PRINCIPAL FINANCIAL GROUP INC
Form 10-Q
May 02, 2019
Table of Contents

UNITED STATES
SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

FORM 10-Q

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

For the quarterly period ended March 31, 2019

OR

o 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 ý No o

Indicate by check mark whether the registrant has submitted electronically and posted on its corporate Web site, if any, every Interactive Data File required to be submitted and posted pursuant to Rule 405 of Regulation S-T (§232.405 of this chapter) during the preceding 12 months (or for such shorter period that the registrant was required to submit and post such files). Yes ý No o

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 ý Accelerated filer o Non-accelerated filer o Smaller reporting company o Emerging growth company o

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. o

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

The total number of shares of the registrant s Common Stock, $0.01 par value, outstanding as of April 24, 2019, was 278,548,135.

Table of Contents

PRINCIPAL FINANCIAL GROUP, INC.

TABLE OF CONTENTS

Table of Contents

PART I FINANCIAL INFORMATION

Item 1. Financial Statements

Principal Financial Group, Inc.

Consolidated Statements of Financial Position

	March 31, 2019 (Unaudited)	December 31, 2018
	(in millions)	
Assets		
Fixed maturities, available-for-sale (2019 and 2018 include $98.9 million and $94.5 million related to consolidated variable interest entities)	**$ 63,123.0**	$ 60,108.5
Fixed maturities, trading	**668.9**	636.1
Equity securities (2019 and 2018 include $811.3 million and $774.8 million related to consolidated variable interest entities)	**1,864.1**	1,843.7
Mortgage loans	**15,597.5**	15,336.9
Real estate (2019 and 2018 include $376.1 million and $364.0 million related to consolidated variable interest entities)	**1,736.7**	1,729.7
Policy loans	**798.5**	801.4
Other investments (2019 and 2018 include $590.7 million and $457.9 million related to consolidated variable interest entities and $25.3 million and $23.6 million measured at fair value under the fair value option)	**4,755.2**	4,310.3
Total investments	**88,543.9**	84,766.6
Cash and cash equivalents	**2,259.7**	2,977.5
Accrued investment income	**679.6**	636.2
Premiums due and other receivables	**1,641.1**	1,413.1
Deferred acquisition costs	**3,616.5**	3,693.5
Property and equipment	**933.2**	767.3
Goodwill	**1,110.6**	1,100.0
Other intangibles	**1,310.3**	1,315.1
Separate account assets (2019 and 2018 include $39,544.7 million and $37,183.3 million related to consolidated variable interest entities)	**157,942.8**	144,987.9
Other assets	**1,382.2**	1,378.9
Total assets	**$ 259,419.9**	$ 243,036.1
Liabilities		
Contractholder funds (2019 and 2018 include $395.8 million and $396.0 million related to consolidated variable interest entities)	**$ 39,649.3**	$ 39,699.7
Future policy benefits and claims	**36,891.2**	35,664.8
Other policyholder funds	**939.1**	888.4
Short-term debt	**43.9**	42.9
Long-term debt (2019 and 2018 include $62.9 million and $58.4 million related to consolidated variable interest entities)	**3,266.4**	3,259.6
Income taxes currently payable	**22.3**	25.3
Deferred income taxes	**1,318.7**	958.4
Separate account liabilities (2019 and 2018 include $39,544.7 million and $37,183.3 million related to consolidated variable interest entities)	**157,942.8**	144,987.9
Other liabilities (2019 and 2018 include $154.8 million and $104.9 million related to consolidated variable interest entities)	**6,046.3**	5,661.9
Total liabilities	**246,120.0**	231,188.9
Redeemable noncontrolling interest (2019 and 2018 include $460.2 million and $325.7 million related to consolidated variable interest entities)	**537.7**	391.2

Stockholders equity				
Common stock, par value $0.01 per share 2,500.0 million shares authorized, 478.5 million and 476.7 million shares issued, and 278.2 million and 279.5 million shares outstanding in 2019 and 2018		**4.8**		4.8
Additional paid-in capital		**10,090.8**		10,060.7
Retained earnings		**10,571.9**		10,290.2
Accumulated other comprehensive loss		**(418.9)**		(1,565.1)
Treasury stock, at cost (200.3 million and 197.2 million shares in 2019 and 2018)		**(7,554.2)**		(7,400.6)
Total stockholders equity attributable to Principal Financial Group, Inc.		**12,694.4**		11,390.0
Noncontrolling interest		**67.8**		66.0
Total stockholders equity		**12,762.2**		11,456.0
Total liabilities and stockholders equity	**$**	**259,419.9**	$	243,036.1

See accompanying notes.

Table of Contents

Principal Financial Group, Inc.

Consolidated Statements of Operations

(Unaudited)

	For the three months ended March 31,	
	2019	**2018**
	(in millions, except per share data)	
Revenues		
Premiums and other considerations	**$ 1,724.9**	$ 995.2
Fees and other revenues	**973.5**	1,011.3
Net investment income	**961.0**	902.2
Net realized capital gains (losses), excluding impairment losses on available-for-sale securities	**91.3**	(15.2)
Net other-than-temporary impairment (losses) recoveries on available-for-sale securities	**(9.6)**	1.3
Other-than-temporary impairment losses on fixed maturities, available-for-sale reclassified to (from) other comprehensive income	**2.8**	(11.2)
Net impairment losses on available-for-sale securities	**(6.8)**	(9.9)
Net realized capital gains (losses)	**84.5**	(25.1)
Total revenues	**3,743.9**	2,883.6
Expenses		
Benefits, claims and settlement expenses	**2,195.1**	1,411.1
Dividends to policyholders	**30.1**	30.5
Operating expenses	**992.7**	985.0
Total expenses	**3,217.9**	2,426.6
Income before income taxes	**526.0**	457.0
Income taxes	**73.9**	54.5
Net income	**452.1**	402.5
Net income attributable to noncontrolling interest	**22.2**	5.4
Net income attributable to Principal Financial Group, Inc.	**$ 429.9**	$ 397.1
Earnings per common share		
Basic earnings per common share	**$ 1.54**	$ 1.37
Diluted earnings per common share	**$ 1.53**	$ 1.36

See accompanying notes.

Principal Financial Group, Inc.

Consolidated Statements of Comprehensive Income

(Unaudited)

	For the three months ended March 31,	
	2019	**2018**
	(in millions)	
Net income	**$ 452.1**	$ 402.5
Other comprehensive income (loss), net:		
Net unrealized gains (losses) on available-for-sale securities	**1,104.3**	(805.5)
Noncredit component of impairment losses on fixed maturities, available-for-sale	**(2.5)**	9.3
Net unrealized losses on derivative instruments	**(4.5)**	(14.4)
Foreign currency translation adjustment	**37.9**	65.8
Net unrecognized postretirement benefit obligation	**11.5**	8.7
Other comprehensive income (loss)	**1,146.7**	(736.1)
Comprehensive income (loss)	**1,598.8**	(333.6)
Comprehensive income attributable to noncontrolling interest	**22.7**	6.3
Comprehensive income (loss) attributable to Principal Financial Group, Inc.	**$ 1,576.1**	$ (339.9)

See accompanying notes.

Table of Contents

Principal Financial Group, Inc.

