanding (3)
			(in millions)	
Principal Life (1)	Credit facility	October 2027	$ 800.0	$ —
Principal International Chile (2)	Unsecured lines of credit		145.2	24.2
Total			$ 945.2	$ 24.2

(1) The credit facility is supported by sixteen banks.
(2) The unsecured lines of credit can be used for repurchase agreements or other borrowings. Each line has a maturity ofless than one year.
(3) The amount outstanding is reported in short-term debt on the consolidated statements of financial position.

The revolving credit facilities are committed and available for general corporate purposes. These credit facilities also provide 100% back-stop support for our commercial paper program, of which we had no outstanding balances as of March 31, 2023 and December 31, 2022. Most of the banks supporting the credit facilities have other relationships with us. Due to the financial strength and the strong relationships we have with these providers, we are comfortable we have very low risk the financial institutions would be unable or unwilling to fund these facilities.

The Holding Companies: PFG and PFS. The principal sources of funds available to our parent holding company, PFG, are dividends from subsidiaries as well as its ability to borrow funds at competitive rates and raise capital to meet operating and growth needs. These funds are used by PFG to meet its obligations, which include the payment of dividends on common stock, debt service and the repurchase of stock. The declaration and payment of common stock dividends is subject to the discretion of our Board and will depend on our overall financial condition, results of operations, capital levels, cash requirements, future prospects, receipt of dividends or other distributions from Principal Life (as described below), risk management considerations and other factors deemed relevant by the Board. No significant restrictions limit the payment of dividends by PFG, except those generally applicable to corporations incorporated in Delaware.

Dividends or other distributions from Principal Life, our primary subsidiary, are limited by Iowa law. Under Iowa law, Principal Life may pay dividends or make other distributions only from the earned surplus arising from its business and must receive the prior approval of the Commissioner of Insurance of the State of Iowa (the “Commissioner”) to pay stockholder dividends or make any other distribution if such distribution would exceed certain statutory limitations. Iowa law gives the Commissioner discretion to disapprove requests for distributions in excess of these limitations. Extraordinary dividends include those made, together with dividends and other distributions, within the preceding twelve months that exceed the greater of (i) 10% of statutory policyholder surplus as of the previous year-end or (ii) the statutory net gain from operations from the previous calendar year, not to exceed earned surplus. Based on statutory results for the year ended December 31, 2022, the ordinary stockholder dividend limitation for Principal Life is approximately $430.1 million in 2023. However, because the dividend test is based on dividends previously paid over rolling 12-month periods, if paid before a specified date during 2023, some or all of such dividends may be extraordinary and require regulatory approval.

Total stockholder dividends paid by Principal Life to its parent for the three months ended March 31, 2023, were $150.0 million, all of which was extraordinary and approved by the Commissioner. As of March 31, 2023, we had $2,202.0 million of cash and liquid assets held in our holding companies and other subsidiaries, which is available for corporate purposes. Corporate balances held in foreign holding companies meet the indefinite reinvestment exception.

Operations. Our primary consolidated cash flow sources are premiums from insurance products, pension and annuity deposits, asset management fee revenues, administrative services fee revenues, income from investments and proceeds from the sales or maturity of investments. Cash outflows consist primarily of payment of benefits to policyholders and beneficiaries, income and other taxes, current operating expenses, payment of dividends to policyholders, payments in connection with investments acquired, payments made to acquire subsidiaries, payments relating to policy and contract surrenders, withdrawals, policy loans, interest payments and repayment of short-term debt and long-term debt. Our investment strategies are generally intended to provide adequate funds to pay benefits without forced sales of investments. For a discussion of our investment objectives and strategies, see “Investments.”

Cash Flows. Cash flow activity, as reported in our consolidated statements of cash flows, provides relevant information regarding our sources and uses of cash. The following discussion of our operating, investing and financing portions of the cash flows excludes cash flows attributable to the separate accounts.

Net cash provided by operating activities was $695.3 million and $31.5 million for the three months ended March 31, 2023 and 2022, respectively. Our insurance business typically generates positive cash flows from operating activities, as premiums collected from our insurance products and income received from our investments exceed acquisition costs, benefits paid, redemptions and operating expenses. These positive cash flows are then invested to support the obligations of our insurance and investment products and required capital supporting these products. Our cash flows from operating activities are affected by the timing of premiums, fees and investment income received and benefits and expenses paid. The increase in cash provided by operating activities was primarily due to fluctuations in receivables and payables associated with the timing of settlements in 2023 as compared to 2022.

Net cash used in investing activities was $1,104.1 million for the three months ended March 31, 2023, compared to net cash provided by financing activities of $126.8 million for the three months ended March 31, 2022. The increase in cash used in investing activities was due to net purchases of available-for sale securities in 2023 compared to net sales and maturities of available-for sale securities in 2022, which was partially offset by net sales of mortgage loans in 2023 as compared to net acquisitions and originations in 2022. The portfolio changes are due in part to the Reinsurance Transaction and the associated funds withheld portfolio activity.

Net cash provided by financing activities was $201.7 million and $250.9 million for the three months ended March 31, 2023 and 2022, respectively. The decrease in cash provided by financing activities was due to mostly offsetting factors, including a decrease in banking operation deposits in 2023 as compared to an increase in 2022. The decrease was largely offset by increased long-term debt issuances in 2023 as compared to 2022 and decreased share repurchases in 2023 as compared to 2022 due to the accelerated share repurchase program in the prior year.

Guarantors and Issuers of Guaranteed Securities. PFG has issued certain notes pursuant to transactions registered under the Securities Act of 1933. Such notes include all currently outstanding senior notes and junior subordinated notes, which are subordinated to all our senior debt (collectively, the "registered notes"). For additional information on the senior notes and junior subordinated notes, see Item 8. "Financial Statements and Supplementary Data, Notes to Consolidated Financial Statements, Note 10, Debt" in our Annual Report on Form 10-K for the year ended December 31, 2022. For additional long-term debt information, see Item 1. "Financial Statements, Notes to Unaudited Condensed Consolidated Financial Statements, Note 11, Long-Term Debt and Note 21, Subsequent Event."

PFS, a wholly owned subsidiary of PFG, has guaranteed each of the registered notes on a full and unconditional basis. The full and unconditional guarantees require PFS to satisfy the obligations of the guaranteed security immediately, if and when PFG has failed to make a scheduled payment thereunder. If PFS does not make such payment, any holder of the guaranteed security may immediately bring suit directly against PFS for payment of amounts due and payable. No other subsidiary of PFG has guaranteed any of the registered notes.

Summary financial information is presented below on a combined basis for PFG and PFS (the "obligor group") and transactions between the obligor group have been eliminated. The summary financial information excludes subsidiaries that are not issuers or guarantors. Any investments by the obligor group in other subsidiaries have been excluded.

	March 31, 2023	December 31, 2022
	(in millions)	
Summary Statements of Financial Position Information:		
Total investments	**$ 485.3**	$ 320.7
Cash and cash equivalents	**1,120.3**	952.0
Goodwill	**618.5**	618.5
Other intangibles	**440.4**	447.4
Other assets	**352.5**	385.4
Due from non-obligor subsidiaries	**24.4**	47.7
Total assets	**3,062.9**	2,789.5
Long-term debt	**4,621.4**	3,929.2
Other liabilities	**396.8**	584.6
Due to non-obligor subsidiaries	**651.6**	793.9
Total liabilities	**5,714.8**	5,371.1

	For the three months ended March 31, 2023	**For the year ended December 31, 2022**
	(in millions)	
Summary Statements of Operations Information:		
Total revenues	**$ (12.2)**	$ (7.5)
Total expenses	**148.2**	524.2
Net loss	**(135.9)**	(462.1)

Shelf Registration. On February 27, 2023, our shelf registration statement was filed with the SEC and became effective. The shelf registration replaced the shelf registration that had been in effect since April 2020. Under our current shelf registration, we have the ability to issue, in unlimited amounts, unsecured senior debt securities or subordinated debt securities, junior subordinated debt, preferred stock, common stock, warrants, depositary shares, purchase contracts and purchase units of PFG. Our wholly owned subsidiary, PFS, may guarantee, fully and unconditionally or otherwise, our obligations with respect to any non-convertible securities, other than common stock, described in the shelf registration. For information on senior notes issued from our shelf registration, see Item 1. "Financial Statements, Notes to Unaudited Condensed Consolidated Financial Statements, Note 11, Long-Term Debt."

Short-Term Debt. The components of short-term debt were as follows:

	March 31, 2023	December 31, 2022
	(in millions)	
Other recourse short-term debt	**$ 24.2**	$ 80.7
Total short-term debt	**$ 24.2**	$ 80.7

The short-term credit facilities are used for general corporate purposes and borrowings outstanding can fluctuate as part of working capital management.

Long-Term Debt. For long-term debt information, see Item 1. "Financial Statements, Notes to Unaudited Condensed Consolidated Financial Statements, Note 11, Long-Term Debt and Note 21, Subsequent Event."

Contingent Funding Agreements for Senior Debt Issuance. In March 2018, we entered into two contingent funding agreements that give us the right at any time over a ten-year or thirty-year period to issue up to $400.0 million or $350.0 million, respectively, of senior notes.

Stockholders' Equity. The following table summarizes our return of capital to common stockholders.

	For the three months ended March 31, 2023	For the year ended December 31, 2022
	(in millions)	
Dividends to stockholders	**$ 155.5**	$ 642.3
Repurchase of common stock (1)	**188.5**	1,661.1
Total cash returned to common stockholders	**$ 344.0**	$ 2,303.4

(1) Includes common stock utilized to execute certain stock incentive awards and shares purchased as part of publicly announced programs.

In March 2022, we entered into an accelerated share repurchase program with a third party financial institution to repurchase $700.0 million of common stock. This program closed in June 2022. In August 2022, we entered into an accelerated share repurchase program with a third party financial institution to repurchase $400.0 million of common stock. This program closed in September 2022.

For additional stockholders' equity information, see Item 1. "Financial Statements, Notes to Unaudited Condensed Consolidated Financial Statements, Note 15, Stockholders' Equity."

Capitalization

The following table summarizes our capital structure:

	March 31, 2023	December 31, 2022
	($ in millions)	
Debt:		
Short-term debt	**$ 24.2**	$ 80.7
Long-term debt	**4,688.6**	3,997.0
Total debt	**4,712.8**	4,077.7
Total stockholders' equity attributable to PFG	**10,217.9**	9,976.7
Total capitalization	**$ 14,930.7**	$ 14,054.4
Debt to equity	**46 %**	41 %
Debt to capitalization	**32 %**	29 %

Contractual Obligations and Contractual Commitments

As of March 31, 2023, we had no unique material cash requirements from known contractual and other obligations.

Off-Balance Sheet Arrangements

Variable Interest Entities. We have relationships with various types of special purpose entities and other entities where we have a variable interest as described in Item 1. "Financial Statements, Notes to Unaudited Condensed Consolidated Financial Statements, Note 2, Variable Interest Entities." We have made commitments to fund certain limited partnerships, some of which are classified as unconsolidated variable interest entities.