Consolidated Statements of Stockholders Equity

(Unaudited)

	Common stock	Additional paid-in capital	Retained earnings	Accumulated other comprehensive income (loss)	Treasury stock	Noncontrolling interest	Total stockholders equity
				(in millions)			
Balances as of January 1, 2018	$ 4.7	$ 9,925.2	$ 9,482.9	$ 165.5	$ (6,729.0)	$ 72.6	$ 12,921.9
Common stock issued		32.5					32.5
Stock-based compensation		23.2	(1.5)			(0.6)	21.1
Treasury stock acquired, common					(199.6)		(199.6)
Dividends to common stockholders			(147.3)				(147.3)
Distributions to noncontrolling interest						(8.0)	(8.0)
Contributions from noncontrolling interest						0.1	0.1
Adjustments to redemption amount of redeemable noncontrolling interest		0.9					0.9
Effects of implementation of accounting change related to equity investments, net			1.0	(1.0)			
Effects of implementation of accounting change related to revenue recognition, net			(65.0)	25.6		(0.3)	(39.7)
Effects of implementation of accounting change related to intra-entity asset transfer taxes, net			8.7				8.7
Effects of implementation of accounting change related to the reclassification of certain tax effects, net			(77.6)	77.6			
Net income (1)			397.1			4.6	401.7
Other comprehensive loss (1)				(737.0)		0.5	(736.5)
Balances as of March 31, 2018	$ 4.7	$ 9,981.8	$ 9,598.3	$ (469.3)	$ (6,928.6)	$ 68.9	$ 12,255.8
Balances as of January 1, 2019	**$ 4.8**	**$ 10,060.7**	**$ 10,290.2**	**$ (1,565.1)**	**$ (7,400.6)**	**$ 66.0**	**$ 11,456.0**
Common stock issued		**5.8**					**5.8**
Stock-based compensation		**26.8**	**(2.0)**				**24.8**
Treasury stock acquired, common					**(153.6)**		**(153.6)**
Dividends to common stockholders			**(150.2)**				**(150.2)**
Distributions to noncontrolling interest						**(1.3)**	**(1.3)**
Contributions from noncontrolling interest						**0.8**	**0.8**
Adjustments to redemption amount of redeemable noncontrolling interest		**(2.5)**					**(2.5)**
Effects of implementation of accounting change related to leases, net			**4.0**				**4.0**
Net income (1)			**429.9**			**1.9**	**431.8**
Other comprehensive income (1)				**1,146.2**		**0.4**	**1,146.6**
Balances as of March 31, 2019	**$ 4.8**	**$ 10,090.8**	**$ 10,571.9**	**$ (418.9)**	**$ (7,554.2)**	**$ 67.8**	**$ 12,762.2**

(1) Excludes amounts attributable to redeemable noncontrolling interest. See Note 9, Stockholders Equity, for further details.

See accompanying notes.

6

Table of Contents

Principal Financial Group, Inc.

Consolidated Statements of Cash Flows

(Unaudited)

	For the three months ended March 31, 2019	2018
	(in millions)	
Operating activities		
Net income	$ **452.1**	$ 402.5
Adjustments to reconcile net income to net cash provided by operating activities:		
Net realized capital (gains) losses	**(84.5)**	25.1
Depreciation and amortization expense	**51.0**	50.6
Amortization of deferred acquisition costs and contract costs	**58.9**	73.0
Additions to deferred acquisition costs and contract costs	**(108.3)**	(107.3)
Stock-based compensation	**24.9**	21.6
Income from equity method investments, net of dividends received	**(8.8)**	(34.7)
Changes in:		
Accrued investment income	**(43.4)**	(25.4)
Net cash flows for trading securities and equity securities with operating intent	**0.2**	(107.0)
Premiums due and other receivables	**(189.8)**	(57.0)
Contractholder and policyholder liabilities and dividends	**929.9**	300.2
Current and deferred income taxes	**65.9**	45.8
Real estate acquired through operating activities	**(9.2)**	(30.6)
Real estate sold through operating activities	**1.5**	46.4
Other assets and liabilities	**28.6**	143.6
Other	**7.4**	(0.3)
Net adjustments	**724.3**	344.0
Net cash provided by operating activities	**1,176.4**	746.5
Investing activities		
Fixed maturities available-for-sale and equity securities with intent to hold:		
Purchases	**(2,886.7)**	(3,330.8)
Sales	**342.6**	1,273.5
Maturities	**1,548.9**	1,555.0
Mortgage loans acquired or originated	**(625.1)**	(643.0)
Mortgage loans sold or repaid	**382.4**	331.8
Real estate acquired	**(10.5)**	(14.7)
Real estate sold		56.5
Net purchases of property and equipment	**(29.4)**	(26.0)
Purchase of interests in subsidiaries, net of cash acquired		(113.9)
Net change in other investments	**(213.3)**	(68.3)
Net cash used in investing activities	**(1,491.1)**	(979.9)
Financing activities		
Issuance of common stock	**5.8**	32.5
Acquisition of treasury stock	**(153.6)**	(199.6)
Payments for financing element derivatives	**(6.5)**	(19.3)
Dividends to common stockholders	**(150.2)**	(147.3)
Issuance of long-term debt	**6.7**	18.0
Principal repayments of long-term debt	**(0.3)**	(0.3)
Net proceeds from short-term borrowings	**0.1**	38.0
Investment contract deposits	**1,872.2**	1,783.0
Investment contract withdrawals	**(1,947.4)**	(1,535.5)
Net increase (decrease) in banking operation deposits	**(35.4)**	124.1
Other	**5.5**	4.7
Net cash provided by (used in) financing activities	**(403.1)**	98.3
Net decrease in cash and cash equivalents	**(717.8)**	(135.1)
Cash and cash equivalents at beginning of period	**2,977.5**	2,470.8
Cash and cash equivalents at end of period	$ **2,259.7**	$ 2,335.7
Supplemental disclosure of non-cash activities:		

Lease assets established upon adoption of accounting guidance	**$**	**168.8**	$
Lease liabilities established upon adoption of accounting guidance	**$**	**164.0**	$

See accompanying notes.

Principal Financial Group, Inc.
Notes to Consolidated Financial Statements
March 31, 2019
(Unaudited)

1. Nature of Operations and Significant Accounting Policies

Basis of Presentation

The accompanying unaudited 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, 2019, are not necessarily indicative of the results that may be expected for the year ended December 31, 2019. These interim unaudited consolidated financial statements should be read in conjunction with our annual audited financial statements as of December 31, 2018, included in our Form 10-K for the year ended December 31, 2018, filed with the United States Securities and Exchange Commission (SEC). The accompanying consolidated statement of financial position as of December 31, 2018, 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.

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.

Table of Contents

Principal Financial Group, Inc.
Notes to Consolidated Financial Statements (continued)
March 31, 2019
(Unaudited)

Recent Accounting Pronouncements

Description	Date of adoption	Effect on our consolidated financial statements or other significant matters
Standards not yet adopted:		
Targeted improvements to the accounting for long-duration insurance contracts This authoritative guidance updates 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 will be reviewed and updated periodically. Cash flow assumptions will be 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 will be updated quarterly with the impact recognized in other comprehensive income (OCI). 2. Market risk benefits, which are certain market-based options or guarantees associated with deposit or account balance contracts, will be measured at fair value. The periodic change in fair value related to instrument-specific credit risk will be recognized in OCI while the remaining change in fair value will be recognized in net income. 3. Deferred acquisition costs (DAC) for all insurance and annuity contracts will be 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 and disclosures about significant inputs, judgments, assumptions and methods used in measurement.	January 1, 2021	Our implementation and evaluation process to date includes, but is not limited to, identifying and documenting contracts and contract features in scope of the guidance; identifying the actuarial models, systems and processes to be updated; evaluating our systems solutions for implementing the new guidance and evaluating our key accounting policies. As we progress through our implementation, we will be able to better assess the impact to our consolidated financial statements; however, we expect this guidance to significantly change how we account for many of our insurance and annuity products.

The guidance for the liability for future policy benefits for traditional and limited-payment contracts and DAC will be applied 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. An entity may elect to apply the changes retrospectively. The guidance for market risk benefits will be applied retrospectively. Early adoption is permitted.		

Principal Financial Group, Inc.
Notes to Consolidated Financial Statements (continued)
March 31, 2019
(Unaudited)

Description	Date of adoption	Effect on our consolidated financial statements or other significant matters
Goodwill impairment testing This authoritative guidance simplifies how an entity is required to test goodwill for impairment by eliminating Step 2 (which measures a goodwill impairment loss by comparing the implied fair value of a reporting unit s goodwill to the carrying amount of that goodwill) from the goodwill impairment test. A goodwill impairment loss will be the amount by which a reporting unit s carrying value exceeds its fair value, not to exceed the carrying amount of goodwill. Entities will continue to have the option to perform a qualitative assessment to determine if a quantitative impairment test is necessary. Early adoption is permitted.	January 1, 2020	We are currently evaluating the impact this guidance will have on our consolidated financial statements, but do not expect it to have a material impact on our consolidated financial statements. We expect the guidance will reduce complexity and costs associated with performing a Step 2 test, should one be needed in the future. However, the impact on the outcome of any such future impairment assessment will be dependent on modeling factors that are not currently determinable.
Credit losses This authoritative guidance requires entities to use a current expected credit loss (CECL) model to measure impairment for most financial assets that are not recorded at fair value through net income. Under the CECL model, an entity will estimate lifetime expected credit losses considering available relevant information about historical events, current conditions and reasonable and supportable forecasts. The CECL model does not apply to available-for-sale debt securities. This guidance also expands the required credit loss disclosures and will be applied using a modified retrospective approach by recording a cumulative effect adjustment to retained earnings as of the beginning of the fiscal year of adoption. Early adoption is permitted.	January 1, 2020	Our implementation and evaluation process to date includes, but is not limited to, identifying financial assets within scope of the guidance, developing and refining CECL models for the relevant assets, preparing quarterly estimates of the cumulative effect of adoption, and drafting the required financial statement disclosures. We believe estimated credit losses under the CECL model will generally result in earlier loss recognition for loans and other receivables.
Standards adopted:		
Implementation costs in a cloud computing arrangement that is a service contract This authoritative guidance aligns the requirements for capitalizing implementation costs incurred in a hosting arrangement that is a service contract with the requirements for capitalizing implementation costs incurred to develop or obtain internal-use software. This guidance can be applied either retrospectively or prospectively and early adoption is permitted.	January 1, 2019	The effective date of the guidance is January 1, 2020; however, we elected to early-adopt this guidance on a prospective basis, effective January 1, 2019. This guidance did not have a material impact on our consolidated financial statements.

Principal Financial Group, Inc.
Notes to Consolidated Financial Statements (continued)
March 31, 2019
(Unaudited)

Description	Date of adoption	Effect on our consolidated financial statements or other significant matters
Leases This authoritative guidance requires lessee recognition of lease assets and lease liabilities on the balance sheet. The concept of an operating lease, where the lease assets and liabilities are off balance sheet, is eliminated under the new guidance. For lessors, the guidance modifies lease classification criteria and accounting for certain types of leases. Other key aspects of the guidance relate to the removal of the current real estate-specific guidance and new presentation and disclosure requirements. Lessees and lessors are required to recognize and measure leases using a modified retrospective approach, which includes certain optional practical expedients that may be elected. We elected the alternative transition method, which allows entities to initially apply the new standard at the adoption date and recognize a cumulative effect adjustment to the opening balance of retained earnings in the period of adoption.	January 1, 2019	We adopted the guidance using the modified retrospective approach and comparative periods were not restated. Further details are included under the caption Adoption of Lease Guidance and in Note 8, Contingencies, Guarantees, Indemnifications and Leases.
Targeted improvements to accounting for hedging activities This authoritative guidance updated certain recognition and measurement requirements for hedge accounting. The objective of the guidance is to more closely align the economics of a company s risk management activities in its financial results and reduce the complexity of applying hedge accounting. The updates included the expansion of hedging strategies that are eligible for hedge accounting, elimination of the separate measurement and reporting of hedge ineffectiveness, presentation of the changes in the fair value of the hedging instrument in the same consolidated statement of operations line as the earnings effect of the hedged item and simplification of hedge effectiveness assessments. This guidance also included new disclosures.	January 1, 2019	This guidance did not have a material impact on our consolidated financial statements. See Note 4, Derivative Financial Instruments, for further details.
Premium amortization on purchased callable debt securities This authoritative guidance applies to entities that hold certain non-contingently callable debt securities, where the amortized cost basis is at a premium to the price repayable by the issuer at the earliest call date. Under the guidance the premium will be amortized to the first call date.	January 1, 2019	This guidance did not have a material impact on our consolidated financial statements.

Principal Financial Group, Inc.
Notes to Consolidated Financial Statements (continued)
March 31, 2019
(Unaudited)

Description	Date of adoption	Effect on our consolidated financial statements or other significant matters
Reclassification of certain tax effects from accumulated other comprehensive income This authoritative guidance permits a reclassification from accumulated other comprehensive income (AOCI) to retained earnings for the stranded tax effects resulting from U.S. tax legislation enacted on December 22, 2017, which is referred to as the Tax Cuts and Jobs Act (U.S. tax reform). The amount of that reclassification includes the change in corporate income tax rate, as well as an election to include other income tax effects related to the application of U.S. tax reform. The guidance also requires disclosures about stranded tax effects.	January 1, 2018	The effective date of the guidance was January 1, 2019; however, we elected to early adopt the guidance. The guidance was applied at the beginning of the period of adoption and comparative periods were not restated. We reclassified the stranded tax effects in AOCI resulting from U.S. tax reform, which includes the change in corporate income tax rate and an election to reclassify the tax effects of the one-time deemed repatriation tax. A reclassification of $77.6 million was recorded as an increase to AOCI and a decrease to retained earnings.
Revenue recognition This authoritative guidance replaces all general and most industry specific revenue recognition guidance currently prescribed by U.S. GAAP. The core principle is that an entity recognizes revenue to reflect the transfer of a promised good or service to customers in an amount that reflects the consideration to which the entity expects to be entitled in exchange for that good or service. This guidance also provides clarification on when an entity is a principal or an agent in a transaction. In addition, the guidance updates the accounting for certain costs associated with obtaining and fulfilling a customer contract. The guidance may be applied using one of the following two methods: (1) retrospectively to each prior reporting period presented, or (2) retrospectively with the cumulative effect of initially applying the standard recognized at the date of initial application.	January 1, 2018	We adopted the guidance using the modified retrospective approach. The guidance did not have a material impact on our consolidated financial statements. A cumulative effect adjustment of $39.7 million was recorded as a decrease to total stockholders equity. See Note 12, Revenues from Contracts with Customers, for further details.
Income tax - intra-entity transfers of assets This authoritative guidance requires entities to recognize current and deferred income tax resulting from an intra-entity asset transfer when the transfer occurs. Prior to issuance of this guidance, U.S. GAAP did not allow recognition of income tax consequences until the asset had been sold to a third party. This guidance requires adoption through a cumulative effect adjustment to the balance sheet as of the beginning of the fiscal year of adoption.	January 1, 2018	We adopted the guidance using the modified retrospective approach. A cumulative effect adjustment of $8.7 million was recorded as an increase to retained earnings. In addition, other assets and deferred income taxes decreased $21.1 million and $29.8 million, respectively, due to the adoption of this guidance.