Guarantees and Indemnifications. As of March 31, 2023, no significant changes to guarantees and indemnifications have occurred since December 31, 2022. For guarantee and indemnification information, see Item 1. "Financial Statements, Notes to Unaudited Condensed Consolidated Financial Statements, Note 14, Contingencies, Guarantees and Indemnifications" under the caption, "Guarantees and Indemnifications."

Financial Strength and Credit Ratings

Our ratings are influenced by the relative ratings of our peers/competitors as well as many other factors including our operating and financial performance, capital levels, asset quality, liquidity, asset/liability management, overall portfolio mix, financial leverage (i.e., debt), risk exposures, operating leverage and other factors.

We have had no significant changes or actions in ratings and rating outlooks that have occurred from January 1, 2023, through the date of this filing.

The following table summarizes our significant financial strength and debt ratings from the major independent rating organizations. A rating is not a recommendation to buy, sell or hold securities. Such a rating may be subject to revision or withdrawal at any time by the assigning rating agency. Each rating should be evaluated independently of any other rating.

	A.M. Best	Fitch	Moody's	S&P
Last review date	March 2023	June 2022	January 2022	June 2022
Current outlook	Stable	Stable	Stable	Stable
Principal Financial Group				
Senior Unsecured Debt	a	A-	Baa1	A-
Junior Subordinated Debt	a-		Baa2	BBB
Long-Term Issuer Default Rating		A		
Principal Life Insurance Company				
Insurer Financial Strength	A+	AA-	A1	A+
Issuer Credit Rating	aa			
Commercial Paper	AMB-1+		P-1	A-1+
Principal National Life Insurance Company				
Insurer Financial Strength	A+	AA-	A1	A+

Fair Value Measurement

Fair value is defined as the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date (an exit price). The fair value hierarchy prioritizes the inputs to valuation techniques used to measure fair value into three levels. The fair value hierarchy gives the highest priority (Level 1) to unadjusted quoted prices in active markets for identical assets or liabilities and gives the lowest priority (Level 3) to unobservable inputs. The level in the fair value hierarchy within which the fair value measurement in its entirety falls is determined based on the lowest level input that is significant to the fair value measurement in its entirety considering factors specific to the asset or liability. See Item 1. "Financial Statements, Notes to Unaudited Condensed Consolidated Financial Statements, Note 16, Fair Value Measurements" for further details, including a reconciliation of changes in Level 3 fair value measurements.

As of March 31, 2023, 44% of our net assets (liabilities) were Level 1, 53% were Level 2 and 3% were Level 3. Excluding separate account assets as of March 31, 2023, 4% of our net assets (liabilities) were Level 1, 88% were Level 2 and 8% were Level 3.

As of December 31, 2022, 43% of our net assets (liabilities) were Level 1, 54% were Level 2 and 3% were Level 3. Excluding separate account assets as of December 31, 2022, 4% of our net assets (liabilities) were Level 1, 88% were Level 2 and 8% were Level 3.

Changes in Level 3 Fair Value Measurements

Net assets (liabilities) measured at fair value on a recurring basis using significant unobservable inputs (Level 3) as of March 31, 2023, were $6,698.0 million as compared to $6,842.2 million as of December 31, 2022. The decrease was primarily related to a decrease in the embedded derivative related to the funds withheld agreement, partially offset by purchases in collateralized debt obligations and other debt obligations and transfers to level 3 in other debt obligations.

Investments

We had total consolidated assets as of March 31, 2023, of $299,408.2 million, of which $98,031.2 million were invested assets. A portion of our invested assets represent funds withheld backing reserves as part of a coinsurance with funds withheld reinsurance agreement. The funds withheld assets and associated net investment income and net realized capital gains (losses) are not included in the discussions below as the investment risk is passed to the reinsurer. See Item 1. "Financial Statements, Notes to Unaudited Condensed Consolidated Financial Statements, Note 10, Reinsurance" for more information on the funds withheld assets. The rest of our total consolidated assets are comprised primarily of separate account assets for which we do not bear investment risk; therefore, the discussion and financial information below does not include such assets.

Overall Composition of Invested Assets

Invested assets as of March 31, 2023, were predominantly high quality and broadly diversified across asset class, individual credit, industry and geographic location. Asset allocation is determined based on cash flow and the risk/return requirements of our products. As shown in the following table, the major categories of invested assets are fixed maturities and commercial mortgage loans.

	March 31, 2023		
	Investments excluding funds withheld	Funds withheld	Total
		(in millions)	
Fixed maturities	**$ 49,849.9**	**$ 16,334.9**	**$ 66,184.8**
Equity securities	**1,733.0**	**0.3**	**1,733.3**
Mortgage loans	**17,868.4**	**2,735.1**	**20,603.5**
Real estate	**2,300.1**	**—**	**2,300.1**
Policy loans	**788.0**	**—**	**788.0**
Other investments	**6,218.5**	**203.0**	**6,421.5**
Total invested assets	**78,757.9**	**19,273.3**	**98,031.2**
Cash and cash equivalents	**3,118.1**	**1,522.8**	**4,640.9**
Total invested assets and cash	**$ 81,876.0**	**$ 20,796.1**	**$ 102,672.1**

	December 31, 2022		
	Investments excluding funds withheld	Funds withheld	Total
		(in millions)	
Fixed maturities	$ 47,856.3	$ 15,794.3	$ 63,650.6
Equity securities	1,697.6	11.0	1,708.6
Mortgage loans	17,819.0	2,810.8	20,629.8
Real estate	2,239.7	—	2,239.7
Policy loans	784.7	—	784.7
Other investments	5,942.2	179.8	6,122.0
Total invested assets	76,339.5	18,795.9	95,135.4
Cash and cash equivalents	3,085.1	1,762.9	4,848.0
Total invested assets and cash	$ 79,424.6	$ 20,558.8	$ 99,983.4

Investment Results

Net Investment Income

The following table presents the yield and investment income, excluding net realized capital gains and losses, for our invested assets for the periods indicated. We calculate annualized yields using a simple average of asset classes at the beginning and end of the reporting period. The yields for available-for-sale fixed maturities are calculated using amortized cost. All other yields are calculated using carrying amounts.

	For the three months ended March 31,					
	2023		2022		Increase (decrease)	
	Yield	Amount	Yield	Amount	Yield	Amount
	($ in millions)					
Fixed maturities	**4.7 %**	**$ 628.0**	3.6 %	$ 655.1	1.1 %	$ (27.1)
Equity securities (1)	**4.5**	**19.3**	(0.7)	(3.9)	5.2	23.2
Mortgage loans — commercial	**3.9**	**137.1**	3.7	153.3	0.2	(16.2)
Mortgage loans — residential	**5.3**	**50.8**	5.2	46.2	0.1	4.6
Real estate	**6.0**	**34.2**	12.2	64.6	(6.2)	(30.4)
Policy loans	**4.9**	**9.7**	5.0	9.5	(0.1)	0.2
Cash and cash equivalents	**5.4**	**41.7**	0.3	1.6	5.1	40.1
Other investments	**7.9**	**120.2**	16.1	231.3	(8.2)	(111.1)
Total	**4.9**	**1,041.0**	4.3	1,157.7	0.6	(116.7)
Investment expenses	**(0.3)**	**(54.3)**	(0.1)	(32.2)	(0.2)	(22.1)
Net investment income	**4.6 %**	**$ 986.7**	4.2 %	$ 1,125.5	0.4 %	$ (138.8)

(1) Negative in 2022 due to negative market performance on non-OPEB mutual funds and required regulatory investments.

Three Months Ended March 31, 2023 Compared to Three Months Ended March 31, 2022

Net investment income decreased primarily due to impacts of the second quarter 2022 Reinsurance Transaction and lower inflation-based investment returns on Latin America average invested assets. These decreases were partially offset by higher fixed maturity yields in our U.S. operations and favorable relative market performance on required regulatory investments.

Net Realized Capital Gains (Losses)

The following table presents the contributors to net realized capital gains (losses) for the periods indicated.

	For the three months ended March 31,		
	2023	2022	Increase (decrease)
	(in millions)		
Fixed maturities, available-for-sale – credit losses, including credit sales (1)	**$ (11.5)**	$ (6.1)	$ (5.4)
Commercial mortgage loans – credit losses	**(2.7)**	(20.2)	17.5
Other – credit gains	**—**	0.6	(0.6)
Fixed maturities, available-for-sale and trading – noncredit	**(6.9)**	38.8	(45.7)
Derivatives and related hedge activities	**(40.5)**	15.7	(56.2)
Other losses	**(4.4)**	(165.4)	161.0
Net realized capital losses (2)	**$ (66.0)**	$ (136.6)	$ 70.6

(1) Includes credit sales, adjustments to the credit loss valuation allowance, write-offs and recoveries on available-for-sale securities.
(2) Net realized capital gains (losses) can be volatile due to credit losses from invested assets, mark-to-market adjustments of certain invested assets and our decision to sell invested assets.

Three Months Ended March 31, 2023 Compared to Three Months Ended March 31, 2022

Net realized capital losses decreased primarily due to reduced losses from corporate impairments, gains versus losses on equity securities and sponsored investment funds due to equity market improvement, and reduced losses on interest rate swaps not designated as hedging instruments due to a decrease in rates. These decreases were partially offset by net losses in 2023 versus net gains in 2022 on the sale of available-for-sale fixed maturity securities.

U.S. Investment Operations

In the following sections, we provide details about U.S. Investment Operations, excluding investments held as part of the coinsurance with funds withheld agreement. We believe the details of the composition of our investment portfolio excluding the funds withheld are most relevant to an understanding of our operations that are pertinent to investors because all funds withheld assets support obligations and liabilities relating to the Reinsurance Transaction. Guidelines are in place to ensure the investment risk associated with these fund withheld assets are appropriately managed. See Footnote 10, Reinsurance, for further information on the funds withheld assets.

Of our invested assets, $70,833.2 million were held by our U.S. operations as of March 31, 2023. Our U.S. invested assets are managed primarily by Principal Global Investors. Our Investment Committee, appointed by our Board, is responsible for establishing investment policies and monitoring risk limits and tolerances. Our primary investment objective is to maximize after-tax returns consistent with acceptable risk parameters. We seek to protect customers' benefits by optimizing the risk/return relationship on an ongoing basis, through asset/liability matching, reducing credit risk, avoiding high levels of investments that may be redeemed by the issuer, maintaining sufficiently liquid investments and avoiding undue asset concentrations through diversification. We are exposed to two primary sources of investment risk:

- credit risk, relating to the uncertainty associated with the continued ability of an obligor to make timely payments of principal and interest and
- interest rate risk, relating to the market price and/or cash flow variability associated with changes in market yield curves.

Our ability to manage credit risk is essential to our business and our profitability. We devote considerable resources to the credit analysis of each new investment. We manage credit risk through industry, issuer and asset class diversification.