Principal Financial Group, Inc.
Notes to Consolidated Financial Statements (continued)
March 31, 2019
(Unaudited)

Description	Date of adoption	Effect on our consolidated financial statements or other significant matters
Financial instruments - recognition and measurement This authoritative guidance addresses certain aspects of recognition, measurement, presentation and disclosure of financial instruments. The guidance eliminated the classification of equity securities into different categories (trading or available-for-sale) and requires equity investments to be measured at fair value with changes in the fair value recognized through net income. The guidance also updated certain financial instrument disclosures and eliminated the requirement to disclose the methods and significant assumptions used to estimate the fair value of financial instruments that are measured at amortized cost on the balance sheet.	January 1, 2018	We adopted this guidance using the modified retrospective approach. A cumulative effect adjustment of $1.0 million was recorded as a decrease to AOCI and a corresponding increase to retained earnings. The guidance did not have a material impact on our consolidated financial statements. See Note 3, Investments, for further details.
Nonfinancial asset derecognition and partial sales of nonfinancial **assets** This authoritative guidance clarifies the scope of the recently established guidance on nonfinancial asset derecognition and the accounting for partial sales of nonfinancial assets. The guidance conforms the derecognition guidance on nonfinancial assets with the model for transactions in the new revenue recognition standard.	January 1, 2018	The guidance did not have a material impact on our consolidated financial statements.
Presentation of net periodic pension cost and net periodic **postretirement benefit cost** This authoritative guidance requires that an employer disaggregate the service cost component from the other components of net benefit cost. The guidance also provides explicit guidance on the presentation of the service cost component and the other components of net benefit cost in the consolidated statement of operations and allows only the service cost component of net benefit cost to be eligible for capitalization.	January 1, 2018	The guidance did not have a material impact on our consolidated financial statements.
Definition of a business This authoritative guidance clarifies the definition of a business to assist with evaluating when transactions involving an integrated set of assets and activities (a set) should be accounted for as acquisitions or disposals of assets or businesses. The guidance requires that when substantially all of the fair value of the gross	January 1, 2018	The guidance did not have a material impact on our consolidated financial statements.

assets acquired or disposed of is concentrated in a single identifiable asset or a group of similar identifiable assets, the set is not a business. The guidance also requires a set to include, at a minimum, an input and a substantive process that together significantly contribute to the ability to create output to be considered a business. Lastly, the guidance removes the evaluation of whether a market participant could replace missing elements and narrows the definition of outputs by more closely aligning it with how outputs are described in the revenue recognition guidance. The guidance will be applied prospectively.		

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. Each of the standards listed above is in varying stages in our implementation process based on its issuance and adoption dates. We are on track to implement guidance by the respective effective dates.

Principal Financial Group, Inc.
Notes to Consolidated Financial Statements (continued)
March 31, 2019
(Unaudited)

Adoption of Lease Guidance

On January 1, 2019, we adopted the guidance using the modified retrospective approach with the cumulative effect of initially applying the standard recognized at the date of adoption. We elected the package of practical expedients permitted under the transition guidance. In addition, we elected the hindsight practical expedient to determine the lease term for existing leases. We have agreements with lease and non-lease components, which we account for as a combined unit of account for all classes.

The impact of the guidance to our consolidated financial statements primarily related to the establishment of additional assets and liabilities of $168.8 million and $164.0 million, respectively. The difference between the additional assets and liabilities, net of deferred tax impacts, was recorded as a cumulative effect adjustment to retained earnings and increased total stockholders equity by $4.0 million.

Results of reporting periods beginning January 1, 2019, are presented under the new guidance, while prior period amounts are not adjusted and continue to be reported in accordance with our prior accounting. The guidance did not have a material impact on our consolidated statements of operations and did not impact earnings per common share.

Derivatives

Overview

Derivatives are financial instruments whose values are derived from interest rates, foreign exchange rates, financial indices or the values of securities. Derivatives generally used by us include swaps, options, futures and forwards. Derivative positions are either assets or liabilities in the consolidated statements of financial position and are measured at fair value, generally by obtaining quoted market prices or through the use of pricing models. See Note 10, Fair Value Measurements, for policies related to the determination of fair value. Fair values can be affected by changes in interest rates, foreign exchange rates, financial indices, values of securities, credit spreads, and market volatility and liquidity.

Accounting and Financial Statement Presentation

We designate derivatives as either:

(a) a hedge of the exposure to changes in the fair value of a recognized asset or liability or an unrecognized firm commitment, including those denominated in a foreign currency (fair value hedge);

(b) a hedge of a forecasted transaction or the exposure to variability of cash flows to be received or paid related to a recognized asset or liability, including those denominated in a foreign currency (cash flow hedge);

(c) a hedge of a net investment in a foreign operation or

(d) a derivative not designated as a hedging instrument.

Our accounting for the ongoing changes in fair value of a derivative depends on the intended use of the derivative and the designation, as described above, and is determined when the derivative contract is entered into or at the time of redesignation. Hedge accounting is used for derivatives that are specifically designated in advance as hedges and that reduce our exposure to an indicated risk by having a high correlation between changes in the value of the derivatives and the items being hedged at both the inception of the hedge and throughout the hedge period.

Fair Value Hedges. When a derivative is designated as a fair value hedge and is determined to be highly effective, changes in its fair value, along with changes in the fair value of the hedged asset, liability or firm commitment attributable to the hedged risk, are reported in the same income statement line item that is used to report the earnings effect of the hedged item. For fair value hedges of fixed maturities, available-for-sale, these changes in fair value are reported in net investment income. Prior to 2019, these changes in fair value were recorded in net realized capital gains (losses). A fair value hedge determined to be highly effective may still result in a mismatch between the change in the fair value of the hedging instrument and the change in the fair value of the hedged item attributable to the hedged risk.

Cash Flow Hedges. When a derivative is designated as a cash flow hedge and is determined to be highly effective, changes in its fair value are recorded as a component of OCI. At the time the variability of cash flows being hedged impacts

Principal Financial Group, Inc.
Notes to Consolidated Financial Statements (continued)
March 31, 2019
(Unaudited)

net income, the related portion of deferred gains or losses on the derivative instrument is reclassified and reported in net income.

Net Investment in a Foreign Operation Hedge. When a derivative is used as a hedge of a net investment in a foreign operation, its change in fair value, to the extent effective as a hedge, is recorded as a component of OCI. If the foreign operation is sold or upon complete or substantially complete liquidation, the deferred gains or losses on the derivative instrument are reclassified into net income.

Non-Hedge Derivatives. If a derivative does not qualify or is not designated for hedge accounting, all changes in fair value are reported in net income without considering the changes in the fair value of the economically associated assets or liabilities.

Hedge Documentation and Effectiveness Testing. At inception, we formally document all relationships between hedging instruments and hedged items, as well as our risk management objective and strategy for undertaking various hedge transactions. This process includes associating all derivatives designated as fair value or cash flow hedges with specific assets or liabilities on the consolidated statements of financial position or with specific firm commitments or forecasted transactions. Effectiveness of the hedge is formally assessed at inception and throughout the life of the hedging relationship. Even if a hedge is determined to be highly effective, the hedge may still result in a mismatch between the change in the fair value of the hedging instrument and the change in the fair value of the hedged item attributable to the hedged risk.

We use qualitative and quantitative methods to assess hedge effectiveness. Qualitative methods may include monitoring changes to terms and conditions and counterparty credit ratings. Quantitative methods may include statistical tests including regression analysis and minimum variance and dollar offset techniques.

Termination of Hedge Accounting. We prospectively discontinue hedge accounting when (1) the criteria to qualify for hedge accounting is no longer met, e.g., a derivative is determined to no longer be highly effective in offsetting the change in fair value or cash flows of a hedged item; (2) the derivative expires, is sold, terminated or exercised or (3) we remove the designation of the derivative being the hedging instrument for a fair value or cash flow hedge.

If it is determined that a derivative no longer qualifies as an effective hedge, the derivative will continue to be carried on the consolidated statements of financial position at its fair value, with changes in fair value recognized prospectively in net realized capital gains (losses). The asset or liability under a fair value hedge will no longer be adjusted for changes in fair value pursuant to hedging rules and the existing basis adjustment is amortized to the consolidated statements of operations line associated with the asset or liability. The component of AOCI related to discontinued cash flow hedges that are no longer highly effective is amortized to the consolidated statements of operations consistent with the net income impacts of the original hedged cash flows. If a cash flow hedge is discontinued because it is probable the hedged forecasted transaction will not occur, the deferred gain or loss is immediately reclassified from AOCI into net income.

Embedded Derivatives. We purchase and issue certain financial instruments and products that contain a derivative that is embedded in the financial instrument or product. We assess whether this embedded derivative is clearly and closely related to the asset or liability that serves as its host contract. If we deem that the embedded derivative s terms are not clearly and closely related to the host contract, and a separate instrument with the same terms would qualify as a derivative instrument, the derivative is bifurcated from that contract and held at fair value on the consolidated statements of financial position, with changes in fair value reported in net income.

Separate Accounts

The separate accounts are legally segregated and are not subject to the 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. 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.

Table of Contents

Separate account assets and separate account liabilities include certain international retirement accumulation products where the segregated funds and associated obligation to the client are consolidated within our financial statements. We have determined that summary totals are the most meaningful presentation for these funds.

As of March 31, 2019 and December 31, 2018, the separate accounts included a separate account valued at $102.7 million and $94.9 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 to eligible participants of the qualified plan. 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.

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, 2019 and December 31, 2018.

Consolidated Variable Interest Entities

Grantor Trust

We contributed undated subordinated floating rate notes to a grantor trust. The trust separated its cash flows by issuing an interest-only certificate and a residual certificate related to each note contributed. Each interest-only certificate entitles the holder to interest on the stated note for a specified term, while the residual certificate entitles the holder to interest payments subsequent to the term of the interest-only certificate and to all principal payments. We retained the interest-only certificates and the residual certificates were subsequently sold to third parties. We determined the grantor trust is a VIE due to insufficient equity to sustain it. We determined we are the primary beneficiary as a result of our contribution of securities into the trust and our significant continuing interest in the trust.

Commercial Mortgage-Backed Securities

We sold commercial mortgage loans to a real estate mortgage investment conduit trust. The trust issued various commercial mortgage-backed securities (CMBS) certificates using the cash flows of the underlying commercial mortgage loans it purchased. This is considered a VIE due to insufficient equity to sustain itself. We determined we are the primary beneficiary as we retained the special servicing role for the assets within the trust as well as the ownership of the bond class that controls the unilateral kick-out rights of the special servicer.

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-

Principal Financial Group, Inc.
Notes to Consolidated Financial Statements (continued)
March 31, 2019
(Unaudited)

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.

We also invest in certain series of another investment fund. These series are VIEs as the equity holders of each series lack the power to direct the most significant activities of the VIE. We determined we are the primary beneficiary of these series as our interest is more than insignificant and collectively we have the power to direct the most significant activities of the fund.

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, 2019		December 31, 2018	
	Total assets	Total liabilities	Total assets	Total liabilities
	(in millions)			
Grantor trust (1)	**$ 99.6**	**$ 94.9**	$ 95.0	$ 89.4
CMBS	**5.9**		6.4	
Mandatory retirement savings funds (2)	**40,311.8**	**39,940.5**	37,915.7	37,579.3
Real estate (3)	**389.9**	**70.7**	379.2	70.6
Sponsored investment funds (4)	**697.8**	**52.4**	526.5	3.6
Total	**$ 41,505.0**	**$ 40,158.5**	$ 38,922.8	$ 37,742.9

(1) The assets of grantor trusts are primarily fixed maturities, available-for-sale. The liabilities are primarily other liabilities that reflect an embedded derivative of the forecasted transaction to deliver the underlying securities.

(2) The assets of the mandatory retirement savings funds include separate account assets and equity securities. The liabilities include separate account liabilities and contractholder funds.

(3) The assets of the real estate VIEs primarily include real estate and cash. Liabilities primarily include long-term debt and other liabilities.

(4) 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 $460.2 million and $325.7 million redeemable noncontrolling interest for sponsored investment funds as of March 31, 2019 and December 31, 2018, respectively.

Principal Financial Group, Inc.
Notes to Consolidated Financial Statements (continued)
March 31, 2019
(Unaudited)

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 CMBS, residential mortgage-backed pass-through securities (RMBS) and other asset-backed securities (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, invest in and have other interests 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.