A dedicated committee, comprised of senior investment professional staff members, approves the credit rating for the fixed maturities we purchase. We have teams of security analysts, organized by industry and asset class, that analyze and monitor these investments. Investments held in the portfolio are monitored on a continuous basis with a formal review annually or more frequently if material events affect the issuer. The analysis includes both fundamental and technical factors. The fundamental analysis encompasses both quantitative and qualitative analysis of the issuer. The qualitative analysis includes an assessment of both accounting and management aggressiveness of the issuer. In addition, technical indicators such as stock price volatility and credit default swap levels are monitored. We regularly review our investments to determine whether we should re-rate them, employing the following criteria:

- material changes in the issuer's revenues, margins, capital structure or collateral values;
- significant management or organizational changes;
- significant changes regarding the issuer's industry;
- debt service coverage or cash flow ratios that fall below industry-specific thresholds;
- violation of financial covenants and
- other business factors that relate to the issuer.

We purchase credit default swaps to hedge certain credit exposures in our investment portfolio. We economically hedged credit exposure in our portfolio by purchasing credit default swaps with a notional amount of $130.0 million as of both March 31, 2023 and December 31, 2022. We sell credit default swaps to offer credit protection to investors when entering into synthetic replicating transactions. When selling credit protection, if there is an event of default by the referenced name, we are obligated to pay the counterparty the referenced amount of the contract and receive in return the referenced security. For further information on credit derivatives sold, see Item 1. "Financial Statements, Notes to Unaudited Condensed Consolidated Financial Statements, Note 4, Derivative Financial Instruments" under the caption, "Credit Derivatives Sold."

Our use of derivatives exposes us to counterparty risk, or the risk that the counterparty fails to perform the terms of the derivative contract. We actively manage this risk by:

- obtaining approval of all new counterparties by the Investment Committee;
- establishing exposure limits that take into account non-derivative exposure we have with the counterparty as well as derivative exposure;
- performing similar credit analysis prior to approval on each derivatives counterparty that we do when lending money on a long-term basis;
- diversifying our risk across numerous approved counterparties;
- implementing credit support annex (collateral) agreements ("CSAs") for over-the-counter derivative transactions or similar agreements with a majority of our counterparties to further limit counterparty exposures, which provide for netting of exposures;
- limiting exposure to A credit or better for over-the-counter derivative counterparties without CSAs;
- conducting stress-test analysis to determine the maximum exposure created during the life of a prospective transaction;
- daily monitoring of counterparty credit ratings, exposures and associated collateral levels and
- trading mandatorily cleared contracts through centralized clearinghouses.

We manage our exposure on a net basis, whereby we net positive and negative exposures for each counterparty with agreements in place. For further information on derivative exposure, see Item 1. "Financial Statements, Notes to Unaudited Condensed Consolidated Financial Statements, Note 3, Investments" under the caption, "Balance Sheet Offsetting."

A dedicated risk management team is responsible for centralized monitoring of the commercial mortgage loan portfolio. We apply a variety of guidelines to minimize credit risk in our commercial mortgage loan portfolio. When considering new commercial mortgage loans, we review the cash flow fundamentals of the property, make a physical assessment of the underlying commercial real estate, conduct a comprehensive market analysis and compare against industry lending practices. We use a proprietary risk rating model to evaluate all new and substantially all existing loans within the portfolio. The proprietary risk model is designed to stress projected cash flows under simulated economic and market downturns. Our lending guidelines are typically 75% or less loan-to-value ratio and a debt service coverage ratio of at least 1.2 times. We analyze investments outside of these guidelines based on cash flow quality, tenancy and other factors. The following table presents loan-to-value and debt service coverage ratios for our brick and mortar commercial mortgage loans:

	Weighted average loan-to-value ratio		**Debt service coverage ratio**	
	March 31, 2023	**December 31, 2022**	**March 31, 2023**	**December 31, 2022**
New mortgages	**37 %**	50 %	**1.1 x**	2.3 x
Entire mortgage portfolio	**46 %**	46 %	**2.5 x**	2.5 x

We also seek to manage call or prepayment risk arising from changes in interest rates. We assess and price for call or prepayment risks in all of our investments and monitor these risks in accordance with asset/liability management policies.

The amortized cost and weighted average yield, calculated using amortized cost, of non-structured fixed maturity securities that will be callable at the option of the issuer, excluding securities with a make-whole provision, were $2,265.9 million and 4.1%, respectively, as of March 31, 2023, and $2,539.0 million and 3.9%, respectively, as of December 31, 2022. In addition, the amortized cost and weighted average yield of RMBS, residential collateralized mortgage obligations, and asset-backed securities - home equity with material prepayment risk were $6,224.2 million and 3.3%, respectively, as of March 31, 2023, and $5,546.1 million and 2.9%, respectively, as of December 31, 2022.

Our investment decisions and objectives are a function of the underlying risks and product profiles of each primary business operation. In addition, we diversify our product portfolio offerings to include products that contain features that will protect us against fluctuations in interest rates. Those features include adjustable crediting rates, policy surrender charges and market value adjustments on liquidations. For further information on our management of interest rate risk, see Item 3 "Quantitative and Qualitative Disclosures About Market Risk – Interest Rate Risk."

Overall Composition of U.S. Invested Assets

As shown in the following table, the major categories of U.S. invested assets are fixed maturities and mortgage loans.

	March 31, 2023		December 31, 2022	
	Carrying amount	% of total	Carrying amount	% of total
	($ in millions)			
Fixed maturities	**$ 46,580.5**	**66 %**	$ 44,745.4	65 %
Equity securities	**528.7**	**1**	532.2	1
Mortgage loans	**16,826.4**	**24**	16,866.3	25
Real estate	**2,297.6**	**3**	2,237.4	3
Policy loans	**771.9**	**1**	770.2	1
Other investments	**3,828.1**	**5**	3,745.7	5
Total invested assets	**70,833.2**	**100 %**	68,897.2	100 %
Cash and cash equivalents	**2,904.7**		2,894.5	
Total invested assets and cash	**$ 73,737.9**		$ 71,791.7	

Fixed Maturities

Fixed maturities include bonds, ABS, redeemable preferred stock and certain non-redeemable preferred securities.

Fixed maturities were diversified by category of issuer, as shown in the following table for the periods indicated.

	March 31, 2023		December 31, 2022	
	Carrying amount	Percent of total	Carrying amount	Percent of total
	($ in millions)			
U.S. government and agencies	**$ 1,464.5**	**3 %**	$ 1,432.4	3 %
Non-U.S. governments	**395.1**	**1**	400.0	1
States and political subdivisions	**4,484.3**	**10**	4,544.9	10
Corporate - public	**15,648.0**	**34**	15,661.4	35
Corporate - private	**9,897.0**	**21**	9,144.4	20
Residential mortgage-backed pass-through securities	**2,744.5**	**6**	2,172.3	5
Commercial mortgage-backed securities	**3,944.0**	**8**	3,861.9	9
Residential collateralized mortgage obligations	**2,858.0**	**6**	2,666.9	6
Asset-backed securities	**5,145.1**	**11**	4,861.2	11
Total fixed maturities	**$ 46,580.5**	**100 %**	$ 44,745.4	100 %

We believe it is desirable to hold residential mortgage-backed pass-through securities due to their credit quality and liquidity as well as portfolio diversification characteristics. Our portfolio is comprised of Government National Mortgage Association, Federal National Mortgage Association and Federal Home Loan Mortgage Corporation pass-through securities. In addition, our residential collateralized mortgage obligation portfolio offers structural features that allow cash flows to be matched to our liabilities.

We purchase CMBS to diversify the overall credit risks of the fixed maturities portfolio and to provide attractive returns. The primary risks in holding CMBS are structural and credit risks. Structural risks include the security's priority in the issuer's capital structure, the adequacy of and ability to realize proceeds from the collateral and the potential for prepayments. Credit risks involve collateral and issuer/servicer risk where collateral and servicer performance may deteriorate. CMBS are predominantly comprised of large pool securitizations that are diverse by property type, borrower and geographic dispersion. The risks to any CMBS deal are determined by the credit quality of the underlying loans and how those loans perform over time. Another key risk is the vintage of the underlying loans and the state of the markets during a particular vintage.

Similar to CMBS, we purchase ABS for diversification and to provide attractive returns. The primary risks in holding ABS are also structural and credit risks, which are similar to those noted above for CMBS. Our ABS portfolio is diversified by type of asset, issuer, and vintage. We actively monitor holdings of ABS to recognize adverse changes in the risk profile of each security. Prepayments in the ABS portfolio are, in general, insensitive to changes in interest rates or are insulated from such changes by call protection features. In the event we are subject to prepayment risk, we monitor the factors that impact the level of prepayment and prepayment speed for those ABS. In addition, we hold a diverse class of securities, which limits our exposure to any one security.

The international exposure held in our U.S. operation's fixed maturities portfolio was 14% of total fixed maturities as of both March 31, 2023 and December 31, 2022. It is comprised of corporate and foreign government fixed maturities.

	March 31, 2023	December 31, 2022
	(in millions)	
European Union	**$ 1,731.1**	$ 1,547.7
Australia/New Zealand	**1,353.9**	1,283.4
United Kingdom	**1,053.5**	1,167.4
Latin America	**1,004.1**	1,023.3
Asia-Pacific	**610.7**	584.7
Middle East and Africa	**466.6**	424.5
Europe, non-European Union	**264.4**	302.5
Other	**138.1**	137.3
Total	**$ 6,622.4**	$ 6,470.8

International fixed maturities exposure is determined by the country of risk of the obligor entity. All international fixed maturities held by our U.S. operations are either denominated in U.S. dollars or have been swapped into U.S. dollar equivalents. Our international investments are analyzed internally by country and industry credit investment professionals. We control concentrations using issuer and country level exposure benchmarks, which are based on the credit quality of the issuer and the country. Our investment policy limits total international fixed maturities investments and we are within those internal limits. Exposure to Canada is not included in our international exposure. As of March 31, 2023 and December 31, 2022, our investments in Canada totaled $995.2 million and $982.9 million, respectively.

Fixed Maturities Credit Concentrations. One aspect of managing credit risk is through industry, issuer and asset class diversification. Our credit concentrations are managed to established limits. The top 10 exposures comprised 4.8% of single-name credit fixed maturity exposures as of both March 31, 2023 and December 31, 2022.

Fixed Maturities Valuation and Credit Quality. Valuation techniques for the fixed maturities portfolio vary by security type and the availability of market data. The use of different pricing techniques and their assumptions could produce different financial results. See Item 1. "Financial Statements, Notes to Unaudited Condensed Consolidated Financial Statements, Note 16, Fair Value Measurements" for further details regarding our pricing methodology. Once prices are determined, they are reviewed by pricing analysts for reasonableness based on asset class and observable market data. Investment analysts who are familiar with specific securities review prices for reasonableness through direct interaction with external sources, review of recent trade activity or use of internal models. All fixed maturities placed on the "watch list" are periodically analyzed by investment analysts. These analysts periodically meet with the Chief Investment Officer and the Portfolio Managers to determine reasonableness of the analysts' prices. The valuation of bonds for which a credit loss exists and there is no quoted price is typically based on relative value analysis and the present value of the future cash flows expected to be received. Although we believe these values reasonably reflect the fair value of those securities, the key assumptions about risk premiums, performance of underlying collateral (if any) and other market factors involve qualitative and unobservable inputs.