Table of Contents

Principal Financial Group, Inc.
Notes to Consolidated Financial Statements (continued)
March 31, 2019
(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, 2019		
Fixed maturities, available-for-sale:		
Corporate	**$ 239.3**	**$ 224.9**
Residential mortgage-backed pass-through securities	**2,484.5**	**2,471.5**
Commercial mortgage-backed securities	**4,242.1**	**4,234.0**
Collateralized debt obligations (2)	**2,765.7**	**2,786.7**
Other debt obligations	**7,545.3**	**7,523.3**
Fixed maturities, trading:		
Residential mortgage-backed pass-through securities	**318.8**	**318.8**
Commercial mortgage-backed securities	**18.5**	**18.5**
Collateralized debt obligations (2)	**20.3**	**20.3**
Other debt obligations	**12.3**	**12.3**
Equity securities	**110.0**	**110.0**
Other investments:		
Other limited partnership and fund interests (3)	**802.3**	**1,428.9**
December 31, 2018		
Fixed maturities, available-for-sale:		
Corporate	$ 235.3	$ 222.6
Residential mortgage-backed pass-through securities	2,460.6	2,488.5
Commercial mortgage-backed securities	3,945.6	4,023.1
Collateralized debt obligations (2)	2,420.8	2,451.3
Other debt obligations	7,153.2	7,196.6
Fixed maturities, trading:		
Residential mortgage-backed pass-through securities	322.6	322.6
Commercial mortgage-backed securities	13.8	13.8
Collateralized debt obligations (2)	11.8	11.8
Other debt obligations	9.7	9.7
Equity securities	103.9	103.9
Other investments:		
Other limited partnership and fund interests (3)	737.5	1,432.2

(1) Our risk of loss is limited to our initial investment measured at amortized cost for fixed maturities, available-for-sale. 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. 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, 2019 and December 31, 2018, the maximum exposure to loss for other limited partnership and fund interests includes $129.7 million and $132.2 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.

Principal Financial Group, Inc.
Notes to Consolidated Financial Statements (continued)
March 31, 2019
(Unaudited)

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, 2019 and December 31, 2018, money market mutual funds we manage held $3.6 billion and $3.0 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

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 10, 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 DAC and related actuarial balances, derivatives in cash flow hedge relationships and applicable income taxes. Mark-to-market adjustments on equity securities, unrealized gains and losses related to hedged portions of fixed maturities, available-for-sale in fair value hedging relationships prior to 2019 and mark-to-market adjustments on certain fixed maturities, trading are reflected in net realized capital gains (losses). Beginning in 2019, 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 declines in value that are other than temporary. Impairments in value deemed to be other than temporary are primarily reported in net income as a component of net realized capital gains (losses), with noncredit impairment losses for certain fixed maturities, available-for-sale reported in other comprehensive income (OCI). For loan-backed and structured securities, we recognize income using a constant effective yield based on currently anticipated cash flows.

20

Principal Financial Group, Inc.
Notes to Consolidated Financial Statements (continued)
March 31, 2019
(Unaudited)

The amortized cost, gross unrealized gains and losses, other-than-temporary impairments in AOCI and fair value of available-for-sale securities were as follows:

	Amortized cost	Gross unrealized gains	Gross unrealized losses	Fair value	Other-than-temporary impairments in AOCI (1)
			(in millions)		
March 31, 2019					
Fixed maturities, available-for-sale:					
U.S. government and agencies	**$ 1,467.0**	**$ 40.6**	**$ 9.2**	**$ 1,498.4**	**$**
Non-U.S. governments	**876.4**	**90.9**	**3.9**	**963.4**	
States and political subdivisions	**6,301.7**	**351.8**	**27.2**	**6,626.3**	
Corporate	**35,242.7**	**1,985.4**	**258.9**	**36,969.2**	**0.5**
Residential mortgage-backed pass-through securities	**2,471.5**	**38.1**	**25.1**	**2,484.5**	
Commercial mortgage-backed securities	**4,234.0**	**51.6**	**43.5**	**4,242.1**	**19.2**
Collateralized debt obligations (2)	**2,786.7**	**0.2**	**21.2**	**2,765.7**	**1.4**
Other debt obligations	**7,551.3**	**69.1**	**47.0**	**7,573.4**	**35.3**
Total fixed maturities, available-for-sale	**$ 60,931.3**	**$ 2,627.7**	**$ 436.0**	**$ 63,123.0**	**$ 56.4**
December 31, 2018					
Fixed maturities, available-for-sale:					
U.S. government and agencies	$ 1,441.6	$ 16.4	$ 17.0	$ 1,441.0	$
Non-U.S. governments	833.4	71.7	14.6	890.5	
States and political subdivisions	6,125.0	196.0	95.3	6,225.7	
Corporate	35,134.6	1,249.9	845.2	35,539.3	
Residential mortgage-backed pass-through securities	2,488.5	21.9	49.8	2,460.6	
Commercial mortgage-backed securities	4,023.1	17.1	94.6	3,945.6	16.3
Collateralized debt obligations (2)	2,451.3		30.5	2,420.8	1.2
Other debt obligations	7,228.3	39.4	82.7	7,185.0	36.1
Total fixed maturities, available-for-sale	$ 59,725.8	$ 1,612.4	$ 1,229.7	$ 60,108.5	$ 53.6

(1) Excludes $65.1 million and $64.2 million as of March 31, 2019 and December 31, 2018, respectively, of net unrealized gains on impaired fixed maturities, available-for-sale related to changes in fair value subsequent to the impairment date, which are included in gross unrealized gains and gross unrealized losses.

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

The amortized cost and fair value of fixed maturities, available-for-sale as of March 31, 2019, by expected maturity, were as follows:

	Amortized cost	Fair value
	(in millions)	
Due in one year or less	**$ 2,659.9**	**$ 2,676.8**
Due after one year through five years	**10,451.4**	**10,643.0**
Due after five years through ten years	**10,617.3**	**10,899.6**
Due after ten years	**20,159.2**	**21,837.9**
Subtotal	**43,887.8**	**46,057.3**
Mortgage-backed and other asset-backed securities	**17,043.5**	**17,065.7**
Total	**$ 60,931.3**	**$ 63,123.0**

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.

Principal Financial Group, Inc.
Notes to Consolidated Financial Statements (continued)
March 31, 2019
(Unaudited)

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): other-than-temporary impairments of securities and subsequent realized recoveries, mark-to-market adjustments on 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, changes in the mortgage loan valuation allowance provision, 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). The major components of net realized capital gains (losses) on investments were as follows:

	For the three months ended March 31, 2019	2018
	(in millions)	
Fixed maturities, available-for-sale:		
Gross gains	**$ 2.5**	$ 4.3
Gross losses	**(1.5)**	(26.7)
Net impairment losses	**(6.8)**	(9.9)
Hedging, net (1)		(5.1)
Fixed maturities, trading (2)	**14.2**	(10.7)
Equity securities (3)	**21.0**	(2.0)
Mortgage loans	**0.3**	0.4
Derivatives (1)	**5.0**	9.4
Other	**49.8**	15.2
Net realized capital gains (losses)	**$ 84.5**	$ (25.1)

(1) Upon adoption of authoritative guidance effective January 1, 2019, 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. Prior to 2019, 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 were reported in net realized capital gains (losses). See Note 4, Derivative Financial Instruments, for further details.

(2) Unrealized gains (losses) on fixed maturities, trading still held at the reporting date were $14.2 million and $(10.7) million for the three months ended March 31, 2019 and 2018, respectively.

(3) Unrealized gains (losses) on equity securities still held at the reporting date were $19.8 million and $(5.0) million for the three months ended March 31, 2019 and 2018, respectively. This excludes $22.5 million and $0.0

million of unrealized gains (losses) on equity securities still held at the reporting date for the three months ended March 31, 2019 and 2018, respectively, that were reported in net investment income.

Proceeds from sales of investments (excluding call and maturity proceeds) in fixed maturities, available-for-sale were $163.0 million and $1,211.8 million for the three months ended March 31, 2019 and 2018, respectively.