The Securities Valuation Office ("SVO") of the National Association of Insurance Commissioners ("NAIC") monitors the bond investments of insurers for regulatory capital and reporting purposes and, when required, assigns securities to one of six categories referred to as NAIC designations. Although NAIC designations are not produced to aid the investment decision making process, NAIC designations may serve as a reasonable proxy for Nationally Recognized Statistical Rating Organizations' ("NRSRO") credit ratings for certain bonds. For most corporate bonds, NAIC designations 1 and 2 include bonds generally considered investment grade by such rating organizations. Bonds are considered investment grade when rated ''Baa3'' or higher by Moody's, or ''BBB-'' or higher by S&P. NAIC designations 3 through 6 include bonds generally referred to as below investment grade. Bonds are considered below investment grade when rated ''Ba1'' or lower by Moody's, or ''BB+'' or lower by S&P.

For loan-backed and structured securities, as defined by the NAIC, the NAIC designation is not always a reasonable indication of an NRSRO rating as described below. For CMBS and non-agency RMBS, Blackrock Solutions undertakes the modeling of those NAIC designations. This may result in a final designation being higher or lower than the NRSRO credit rating.

The following table presents our total fixed maturities by NAIC designation as of the periods indicated as well as the percentage, based on fair value, that each designation comprises.

NAIC designation	March 31, 2023 Amortized cost	March 31, 2023 Carrying amount	March 31, 2023 Percent of carrying amount	December 31, 2022 Amortized cost	December 31, 2022 Carrying amount	December 31, 2022 Percent of carrying amount
			($ in millions)			
1	**$ 33,302.4**	**$ 30,481.6**	**65 %**	$ 32,398.0	$ 29,011.9	65 %
2	**14,231.0**	**13,105.9**	**28**	14,143.5	12,735.3	28
3	**2,838.3**	**2,660.9**	**6**	2,871.9	2,656.1	6
4	**367.9**	**312.1**	**1**	357.0	312.1	1
5	**10.6**	**4.3**	**—**	15.3	14.5	—
6	**20.0**	**15.7**	**—**	20.2	15.5	—
Total fixed maturities	**$ 50,770.2**	**$ 46,580.5**	**100 %**	$ 49,805.9	$ 44,745.4	100 %

Fixed maturities included 50 securities with an amortized cost of $590.0 million, gross gains of $14.4 million, gross losses of $2.9 million and a carrying amount of $601.5 million as of March 31, 2023, that were still pending a review and assignment of a designation by the SVO. Due to the timing of when fixed maturities are purchased, legal documents are filed and the review by the SVO is completed, we will always have securities in our portfolio that are unrated over a reporting period. In these instances, an equivalent designation is assigned based on our fixed income analyst's assessment.

Commercial Mortgage-Backed Securities. As of March 31, 2023, based on amortized cost, 98% of our CMBS portfolio had an NAIC designation of 1.

The following table presents our exposure by credit quality based on NAIC designations for our CMBS portfolio as of the periods indicated.

NAIC designation	March 31, 2023 Amortized cost	March 31, 2023 Carrying amount	December 31, 2022 Amortized cost	December 31, 2022 Carrying amount
		(in millions)		
1	**$ 4,359.8**	**$ 3,882.6**	$ 4,340.6	$ 3,801.5
2	**71.2**	**56.9**	70.8	55.8
3	**2.2**	**1.9**	2.2	1.9
4	**3.9**	**2.3**	3.9	2.4
5	**—**	**—**	—	—
6	**0.6**	**0.3**	0.6	0.3
Total (1)	**$ 4,437.7**	**$ 3,944.0**	$ 4,418.1	$ 3,861.9

(1) The CMBS portfolio included agency CMBS with a $468.0 million amortized cost and a $437.8 million carrying amount as of March 31, 2023, and a $508.4 million amortized cost and a $473.0 million carrying amount as of December 31, 2022.

Fixed Maturities Watch List. We monitor any decline in the credit quality of fixed maturities through the designation of "problem securities," "potential problem securities" and "restructured securities". We define problem securities in our fixed maturity portfolio as securities: (i) with principal and/or interest payments in default or where default is perceived to be imminent in the near term, or (ii) issued by a company that went into bankruptcy subsequent to the acquisition of such securities. We define potential problem securities in our fixed maturity portfolio as securities included on an internal "watch list" for which management has concerns as to the ability of the issuer to comply with the present debt payment terms and which may result in the security becoming a problem or being restructured. The decision whether to classify a performing fixed maturity security as a potential problem involves significant subjective judgments by our management as to the likely future industry conditions and developments with respect to the issuer. We define restructured securities in our fixed maturity portfolio as securities where a concession has been granted to the borrower related to the borrower's financial difficulties that would not have otherwise been considered. We determine that restructures should occur in those instances where greater economic value will be realized under the new terms than through liquidation or other disposition and may involve a change in contractual cash flows. If the present value of the restructured cash flows is less than the current cost of the asset being restructured, a realized capital loss is recorded in net income and a new cost basis is established.

The following table presents the total carrying amount of our fixed maturities portfolio, as well as its problem, potential problem and restructured fixed maturities for the periods indicated.

	March 31, 2023	December 31, 2022
	($ in millions)	
Total fixed maturities	**$ 46,580.5**	$ 44,745.4
Problem fixed maturities (1)	**$ 21.0**	$ 20.9
Potential problem fixed maturities	**47.9**	21.8
Total problem, potential problem and restructured fixed maturities	**$ 68.9**	$ 42.7
Total problem, potential problem and restructured fixed maturities as a percent of total fixed maturities	**0.15 %**	0.10 %

(1) The problem fixed maturities carrying amount is net of the credit loss valuation allowance.

Fixed Maturities Credit Losses. Each reporting period, a group of individuals including the Chief Investment Officer, our Portfolio Managers, the assigned analysts and representatives from Investment Accounting review all securities to determine whether a credit loss exists. The analysis focuses on each issuer's ability to service its debts in a timely fashion. Formal documentation of the analysis and our decision is prepared and approved by management. For additional details regarding our process to identify and evaluate securities with credit losses, see Item 1. "Financial Statements, Notes to Unaudited Condensed Consolidated Financial Statements, Note 3, Investments" under the caption "Allowance for Credit Loss."

We would not consider a security with unrealized losses to have a decline in value due to credit when it is not our intent to sell the security, it is not more likely than not that we would be required to sell the security before recovery of the amortized cost, which may be maturity, and we expect to recover the amortized cost basis. However, we do sell securities under certain circumstances, such as when we have evidence of a change in the issuer's creditworthiness, when we anticipate poor relative future performance of securities, when a change in regulatory requirements modifies what constitutes a permissible investment or the maximum level of investments held or when there is an increase in capital requirements or a change in risk weights of debt securities. Sales generate both gains and losses.

A number of significant risks and uncertainties are inherent in the process of monitoring credit losses and determining the allowance for credit loss. These risks and uncertainties include: (1) the risk that our assessment of an issuer's ability to meet all of its contractual obligations will change based on changes in the credit characteristics of that issuer, (2) the risk that the economic outlook will be worse than expected or have more of an impact on the issuer than anticipated, (3) the risk that our investment professionals are making decisions based on fraudulent or misstated information in the financial statements provided by issuers and (4) the risk that new information obtained by us or changes in other facts and circumstances lead us to change our intent to not sell the security prior to recovery of its amortized cost. Any of these situations could result in a charge to net income in a future period.

The net realized loss relating to the change in the allowance for credit loss and credit related sales of fixed maturities was $15.7 million and $5.0 million for the three months ended March 31, 2023 and 2022, respectively.

Fixed Maturities Available-for-Sale

The following tables present our fixed maturities available-for-sale by industry category, as of the periods indicated.

	March 31, 2023				
	Amortized cost	Gross unrealized gains	Gross unrealized losses	Allowance for credit loss	Carrying amount
			(in millions)		
Finance — Banking	$ 2,337.6	$ 4.6	$ 207.4	$ —	$ 2,134.8
Finance — Brokerage	716.0	4.5	77.8	—	642.7
Finance — Finance Companies	355.7	(0.2)	55.8	—	299.7
Finance — Financial Other	1,298.9	13.2	151.6	—	1,160.5
Finance — Insurance	1,882.6	34.8	167.1	—	1,750.3
Finance — Real estate investment trusts (“REITs”)	1,778.0	0.2	222.6	—	1,555.6
Industrial — Basic Industry	1,269.4	18.9	98.0	—	1,190.3
Industrial — Capital Goods	1,485.4	11.7	126.4	—	1,370.7
Industrial — Communications	2,274.2	61.0	185.2	—	2,150.0
Industrial — Consumer Cyclical	1,225.7	6.1	126.8	—	1,105.0
Industrial — Consumer Non-Cyclical	3,324.0	25.9	229.9	—	3,120.0
Industrial — Energy	1,943.0	53.3	129.8	—	1,866.5
Industrial — Other	821.1	3.5	52.3	—	772.3
Industrial — Technology	1,375.9	5.9	118.3	—	1,263.5
Industrial — Transportation	1,591.4	7.4	148.1	—	1,450.7
Utility — Electric	2,894.0	25.0	329.4	—	2,589.6
Utility — Natural Gas	389.6	1.5	51.6	—	339.5
Utility — Other	379.0	—	60.6	—	318.4
Government guaranteed	168.9	11.4	15.1	—	165.2
Total corporate securities	27,510.4	288.7	2,553.8	—	25,245.3
Residential mortgage-backed pass-through securities	2,881.0	16.3	163.8	—	2,733.5
Commercial mortgage-backed securities	4,359.0	—	493.7	—	3,865.3
Residential collateralized mortgage obligations	3,256.5	5.0	405.7	0.1	2,855.7
Asset-backed securities — Home equity (1)	71.2	3.2	4.2	—	70.2
Asset-backed securities — All other	1,833.9	0.5	102.9	—	1,731.5
Collateralized debt obligations — Credit	16.8	—	5.6	—	11.2
Collateralized debt obligations — CMBS	—	0.2	—	—	0.2
Collateralized debt obligations — Loans	3,396.7	1.7	99.0	—	3,299.4
Total mortgage-backed and other asset-backed securities	15,815.1	26.9	1,274.9	0.1	14,567.0
U.S. government and agencies	1,406.5	1.4	72.6	—	1,335.3
States and political subdivisions	5,066.5	18.9	605.8	—	4,479.6
Non-U.S. governments	411.3	20.7	39.1	—	392.9
Total fixed maturities, available-for-sale	$ 50,209.8	$ 356.6	$ 4,546.2	$ 0.1	$ 46,020.1

(1) This exposure is all related to sub-prime mortgage loans.

	December 31, 2022				
	Amortized cost	Gross unrealized gains	Gross unrealized losses	Allowance for credit loss	Carrying amount
			(in millions)		
Finance — Banking	$ 2,396.8	$ 3.7	$ 234.6	$ —	$ 2,165.9
Finance — Brokerage	667.3	1.6	88.4	—	580.5
Finance — Finance Companies	338.6	—	61.9	—	276.7
Finance — Financial Other	1,120.5	1.5	162.6	—	959.4
Finance — Insurance	1,882.8	27.2	190.9	—	1,719.1
Finance — REITs	1,785.4	0.4	237.6	—	1,548.2
Industrial — Basic Industry	1,220.6	10.6	116.7	—	1,114.5
Industrial — Capital Goods	1,518.7	5.5	158.5	—	1,365.7
Industrial — Communications	2,286.8	47.4	219.1	—	2,115.1
Industrial — Consumer Cyclical	1,216.9	5.5	135.0	—	1,087.4
Industrial — Consumer Non-Cyclical	3,329.2	15.4	292.9	—	3,051.7
Industrial — Energy	1,872.0	39.9	159.2	—	1,752.7
Industrial — Other	807.9	0.7	65.9	—	742.7
Industrial — Technology	1,392.8	2.6	153.1	—	1,242.3
Industrial — Transportation	1,637.0	5.4	176.2	—	1,466.2
Utility — Electric	2,886.8	17.8	382.2	—	2,522.4
Utility — Natural Gas	389.3	0.7	58.9	—	331.1
Utility — Other	359.8	—	66.3	—	293.5
Government guaranteed	171.8	10.3	13.3	—	168.8
Total corporate securities	27,281.0	196.2	2,973.3	—	24,503.9
Residential mortgage-backed pass-through securities	2,348.8	5.8	187.6	—	2,167.0
Commercial mortgage-backed securities	4,334.7	—	556.2	—	3,778.5
Residential collateralized mortgage obligations	3,113.8	2.6	451.8	0.1	2,664.5
Asset-backed securities — Home equity (1)	73.5	1.6	2.9	—	72.2
Asset-backed securities — All other	1,662.1	—	125.2	—	1,536.9
Collateralized debt obligations — Credit	16.8	—	5.2	—	11.6
Collateralized debt obligations — CMBS	—	0.3	—	—	0.3
Collateralized debt obligations — Loans	3,264.7	1.1	108.9	—	3,156.9
Total mortgage-backed and other asset-backed securities	14,814.4	11.4	1,437.8	0.1	13,387.9
U.S. government and agencies	1,443.9	0.1	90.2	—	1,353.8
States and political subdivisions	5,281.8	9.8	751.4	—	4,540.2
Non-U.S. governments	423.0	18.8	44.0	—	397.8
Total fixed maturities, available-for-sale	$ 49,244.1	$ 236.3	$ 5,296.7	$ 0.1	$ 44,183.6

(1) This exposure is all related to sub-prime mortgage loans.

Of the $4,546.2 million in gross unrealized losses as of March 31, 2023, $8.7 million in losses were attributed to securities scheduled to mature in one year or less, $308.2 million attributed to securities scheduled to mature between one to five years, $861.3 million attributed to securities scheduled to mature between five to ten years, $2,093.1 million attributed to securities scheduled to mature after ten years and $1,274.9 million related to mortgage-backed and other ABS that are not classified by maturity year. As of March 31, 2023, we were in a $4,189.6 million net unrealized loss position as compared to a $5,060.4 million net unrealized loss position as of December 31, 2022. The $870.8 million decrease in net unrealized loss for the three months ended March 31, 2023, can be attributed to a decrease in interest rates and tightening of credit spreads.

Fixed Maturities Available-For-Sale Unrealized Losses. We believe our long-term fixed maturities portfolio is well diversified among industry types and between publicly traded and privately placed securities. Each year, we direct the majority of our net cash inflows into investment grade fixed maturities. Our current policy is to limit the percentage of fixed maturities invested in below investment grade assets to 15%.

We invest in privately placed fixed maturities to enhance the overall value of the portfolio, increase diversification and obtain higher yields than are possible with comparable quality public market securities. Generally, private placements provide broader access to management information, strengthened negotiated protective covenants, call protection features and, where applicable, a higher level of collateral. They are, however, generally not freely tradable because of restrictions imposed by U.S. federal and state securities laws and illiquid trading markets.

The following table presents our fixed maturities available-for-sale by investment grade and below investment grade as of the periods indicated.

	March 31, 2023					December 31, 2022				
	Amortized cost	Gross unrealized gains	Gross unrealized losses	Allowance for credit loss	Carrying amount	Amortized cost	Gross unrealized gains	Gross unrealized losses	Allowance for credit loss	Carrying amount
	(in millions)									
Investment grade:										
Public	**$ 37,785.6**	**$ 297.6**	**$ 3,329.3**	**$ 0.1**	**$ 34,753.8**	$ 37,338.9	$ 217.2	$ 3,951.8	$ 0.1	$ 33,604.2
Private	**9,320.3**	**47.9**	**962.0**	**—**	**8,406.2**	8,752.7	11.2	1,070.8	—	7,693.1
Below investment grade:										
Public	**1,664.3**	**7.4**	**228.2**	**—**	**1,443.5**	1,728.2	5.5	245.3	—	1,488.4
Private	**1,439.6**	**3.7**	**26.7**	**—**	**1,416.6**	1,424.3	2.4	28.8	—	1,397.9
Total fixed maturities, available-for-sale	**$ 50,209.8**	**$ 356.6**	**$ 4,546.2**	**$ 0.1**	**$ 46,020.1**	$ 49,244.1	$ 236.3	$ 5,296.7	$ 0.1	$ 44,183.6

Included in the public category as of March 31, 2023 and December 31, 2022, were $11,423.5 million and $10,829.2 million, respectively, of securities subject to certain holding periods and resale restrictions pursuant to Rule 144A of the Securities Act of 1933.

The following tables present the fair value and the gross unrealized losses on our fixed maturities available-for-sale for which an allowance for credit loss has not been recorded by investment category and length of time that individual securities have been in a continuous unrealized loss position as of March 31, 2023 and December 31, 2022, respectively.

	March 31, 2023					
	Less than twelve months		Greater than or equal to twelve months		Total	
	Fair value	Gross unrealized losses	Fair value	Gross unrealized losses	Fair value	Gross unrealized losses
	(in millions)					
Fixed maturities, available-for-sale (1):						
U.S. government and agencies	**$ 745.9**	**$ 22.4**	**$ 392.4**	**$ 50.3**	**$ 1,138.3**	**$ 72.7**
Non-U.S. governments	**147.7**	**11.4**	**97.4**	**27.7**	**245.1**	**39.1**
States and political subdivisions	**2,000.3**	**176.4**	**1,816.3**	**429.3**	**3,816.6**	**605.7**
Corporate	**10,684.4**	**697.4**	**9,939.5**	**1,856.4**	**20,623.9**	**2,553.8**
Residential mortgage-backed pass-through securities	**611.5**	**16.1**	**1,111.7**	**147.7**	**1,723.2**	**163.8**
Commercial mortgage-backed securities	**638.8**	**42.2**	**3,069.1**	**450.0**	**3,707.9**	**492.2**
Collateralized debt obligations (2)	**880.2**	**17.6**	**2,174.6**	**87.0**	**3,054.8**	**104.6**
Other debt obligations	**1,270.0**	**62.6**	**2,752.4**	**450.0**	**4,022.4**	**512.6**
Total fixed maturities, available-for-sale	**$ 16,978.8**	**$ 1,046.1**	**$ 21,353.4**	**$ 3,498.4**	**$ 38,332.2**	**$ 4,544.5**

(1) Fair value and gross unrealized losses are excluded for available-for-sale securities for which an allowance for credit loss has been recorded.
(2) Primarily consists of collateralized loan obligations backed by secured corporate loans.

	December 31, 2022					
	Less than twelve months		Greater than or equal to twelve months		Total	
	Fair value	Gross unrealized losses	Fair value	Gross unrealized losses	Fair value	Gross unrealized losses
	(in millions)					
Fixed maturities, available-for-sale (1):						
U.S. government and agencies	$ 1,142.3	$ 48.4	$ 181.5	$ 41.8	$ 1,323.8	$ 90.2
Non-U.S. governments	253.1	38.1	17.2	6.1	270.3	44.2
States and political subdivisions	3,703.9	625.8	382.6	125.6	4,086.5	751.4
Corporate	18,548.4	2,352.8	2,407.8	620.4	20,956.2	2,973.2
Residential mortgage-backed pass-through securities	1,149.9	88.7	573.5	104.5	1,723.4	193.2
Commercial mortgage-backed securities	2,720.5	352.4	986.6	201.8	3,707.1	554.2
Collateralized debt obligations (2)	1,813.1	63.9	1,207.2	50.1	3,020.3	114.0
Other debt obligations	1,976.3	197.6	1,895.6	377.0	3,871.9	574.6
Total fixed maturities, available-for-sale	$ 31,307.5	$ 3,767.7	$ 7,652.0	$ 1,527.3	$ 38,959.5	$ 5,295.0

(1) Fair value and gross unrealized losses are excluded for available-for-sale securities for which an allowance for credit loss has been recorded.
(2) Primarily consists of collateralized loan obligations backed by secured corporate loans.

Mortgage Loans

Mortgage loans consist of commercial mortgage loans on real estate and residential mortgage loans. For further details about residential mortgage loans, see Item 1. “Financial Statements, Notes to Unaudited Condensed Consolidated Financial Statements, Note 3, Investments” under the caption, “Financing Receivables.”

Commercial Mortgage Loans. We generally report commercial mortgage loans on real estate at cost adjusted for amortization of premiums and accrual of discounts, computed using the interest method and net of valuation allowances.

Commercial mortgage loans play an important role in our investment strategy by:

- providing strong risk-adjusted relative value in comparison to other investment alternatives;
- enhancing total returns and
- providing strategic portfolio diversification.

As a result, we have focused on constructing a high quality portfolio of mortgages. Our portfolio is generally comprised of mortgages originated with conservative loan-to-value ratios, high debt service coverages and general purpose property types with a strong credit tenancy.

Our commercial mortgage loan portfolio consists primarily of non-recourse, fixed rate mortgages on fully or near fully leased properties. The mortgage portfolio is comprised primarily of office properties, apartments, well anchored retail properties and general-purpose industrial properties.

Our commercial mortgage loan portfolio is diversified by geography and specific collateral property type. Commercial mortgage lending in the state of California accounted for 25% and 26% of our commercial mortgage loan portfolio before valuation allowance as of March 31, 2023 and December 31, 2022, respectively. We are, therefore, exposed to potential losses resulting from the risk of catastrophes, such as earthquakes, that may affect the region. Like other lenders, we generally do not require earthquake insurance for properties on which we make commercial mortgage loans. With respect to California properties, however, we obtain an engineering report specific to each property. The report assesses the building’s design specifications, whether it has been upgraded to meet seismic building codes and the maximum loss that is likely to result from a variety of different seismic events. We also obtain a report that assesses, by building and geographic fault lines, the amount of loss our commercial mortgage loan portfolio might suffer under a variety of seismic events.