Other-Than-Temporary Impairments

We have a process in place to identify fixed maturity securities that could potentially have an impairment that is other than temporary. 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 are reviewed to determine whether an other-than-temporary decline in value exists and whether losses should be recognized. We consider relevant facts and circumstances in evaluating whether a credit or interest rate related impairment of a security is other than temporary. Relevant facts and circumstances considered include: (1) the extent

Principal Financial Group, Inc.
Notes to Consolidated Financial Statements (continued)
March 31, 2019
(Unaudited)

and length of time the fair value has been 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; (4) for structured securities, the adequacy of the expected cash flows and (5) our intent 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. To the extent we determine a security is deemed to be other than temporarily impaired, an impairment loss is recognized.

The way in which impairment losses on fixed maturities are recognized in the financial statements is dependent on the facts and circumstances related to the specific security. If we intend to sell a security or it is more likely than not that we would be required to sell a security before the recovery of its amortized cost, we recognize an other-than-temporary impairment in net income for the difference between amortized cost and fair value. If we do not expect to recover the amortized cost basis, we do not plan to sell the security and if it is not more likely than not that we would be required to sell a security before the recovery of its amortized cost, the recognition of the other-than-temporary impairment is bifurcated. We recognize the credit loss portion in net income and the noncredit loss portion in OCI (bifurcated OTTI).

Total other-than-temporary impairment losses, net of recoveries from the sale of previously impaired fixed maturities, available-for-sale, were as follows:

	For the three months ended March 31, 2019	2018
	(in millions)	
Net other-than-temporary impairment losses (recoveries)	**$ (9.6)**	$ 1.3
Other-than-temporary impairment losses on fixed maturities, available-for-sale reclassified to (from) OCI (1)	**2.8**	(11.2)
Net impairment losses on fixed maturities, available-for-sale	**$ (6.8)**	$ (9.9)

(1) Represents the net impact of (a) gains resulting from reclassification of noncredit impairment losses for fixed maturities with bifurcated OTTI from net realized capital gains (losses) to OCI and (b) losses resulting from reclassification of previously recognized noncredit impairment losses from OCI to net realized capital gains (losses) for fixed maturities with bifurcated OTTI that had additional credit losses or fixed maturities that previously had bifurcated OTTI that have now been sold or are intended to be sold.

We estimate the amount of the credit loss component of a fixed maturity security impairment 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.

Principal Financial Group, Inc.
Notes to Consolidated Financial Statements (continued)
March 31, 2019
(Unaudited)

The following table provides a rollforward of accumulated credit losses for fixed maturities with bifurcated credit losses. The purpose of the table is to provide detail of (1) additions to the bifurcated credit loss amounts recognized in net realized capital gains (losses) during the period and (2) decrements for previously recognized bifurcated credit losses where the loss is no longer bifurcated and/or there has been a positive change in expected cash flows or accretion of the bifurcated credit loss amount.

	For the three months ended March 31, 2019	2018
	(in millions)	
Beginning balance	**$ (117.5)**	$ (124.3)
Credit losses for which an other-than-temporary impairment was not previously recognized	**(2.0)**	(4.6)
Credit losses for which an other-than-temporary impairment was previously recognized	**(4.3)**	(9.8)
Reduction for credit losses previously recognized on fixed maturities now sold, paid down or intended to be sold	**20.4**	7.3
Net reduction for positive changes in cash flows expected to be collected and amortization (1)	**1.1**	2.2
Ending balance	**$ (102.3)**	$ (129.2)

(1) Amounts are recognized in net investment income.

Gross Unrealized Losses for Available-for-Sale Securities

For available-for-sale securities with unrealized losses, including other-than-temporary impairment losses reported in OCI, 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, 2019					
	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:						
U.S. government and agencies	**$ 1.1**	**$**	**$ 399.4**	**$ 9.2**	**$ 400.5**	**$ 9.2**
Non-U.S. governments	**5.8**	**0.2**	**146.3**	**3.7**	**152.1**	**3.9**
States and political subdivisions	**42.3**	**3.7**	**1,142.8**	**23.5**	**1,185.1**	**27.2**
Corporate	**1,539.9**	**40.8**	**8,035.9**	**218.1**	**9,575.8**	**258.9**
Residential mortgage-backed pass-						

through securities		**1.3**				**1,137.7**		**25.1**		**1,139.0**		**25.1**
Commercial mortgage-backed securities		**185.7**		**3.0**		**1,704.5**		**40.5**		**1,890.2**		**43.5**
Collateralized debt obligations (1)		**1,921.6**		**12.8**		**406.9**		**8.4**		**2,328.5**		**21.2**
Other debt obligations		**246.1**		**1.4**		**3,252.4**		**45.6**		**3,498.5**		**47.0**
Total fixed maturities, available-for-sale	**$**	**3,943.8**	**$**	**61.9**	**$**	**16,225.9**	**$**	**374.1**	**$**	**20,169.7**	**$**	**436.0**

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

Of the total amounts, Principal Life s consolidated portfolio represented $19,889.5 million in available-for-sale fixed maturities with gross unrealized losses of $428.5 million. Of the available-for-sale fixed maturities within Principal Life s consolidated portfolio in a gross unrealized loss position, 95% were investment grade (rated AAA through BBB-) with an average price of 98 (carrying value/amortized cost) as of March 31, 2019. Gross unrealized losses in our fixed maturities portfolio decreased during the three months ended March 31, 2019, primarily due to tightening of credit spreads and a decrease in interest rates.

Table of Contents

Principal Financial Group, Inc.
Notes to Consolidated Financial Statements (continued)
March 31, 2019
(Unaudited)

For those securities that had been in a continuous unrealized loss position for less than twelve months, Principal Life s consolidated portfolio held 362 securities with a carrying value of $3,897.5 million and unrealized losses of $60.3 million reflecting an average price of 98 as of March 31, 2019. Of this portfolio, 86% was investment grade (rated AAA through BBB-) as of March 31, 2019, with associated unrealized losses of $43.8 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 2,194 securities with a carrying value of $15,992.0 million and unrealized losses of $368.2 million. The average credit rating of this portfolio was A+ with an average price of 98 as of March 31, 2019. Of the $368.2 million in unrealized losses, the corporate sector accounts for $213.1 million in unrealized losses with an average price of 97 and an average credit rating of A-. The remaining unrealized losses also include $39.9 million within the commercial mortgage-backed securities sector with an average price of 98 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.

Because we expected to recover our amortized cost, 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 consider these investments to be other-than-temporarily impaired as of March 31, 2019.