The typical borrower in our commercial mortgage loan portfolio is a single purpose entity or single asset entity. As of March 31, 2023 and December 31, 2022, the total number of commercial mortgage loans outstanding were 603 and 656, of which 40% and 43% were for loans with principal balances less than $10.0 million as of March 31, 2023 and December 31, 2022, respectively. The average loan size of our commercial mortgage portfolio was $22.4 million and $20.7 million as of March 31, 2023 and December 31, 2022, respectively.

Commercial Mortgage Loan Credit Monitoring. For further details on monitoring and management of our commercial mortgage loan portfolio, see Item 1. "Financial Statements, Notes to Unaudited Condensed Consolidated Financial Statements, Note 3, Investments" under the caption, "Financing Receivables Credit Monitoring."

We categorize loans that are 60 days or more delinquent, loans in process of foreclosure and loans with borrowers or credit tenants in bankruptcy that are delinquent as "problem" loans. We categorize loans that are delinquent less than 60 days where the default is expected to be cured and loans with borrowers or credit tenants in bankruptcy that are current as "potential problem" loans. The decision whether to classify a loan delinquent less than 60 days as a potential problem involves significant subjective judgments by management as to the likely future economic conditions and developments with respect to the borrower. We categorize loans for which the original note rate has been reduced below market and loans for which the principal has been reduced as "restructured" loans. We also consider loans that are refinanced more than one year beyond the original maturity or call date at below market rates as restructured.

We had two problem commercial mortgage loans with a carrying amount of $44.4 million for which we had a valuation allowance of $28.3 million as of March 31, 2023. We also had two problem commercial mortgage loan with a carrying amount of $43.8 million for which we also had a valuation allowance of $28.3 million as of December 31, 2022.

	March 31, 2023	December 31, 2022
	($ in millions)	
Total commercial mortgage loans	**$ 13,447.2**	$ 13,487.5
Restructured problem commercial mortgage loans	**16.1**	15.5
Total problem, potential problem and restructured commercial mortgage loans	**$ 16.1**	$ 15.5
Total problem, potential problem and restructured commercial mortgage loans as a percent of total commercial mortgage loans	**0.12 %**	0.11 %

Commercial Mortgage Loan Valuation Allowance. We establish the commercial mortgage loan valuation allowance at levels considered adequate to absorb estimated expected credit losses within the portfolio. For further details on the commercial mortgage loan valuation allowance, see Item 1. "Financial Statements, Notes to Unaudited Condensed Consolidated Financial Statements, Note 3, Investments" under the caption, "Financing Receivables Valuation Allowance."

Real Estate

Real estate consists primarily of commercial equity real estate. As of March 31, 2023 and December 31, 2022, the carrying amount of our equity real estate investment was $2,297.6 million and $2,237.4 million, respectively. Our commercial equity real estate is held in the form of wholly owned real estate, real estate acquired upon foreclosure of commercial mortgage loans and majority owned interests in real estate joint ventures.

Equity real estate is categorized as either "real estate held for investment" or "real estate held for sale. The carrying value of real estate held for investment is generally adjusted for impairments whenever events or changes in circumstances indicate the carrying amount of the asset may not be recoverable. Such impairment adjustments are recorded as net realized capital losses in our consolidated results of operations. No such impairment adjustments were recorded for the three months ended March 31, 2023 or for the year ended December 31, 2022.

Once we identify a real estate property to be sold and it is probable that it will be sold, we classify the property as held for sale. We establish a valuation allowance subject to periodic revisions, if necessary, to adjust the carrying value of the property to reflect the lower of its current carrying value or the fair value, less associated selling costs. The valuation allowance did not change for the three months ended March 31, 2023 or for the year ended December 31, 2022.

We use research, both internal and external, to recommend appropriate product and geographic allocations and changes to the equity real estate portfolio. We monitor product, geographic and industry diversification separately and together to determine the most appropriate mix.

Equity real estate is distributed across geographic regions of the country. As of March 31, 2023, our largest equity real estate portfolio concentration was in the Pacific (44%) region of the United States. By property type, our largest concentrations were in Apartments (36%) and Industrial (31%) as of March 31, 2023.

Other Investments

Our other investments totaled $3,828.1 million as of March 31, 2023, compared to $3,745.7 million as of December 31, 2022. Other investments include interests in unconsolidated entities, which include real estate properties owned jointly with venture partners and operated by the partners; sponsored investment funds; the cash surrender value of company owned and trust owned life insurance; derivative assets and other investments.

International Investment Operations

Of our invested assets, $7,924.7 million were held by our Principal International operations as of March 31, 2023. The assets are primarily managed by the local Principal International affiliate. Due to the regulatory constraints in each location, each company maintains its own investment policies. As shown in the following table, the major category of international invested assets is fixed maturities. The following table excludes invested assets of the separate accounts.

	March 31, 2023		December 31, 2022	
	Carrying amount	Percent of total	Carrying amount	Percent of total
	($ in millions)			
Fixed maturities	**$ 3,269.4**	**41 %**	$ 3,110.9	42 %
Equity securities	**1,204.3**	**15**	1,165.4	16
Mortgage loans	**1,042.0**	**13**	952.7	13
Real estate	**2.5**	**—**	2.3	—
Policy loans	**16.1**	**—**	14.5	—
Other investments:				
Direct financing leases	**716.5**	**9**	664.4	9
Investment in unconsolidated operating entities	**1,139.5**	**15**	1,092.3	14
Derivative assets and other investments	**534.4**	**7**	439.8	6
Total invested assets	**7,924.7**	**100 %**	7,442.3	100 %
Cash and cash equivalents	**213.4**		190.6	
Total invested assets and cash	**$ 8,138.1**		$ 7,632.9	

Regulations in certain locations require investment in the funds we manage. These required regulatory investments are classified as equity securities within our consolidated statements of financial position, with all mark-to-market changes reflected in net investment income. Our investment is primarily dictated by client activity and all investment performance is retained by us.

Item 3 Quantitative and Qualitative Disclosures About Market Risk

Market Risk Exposures and Risk Management

Market risk is the risk we will incur losses due to adverse fluctuations in market rates and prices. Our primary market risk exposures are to interest rates, equity markets and foreign currency exchange rates. The active management of market risk is an integral part of our operations. We manage our overall market risk exposure within established risk tolerance ranges using several approaches, including:

- rebalancing our existing asset or liability portfolios;
- controlling the risk structure of newly acquired assets and liabilities and
- using derivative instruments to modify the market risk characteristics of existing assets or liabilities or assets expected to be purchased.

Interest Rate Risk

Interest rate risk is the risk of economic losses due to adverse changes in interest rates. Interest rate risk arises primarily from our holdings in interest sensitive assets and liabilities. Changes in interest rates impact numerous aspects of our operations, including but not limited to:

- yield on our invested assets;
- rate of interest we credit to contractholder account balances;
- timing of cash flows on assets and liabilities containing embedded prepayment options;
- cost of hedging our GMWB rider;
- discount rate used in valuing our liability for future policy benefits for long-duration insurance and annuity contracts;
- discount rate used in valuing our pension and OPEB obligations;
- statutory reserve and capital requirements;
- asset-based fees earned on the fixed income assets we manage;
- interest expense on our long-term borrowings;
- fair value of intangible assets in our reporting units and
- fair value of financial assets and liabilities held at fair value on our consolidated statements of financial position.

Lower interest rates generally result in lower profitability in the long-term. Conversely, higher interest rates generally result in higher profitability in the long-term. However, an increase in market interest rates may cause a decline in the value of financial assets held at fair value on our consolidated statements of financial position.

Impact of Changes in Long-Term Interest Rate Assumptions

We use long-term interest rate assumptions to calculate MRBs, certain reserves and benefit plan obligations in accordance with U.S. GAAP. In setting these assumptions, we consider a variety of factors, including historical experience, emerging trends and future expectations. We evaluate our assumptions on at least an annual basis. Due to the long-term nature of our assumptions, we generally do not revise our assumptions in response to short-term fluctuations in market interest rates. However, we will consider revising our assumptions if a significant change occurs in the factors noted above.

A reduction in our long-term interest rate assumptions may result in increases in MRB liabilities and certain reserves.

Impact of Changes in Interest Rates

Changes in interest rates or a sustained low interest rate environment may result in the following impacts, which would impact our financial position and results of operations:

Impact of Falling Interest Rates or Sustained Low Interest Rates	**Impact of Rising Interest Rates**
Adverse Impacts:	***Positive Impacts:***
A reduction in investment income, which may be partially offset by a reduction in the interest we credit on contractholder account balances; however, our ability to lower crediting rates may be constrained by guaranteed minimum interest rates and competitive pressures	An increase in investment income, which may be partially or fully offset by an increase in the interest we credit on contractholder account balances
An increase in the cost of hedging our GMWB rider	A decrease in the cost of hedging our GMWB rider
An increase in MRB liabilities and certain reserves	A decrease in MRB liabilities and certain reserves
A reduction in the discount rate used to measure reserves for long-duration insurance and annuity contracts, leading to an increase in our reserves	An increase in the discount rate used to measure reserves for long-duration insurance and annuity contracts, leading to a decrease in our reserves
A reduction in the discount rate used in valuing our pension and OPEB obligations, leading to an increase in our Projected Benefit Obligation, Net Periodic Pension Cost, Accumulated Postretirement Benefit Obligation and Net Periodic Benefit Cost	An increase in the discount rate used in valuing our pension and OPEB obligations, leading to a decrease in our Projected Benefit Obligation, Net Periodic Pension Cost, Accumulated Postretirement Benefit Obligation and Net Periodic Benefit Cost
An increase in statutory capital we are required to hold as well as the amount of assets we must maintain to support statutory reserves	A decrease in statutory capital we are required to hold as well as the amount of assets we must maintain to support statutory reserves
An increase in prepayments or redemptions on mortgages and bonds we own, which would force us to reinvest the proceeds at lower interest rates	A decrease in prepayments or redemptions on mortgages and bonds we own, which would reduce our opportunity to reinvest the proceeds at higher interest rates
Positive Impacts:	***Adverse Impacts:***
An increase in the value of the fixed income assets we manage, resulting in an increase in our fee revenue in the short-term	A decrease in the value of the fixed income assets we manage, resulting in a decrease in our fee revenue in the short-term
A decrease in the interest expense on our long-term borrowings, to the extent the borrowings have adjustable rates or we are able to refinance our obligations at lower interest rates	An increase in the interest expense on our long-term borrowings, to the extent the borrowings have adjustable rates or we refinance our obligations at higher interest rates
An increase in the fair value of certain financial assets held at fair value on our consolidated statements of financial position	A decrease in the fair value of certain financial assets held at fair value on our consolidated statements of financial position, as discussed below
	A reduction in the fair value of intangible assets in our reporting units, potentially leading to an impairment of goodwill or other intangible assets

We estimate a hypothetical 100 basis point immediate, parallel decrease in U.S. interest rates would impact segment pre-tax operating earnings between (1)% and 1% over the next 12 months. This estimate reflects the impact of routine management actions in response to changes in interest rates, such as reducing the interest rates we credit on contractholder account balances, but does not reflect the impact of other actions management may consider, such as curtailing sales of certain products.

The selection of a 100 basis point immediate, parallel decrease in U.S. interest rates should not be construed as a prediction by us of future market events, but rather as an illustration of the impact of such an event. Our exposure will change as a result of ongoing portfolio transactions in response to new business, management's assessment of changing market conditions and changes in our mix of business.

If market rates increase rapidly, policy surrenders, withdrawals and requests for policy loans may increase as customers seek to achieve higher returns. Excess lapses may result in an acceleration of amortization for our DAC and other actuarial balances. We may be required to sell assets to raise the cash necessary to respond to such surrenders, withdrawals and loans, thereby realizing capital losses on the assets sold.

Guaranteed Minimum Interest Rate Exposure. The following table provides detail on the differences between the interest rates being credited to contractholders as of March 31, 2023, and the respective GMIRs. Amounts for contracts without significant fee revenues such as GICs, funding agreements, retail fixed income annuities and guaranteed pension contracts are excluded. Additionally, amounts for contracts that are reinsured as part of the Reinsurance Transaction are also excluded. Account values are broken down by GMIR level within the Retirement and Income Solutions and Benefits and Protection segments.

	Account values (1)					
		Excess of crediting rates over GMIR:				
	At GMIR	Up to 0.50% above GMIR	0.51% to 1.00% above GMIR	1.01% to 2.00% above GMIR	2.01% or more above GMIR	Total
			($ in millions)			
Guaranteed minimum interest rate						
Retirement and Income Solutions						
Up to 1.00%	**$ 29.2**	**$ 3.9**	**$ 128.5**	**$ 1,119.4**	**$ 685.6**	**$ 1,966.6**
1.01% - 2.00%	**3.5**	**524.9**	**5,995.9**	**1,653.0**	**279.1**	**8,456.4**
2.01% - 3.00%	**327.0**	**0.1**	**0.7**	**0.5**	**—**	**328.3**
3.01% - 4.00%	**7.7**	**—**	**—**	**—**	**—**	**7.7**
4.01% and above	**18.5**	**—**	**—**	**—**	**—**	**18.5**
Subtotal	**385.9**	**528.9**	**6,125.1**	**2,772.9**	**964.7**	**10,777.5**
Benefits and Protection						
Up to 1.00%	**—**	**1.7**	**16.2**	**—**	**1.2**	**19.1**
1.01% - 2.00%	**—**	**—**	**4.2**	**261.1**	**132.8**	**398.1**
2.01% - 3.00%	**64.8**	**185.9**	**191.3**	**61.0**	**0.4**	**503.4**
3.01% - 4.00%	**1,642.8**	**27.9**	**29.3**	**26.6**	**3.2**	**1,729.8**
4.01% and above	**39.7**	**10.9**	**3.4**	**1.5**	**—**	**55.5**
Subtotal	**1,747.3**	**226.4**	**244.4**	**350.2**	**137.6**	**2,705.9**
Total	**$ 2,133.2**	**$ 755.3**	**$ 6,369.5**	**$ 3,123.1**	**$ 1,102.3**	**$ 13,483.4**
Percentage of total	**15.8 %**	**5.6 %**	**47.2 %**	**23.2 %**	**8.2 %**	**100.0 %**

(1) Includes only the account values, net of policy loans, for products with GMIRs and discretionary crediting rates, excluding amounts for contracts that are reinsured as part of the Reinsurance Transaction.

Impact of Rising Interest Rates on the Fair Value of Financial Assets. An increase in market interest rates may cause a decline in the value of financial assets held at fair value on our consolidated statements of financial position. Although changes in the fair value of our financial assets due to changes in interest rates may impact the amount of equity reported in our consolidated statements of financial position, these changes will not cause an economic gain or loss unless we sell investments, terminate derivative positions, record an allowance for credit loss, or determine a derivative instrument is no longer an effective hedge.

We estimate a hypothetical 100 basis point immediate, parallel increase in interest rates would reduce the net reported fair value of our financial assets and derivatives by $2,490.7 million as of March 31, 2023, compared to $2,446.9 million as of December 31, 2022. This estimate only reflects the change in fair value for financial assets and derivatives reported at fair value on our consolidated statements of financial position. Assets and liabilities not reported at fair value on our consolidated statements of financial position – including mortgage loans, liabilities relating to insurance contracts, investment contracts, debt and bank deposits – are excluded from this sensitivity analysis. We believe the excluded liability items would economically serve as a partial offset to the net interest rate risk of the financial instruments included in the sensitivity analysis. Separate account assets and liabilities are also excluded from this estimate, as any interest rate risk is borne by the holder of the separate account. Assets backing reserves as part of a coinsurance with funds withheld agreement are excluded from this estimate, as any interest rate risk is passed to the reinsurer. For more information on fair value measurements, see Item 8. "Financial Statements and Supplementary Data, Notes to Consolidated Financial Statements, Note 15, Fair Value Measurements" in our Annual Report on Form 10-K for the year ended December 31, 2022.

Our selection of a 100 basis point immediate, parallel increase in interest rates is a hypothetical rate scenario we use to demonstrate potential risk. While a 100 basis point immediate, parallel increase does not represent our view of future market changes, it is a near term reasonably possible hypothetical change that illustrates the potential impact of such events. While this sensitivity analysis provides a representation of interest rate sensitivity, it is based on our portfolio exposures at a point in time and may not be representative of future market results. These exposures will change as a result of ongoing portfolio transactions in response to new business, management's assessment of changing market conditions and available investment opportunities.

Interest Rate Risk Management

We manage interest rate risk through the use of an integrated risk management framework. This helps us identify, assess, monitor, report and manage our risks within established limits and risk tolerances. Our internal risk committees monitor and discuss our risk profile and identify necessary actions to mitigate impacts from interest rate risk.

The product designs within our business units result in a variety of different interest rate risk profiles. Therefore, our business units use a variety of different approaches for managing their asset and liability interest rate risks.

- *Retirement Business Stable Cash Flows* – For stable and predictable cash flow liabilities, such as pension risk transfer, WSRS, and investment only, we use investment strategy and hedges to tightly align the cash flow run off of these asset and liability cash flows. Immunization analysis is also utilized in the management of interest rate risk.

- *U.S. Insurance Stable Cash Flows* – Our insurance businesses in many instances contain long-term guarantees with stable and predictable liability cash flows and recurring premiums. We manage the interest rate risk through investment strategy, product crediting rates and analyzing duration and embedded value sensitivity.

- *Principal International* – Our international businesses operate within local regulations and financial market conditions (e.g., derivative markets, assets available) to achieve similar asset and liability cash flow management objectives. In locations with a limited availability of long-dated assets and derivative markets, the duration gap is managed to risk tolerances specific to each location.

We also limit our exposure to interest rate risk through our business mix and strategy. We have intentionally limited our exposure to specific products where investment margins are critical to the product's profitability, and we continue to emphasize the sale of products that generate revenues in the form of fees for service or premiums for insurance coverage and expose us to minimal interest rate risk.

Prepayment risk is controlled by limiting our exposure to investments that are prepayable without penalty prior to maturity at the option of the issuer. We also require additional yield on these investments to compensate for the risk the issuer will exercise such option. Prepayment risk is also controlled by limiting the sales of liabilities with features such as puts or other options that can be exercised at inopportune times. We manage the interest rate risk associated with our long-term borrowings by monitoring the interest rate environment and evaluating refinancing opportunities as maturity dates approach.

The plan fiduciaries use a Dynamic Asset Allocation strategy for our qualified defined benefit pension plan, which strategically allocates an increasing portion of the assets of the pension plan to fixed income securities as the funding status improves. The intended purpose of using the Dynamic Asset Allocation strategy is that the expected change in the value of the plan assets and the change in pension benefit obligation due to market movements are more likely to have more correlation versus a static allocation of assets between categories. For more information see Item 7. "Management's Discussion and Analysis of Financial Condition and Results of Operations — Critical Accounting Policies and Estimates — Benefit Plans" and Item 8. "Financial Statements and Supplementary Data, Notes to Consolidated Financial Statements, Note 12, Employee and Agent Benefits" in our Annual Report on Form 10-K for the year ended December 31, 2022.

Use of Derivatives to Manage Interest Rate Risk. We use or have used various derivative financial instruments to manage our exposure to fluctuations in interest rates, including interest rate swaps, interest rate options, TBA forwards, bond forwards, treasury forwards, swaptions and futures. We use interest rate swaps, treasury forwards and futures contracts to hedge against changes in the value of the GMWB MRB. We use interest rate swaps and have used TBA forwards primarily to more closely match the interest rate characteristics of assets and liabilities. They can be used to change the sensitivity to the interest rate of specific assets and liabilities as well as an entire portfolio. We use bond forwards to fix the purchase price of a bond at a specified date in the future. We use interest rate options to manage prepayment risks in our assets and minimum guaranteed interest rates and lapse risks in our liabilities. We have purchased swaptions to hedge interest rate exposure for certain assets and liabilities.

Foreign Currency Risk

Foreign currency risk is the risk we will incur economic losses due to adverse fluctuations in foreign currency exchange rates. This risk arises from foreign currency-denominated funding agreements issued to nonqualified institutional investors in the international market, foreign currency-denominated fixed maturity and equity securities, and our international operations, including expected cash flows and potential acquisition and divestiture activity.

We estimate as of March 31, 2023, a 10% immediate unfavorable change in each of the foreign currency exchange rates to which we are exposed would result in no material change to the net fair value of our foreign currency-denominated instruments identified above because we effectively hedge foreign currency-denominated instruments to minimize exchange rate impacts, which is consistent with our estimate as of December 31, 2022. However, fluctuations in foreign currency exchange rates do affect the translation of segment pre-tax operating earnings and equity of our international operations into our consolidated financial statements.

For our Principal International operations, we estimate a 10% immediate unfavorable change in each of the foreign currency exchange rates to which we were exposed would have resulted in a $281.8 million, or 10.0%, reduction in the total equity excluding noncontrolling interests of our international operations as of March 31, 2023, as compared to an estimated $258.5 million, or 10.0%, reduction as of December 31, 2022. We estimate a 10% unfavorable change in the average foreign currency exchange rates to which we were exposed through our international operations would have resulted in a $9.5 million, or 12.0%, reduction in segment pre-tax operating earnings of our international operations for the three months ended March 31, 2023, as compared to an estimated $8.4 million, or 12.0%, reduction for the three months ended March 31, 2022.

The selection of a 10% immediate unfavorable change in all currency exchange rates should not be construed as a prediction by us of future market events, but rather as an illustration of the potential impact of such an event. These exposures will change as a result of a change in the size and mix of our foreign operations.

Use of Derivatives to Manage Foreign Currency Risk. The foreign currency risk on funding agreements and fixed maturities in our U.S. operations is mitigated by using currency swaps that swap the foreign currency interest and principal payments to our functional currency. We did not have currency swap agreements associated with foreign-denominated liabilities as of March 31, 2023 and December 31, 2022. The notional amount of our currency swap agreements associated with foreign-denominated fixed maturities was $1,400.7 million and $1,389.8 million as of March 31, 2023 and December 31, 2022, respectively.

With regard to our international operations, in order to enhance the diversification of our investment portfolios we may invest in bonds denominated in a currency that is different than the currency of our liabilities. We use foreign exchange derivatives to economically hedge the currency mismatch. Our Principal International operations had currency swaps with a notional amount of $217.2 million and $244.9 million as of March 31, 2023 and December 31, 2022, respectively. Our Principal International operations also utilized currency forwards with a notional amount of $1,150.0 million and $672.5 million as of March 31, 2023 and December 31, 2022, respectively.

We use currency forwards to hedge certain foreign-denominated investments in our domestic operations and net equity investments in our foreign operations, including certain sponsored investment funds. We held currency forwards with a notional amount of $435.3 million and $450.6 million as of March 31, 2023 and December 31, 2022, respectively. We have used currency options to hedge currency risk associated with expected cash flows from our foreign operations. No currency options were utilized as of March 31, 2023 or December 31, 2022.

Equity Risk

Equity risk is the risk we will incur economic losses due to adverse fluctuations in equity markets. As of March 31, 2023 and December 31, 2022, the fair value of our equity securities was $1,733.3 million and $1,708.6 million, respectively. We estimate a 10% decline in the prices of the equity securities would result in a decline in fair value of our equity securities of $173.3 million as of March 31, 2023, as compared to a decline in fair value of our equity securities of $170.9 million as of December 31, 2022.

We are also exposed to the risk that asset-based fees decrease as a result of declines in assets under management due to changes in investment prices and the risk that asset management fees calculated by reference to performance could be lower.

We also have equity risk associated with (1) universal life contracts that credit interest to customers based on changes in an external equity index; (2) variable annuity contracts that have a GMWB rider that allows the customer to make withdrawals of a specified annual amount, either for a fixed number of years or for the lifetime of the customer, even if the account value is reduced to zero; (3) variable annuity contracts that have a GMDB that allows the death benefit to be paid, even if the account value has fallen below the GMDB amount and (4) investment contracts in which the return is subject to minimum contractual guarantees. We are also subject to equity risk based upon the assets that support our employee benefit plans. For further discussion of equity risk associated with these plans, see Item 7. "Management's Discussion and Analysis of Financial Condition and Results of Operations — Critical Accounting Policies and Estimates — Benefit Plans" in our Annual Report on Form 10-K for the year ended December 31, 2022.

We estimate an immediate 10% decline in the S&P 500 index, followed by a 2% per quarter increase would reduce our annual segment pre-tax operating earnings by approximately 5% to 8% over the next 12 months. The selection of a 10% unfavorable change in the S&P 500 index should not be construed as a prediction by us of future market events, but rather as an illustration of the potential impact of such an event. Our exposure will change as a result of changes in our mix of business.

Separate and distinct from our equity risk associated with a decline in the S&P index, we also have equity risk associated with certain alternative investments. These investments are comprised of several asset categories (including hedge funds, private equity, infrastructure and direct lending) that provide an attractive asset match to our long-dated liabilities and create diversification benefits to our fixed income investments. The risk profile of these investments is actively monitored by our Investment Committee and our corporate risk management function. Changes in the value of these investments will impact earnings. We estimate an immediate 10% decline in the value of those assets, followed by a 2% per quarter increase would reduce our annual segment pre-tax operating earnings by less than 8%. The selection of a 10% unfavorable change in the value of those assets should not be construed as a prediction of future market events, but rather as an illustration of the potential impact of such a decline in value of those assets.

Use of Derivatives to Manage Equity Risk. We economically hedge the universal life products, where the interest credited is linked to an external equity index, by purchasing options that match the product's profile or selling options to offset existing exposures. We economically hedged the GMWB exposure, which includes interest rate risk and equity risk, using futures, options, treasury forwards and interest rate swaps with notional amounts of $1,615.8 million, $1,365.6 million, $4,265.1 million, and $1,661.2 million, respectively, as of March 31, 2023, and notional amounts of $1,451.6 million, $1,400.7 million, $4,280.1 million, and $1,818.0 million, respectively, as of December 31, 2022. The fair value of both MRBs and associated hedging instruments are sensitive to financial market conditions and the variance related to the change in fair value of these items for a given period is largely dependent on market conditions at the end of the period.

Item 4. Controls and Procedures

Disclosure Controls and Procedures

In order to ensure that the information that we must disclose in our filings with the SEC is recorded, processed, summarized and reported on a timely basis, we have adopted disclosure controls and procedures. Disclosure controls and procedures include, without limitation, controls and procedures designed to ensure that information required to be disclosed by us in the reports that we file with or submit to the SEC is accumulated and communicated to our management, including our Chief Executive Officer and Chief Financial Officer, as appropriate, to allow timely decisions regarding required disclosure.

Our Chief Executive Officer, Daniel J. Houston, and our Chief Financial Officer, Deanna D. Strable-Soethout, have reviewed and evaluated our disclosure controls and procedures as of March 31, 2023, and have concluded our disclosure controls and procedures are effective.

Changes in Internal Control Over Financial Reporting

We had no change in our internal control over financial reporting during our last fiscal quarter that has materially affected, or is reasonably likely to materially affect, our internal control over financial reporting.

PART II — OTHER INFORMATION

Item 1. Legal Proceedings

Disclosure concerning legal proceedings can be found in Part I, Item 1. “Financial Statements, Notes to Unaudited Condensed Consolidated Financial Statements, Note 14, Contingencies, Guarantees and Indemnifications” under the caption, “Litigation and Regulatory Contingencies,” which is incorporated here by this reference.

Item 1A. Risk Factors

In addition to the other information set forth in this report, consideration should be given to the factors discussed in Part I, Item 1A. “Risk Factors” in our Annual Report on Form 10-K for the year ended December 31, 2022. If any of those factors were to occur, they could materially adversely affect our business, financial condition or future results, and could cause actual results to differ materially from those expressed in forward-looking statements in this report. We have not had material changes with respect to the risk factors discussed in our Annual Report on Form 10-K for the year ended December 31, 2022.

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

Issuer Purchases of Equity Securities

The following table presents the amount of our common share purchase activity for the periods indicated.

Period	Total number of shares purchased (1)	Average price paid per share	Total number of shares purchased as part of publicly announced programs	Maximum dollar value of shares that may yet be purchased under the programs (in millions) (2)
January 1, 2023 - January 31, 2023	**673,543**	**$ 87.99**	**673,543**	**$ 930.0**
February 1, 2023 - February 28, 2023	**907,130**	**$ 89.61**	**580,602**	**$ 877.7**
March 1, 2023 - March 31, 2023	**547,054**	**$ 87.06**	**449,119**	**$ 838.8**
Total	**2,127,727**		**1,703,264**	

(1) Includes the number of shares of common stock utilized to execute certain stock incentive awards and shares purchased as part of publicly announced programs.

(2) In January 2022, our Board of Directors authorized a share repurchase program of up to $1.6 billion of our outstanding common stock, which has no expiration.

Item 6. Exhibits

Exhibit Number	Description	Incorporated by reference herein	
		Form	File Date
31.1	Certification of Daniel J. Houston		
31.2	Certification of Deanna D. Strable-Soethout		
32.1	Certification Pursuant to Section 1350 of Chapter 63 of Title 18 of the United States Code – Daniel J. Houston		
32.2	Certification Pursuant to Section 1350 of Chapter 63 of Title 18 of the United States Code – Deanna D. Strable-Soethout		
101.INS	Inline XBRL Instance Document - The instance document does not appear in the interactive data file because its XBRL tags are embedded within the Inline XBRL document.		
101.SCH	Inline XBRL Taxonomy Extension Schema Document		
101.CAL	Inline XBRL Taxonomy Extension Calculation Linkbase Document		
101.LAB	Inline XBRL Taxonomy Extension Label Linkbase Document		
101.PRE	Inline XBRL Taxonomy Extension Presentation Linkbase Document		
101.DEF	Inline XBRL Taxonomy Extension Definition Linkbase Document		
104	The cover page from Principal Financial Group, Inc.'s Quarterly Report on Form 10-Q for the period ended March 31, 2023 formatted in iXBRL and contained in Exhibit 101.		

SIGNATURE

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.

PRINCIPAL FINANCIAL GROUP, INC.

Dated: May 3, 2023

By /s/ Deanna D. Strable-Soethout
Deanna D. Strable-Soethout
Executive Vice President and Chief Financial Officer

Duly Authorized Officer, Principal Financial Officer, and Principal Accounting Officer

Exhibit 31.1

CERTIFICATIONS

I, Daniel J. Houston, certify that:

1. I have reviewed this quarterly report on Form 10-Q of Principal Financial Group, Inc.;

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

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

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

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

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

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

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

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

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

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

Date: May 3, 2023

/s/ Daniel J. Houston
Daniel J. Houston
Chairman, President and Chief Executive Officer

Exhibit 31.2

CERTIFICATIONS

I, Deanna D. Strable-Soethout, certify that:

1. I have reviewed this quarterly report on Form 10-Q of Principal Financial Group, Inc.;

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

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

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

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

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

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

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

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

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

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

Date: May 3, 2023

/s/ Deanna D. Strable-Soethout
Deanna D. Strable-Soethout
Executive Vice President and Chief Financial Officer

Exhibit 32.1

Certification Pursuant to Section 1350 of Chapter 63
of Title 18 of the United States Code

I, Daniel J. Houston, Chairman, President and Chief Executive Officer of Principal Financial Group, Inc., certify that (i) the Form 10-Q for the period ended March 31, 2023, fully complies with the requirements of Section 13(a) of the Securities Exchange Act of 1934 and (ii) the information contained in the Form 10-Q for the period ended March 31, 2023, fairly presents, in all material respects, the financial condition and results of operations of Principal Financial Group, Inc.

/s/ Daniel J. Houston
Daniel J. Houston
Chairman, President and Chief Executive Officer
Date: May 3, 2023

Exhibit 32.2

**Certification Pursuant to Section 1350 of Chapter 63
of Title 18 of the United States Code**

I, Deanna D. Strable-Soethout, Executive Vice President and Chief Financial Officer of Principal Financial Group, Inc., certify that (i) the Form 10-Q for the period ended March 31, 2023, fully complies with the requirements of Section 13(a) of the Securities Exchange Act of 1934 and (ii) the information contained in the Form 10-Q for the period ended March 31, 2023, fairly presents, in all material respects, the financial condition and results of operations of Principal Financial Group, Inc.

/s/ Deanna D. Strable-Soethout
Deanna D. Strable-Soethout
Executive Vice President and Chief Financial Officer
Date: May 3, 2023