	December 31, 2018					
	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:						
U.S. government and agencies	$ 101.8	$ 1.6	$ 500.3	$ 15.4	$ 602.1	$ 17.0
Non-U.S. governments	210.2	4.7	191.5	9.9	401.7	14.6
States and political subdivisions	1,359.9	33.9	1,590.3	61.4	2,950.2	95.3
Corporate	13,198.4	476.0	6,865.0	369.2	20,063.4	845.2
Residential mortgage-backed pass-through securities	236.7	1.0	1,410.2	48.8	1,646.9	49.8
Commercial mortgage-backed securities	790.3	11.6	2,223.2	83.0	3,013.5	94.6
Collateralized debt obligations (1)	2,233.3	24.0	162.6	6.5	2,395.9	30.5
Other debt obligations	985.5	4.9	3,665.1	77.8	4,650.6	82.7
Total fixed maturities, available-for-sale	$ 19,116.1	$ 557.7	$ 16,608.2	$ 672.0	$ 35,724.3	$ 1,229.7

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

Of the total amounts, Principal Life s consolidated portfolio represented $35,051.9 million in available-for-sale fixed maturities with gross unrealized losses of $1,202.9 million. Of the available-for-sale fixed maturities within Principal Life s consolidated portfolio in a gross unrealized loss position, 95% were investment grade (rated AAA through BBB-) with an average price of 97 (carrying value/amortized cost) as of December 31, 2018. Gross unrealized losses in our fixed maturities portfolio increased during the year ended December 31, 2018, primarily due to widening of credit spreads and an increase 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 2,076 securities with a carrying value of $18,764.0 million and unrealized losses of $541.3 million reflecting an average price of 97 as of December 31, 2018. Of this portfolio, 92% was investment grade (rated AAA through BBB-) as of December 31, 2018, with associated unrealized losses of $473.7 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 2,335 securities with a carrying value of $16,287.9 million and unrealized losses of $661.6 million. The average credit rating of this portfolio was AA- with an average price of 96 as of December 31, 2018. Of the

Principal Financial Group, Inc.
Notes to Consolidated Financial Statements (continued)
March 31, 2019
(Unaudited)

$661.6 million in unrealized losses, the corporate sector accounts for $360.4 million in unrealized losses with an average price of 95 and an average credit rating of A-. The remaining unrealized losses also include $82.2 million within the commercial mortgage-backed securities sector with an average price of 96 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.

Because we expected to recover our amortized cost, 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 consider these investments to be other-than-temporarily impaired as of December 31, 2018.

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, the noncredit component of impairment losses on fixed maturities available-for-sale 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 DAC and related actuarial balances, policyholder liabilities, noncontrolling interest and applicable income taxes was as follows:

	March 31, 2019	December 31, 2018
	(in millions)	
Net unrealized gains on fixed maturities, available-for-sale (1)	**$ 2,217.6**	$ 400.8
Noncredit component of impairment losses on fixed maturities, available-for-sale	**(56.4)**	(53.6)
Net unrealized gains on derivative instruments	**107.7**	118.5
Adjustments for assumed changes in amortization patterns	**(90.3)**	30.3
Adjustments for assumed changes in policyholder liabilities	**(590.4)**	(293.7)
Net unrealized gains on other investments and noncontrolling interest adjustments	**77.7**	68.8
Provision for deferred income taxes	**(361.3)**	(63.8)
Net unrealized gains on available-for-sale securities and derivative instruments	**$ 1,304.6**	$ 207.3

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

Mortgage Loans

Mortgage loans consist of commercial and residential mortgage loans. We evaluate risks inherent in our commercial mortgage loans in two classes: (1) brick and mortar property loans, including mezzanine loans, where we analyze the property s rent payments as support for the loan, and (2) credit tenant loans (CTL), where we rely on the credit analysis of the tenant for the repayment of the loan. We evaluate risks inherent in our residential mortgage loan portfolio in two classes: (1) first lien mortgages and (2) home equity mortgages. The carrying amount of our mortgage loan portfolio was as follows:

	March 31, 2019	December 31, 2018
	(in millions)	
Commercial mortgage loans	**$ 14,274.2**	$ 13,996.3
Residential mortgage loans	**1,350.9**	1,368.0
Total amortized cost	**15,625.1**	15,364.3
Valuation allowance	**(27.6)**	(27.4)
Total carrying value	**$ 15,597.5**	$ 15,336.9

Principal Financial Group, Inc.
Notes to Consolidated Financial Statements (continued)
March 31, 2019
(Unaudited)

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, 2019	2018
	(in millions)	
Commercial mortgage loans:		
Purchased	**$ 12.9**	$
Sold	**0.5**	
Residential mortgage loans:		
Purchased	**33.2**	112.2
Sold	**10.9**	23.6

Our commercial mortgage loan portfolio consists primarily of non-recourse, fixed rate mortgages on stabilized properties. Our commercial mortgage loan portfolio is diversified by geographic region and specific collateral property type as follows:

	March 31, 2019 Amortized cost	Percent of total	December 31, 2018 Amortized cost	Percent of total
	($ in millions)			
Geographic distribution				
New England	**$ 636.5**	**4.5 %**	$ 640.6	4.6 %
Middle Atlantic	**3,997.5**	**28.1**	3,927.3	28.0
East North Central	**605.7**	**4.2**	592.8	4.2
West North Central	**203.6**	**1.4**	205.8	1.5
South Atlantic	**2,205.1**	**15.4**	2,206.5	15.8
East South Central	**419.5**	**2.9**	422.5	3.0
West South Central	**1,309.7**	**9.2**	1,213.8	8.7
Mountain	**1,004.4**	**7.0**	968.6	6.9
Pacific	**3,624.9**	**25.4**	3,567.6	25.5
International	**267.3**	**1.9**	250.8	1.8
Total	**$ 14,274.2**	**100.0 %**	$ 13,996.3	100.0 %
Property type distribution				
Office	**$ 4,579.7**	**32.2 %**	$ 4,625.8	33.0 %
Retail	**2,218.1**	**15.5**	2,305.6	16.5
Industrial	**2,305.2**	**16.1**	2,312.9	16.5
Apartments	**4,654.7**	**32.6**	4,250.5	30.4
Hotel	**98.9**	**0.7**	99.8	0.7
Mixed use/other	**417.6**	**2.9**	401.7	2.9
Total	**$ 14,274.2**	**100.0 %**	$ 13,996.3	100.0 %

Our residential mortgage loan portfolio is composed of first lien mortgages with an amortized cost of $1,336.8 million and $1,352.9 million and home equity mortgages with an amortized cost of $14.1 million and $15.1 million as of March 31, 2019 and December 31, 2018, respectively. Our first lien loans are concentrated in Chile and the United States. Our residential home equity mortgages are concentrated in the United States and are generally second lien mortgages comprised of closed-end loans and lines of credit.

Mortgage Loan Credit Monitoring

Commercial Credit Risk Profile Based on Internal Rating

We actively monitor and manage our commercial mortgage loan portfolio. All commercial mortgage loans 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 model stresses 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

Principal Financial Group, Inc.
Notes to Consolidated Financial Statements (continued)
March 31, 2019
(Unaudited)

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. As the credit risk for commercial mortgage loans 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 are updated at least annually and potentially more often for certain loans with material changes in collateral value or occupancy and for loans on an internal watch list .

Commercial mortgage loans that require more frequent and detailed attention are identified and placed on an internal watch list . Among the criteria that would 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.

The amortized cost of our commercial mortgage loan portfolio by credit risk, as determined by our internal rating system expressed in terms of an S&P bond equivalent rating, was as follows:

	March 31, 2019		
	Brick and mortar	CTL	Total
		(in millions)	
A- and above	**$ 12,997.3**	**$ 82.3**	**$ 13,079.6**
BBB+ thru BBB-	**1,019.1**	**101.8**	**1,120.9**
BB+ thru BB-	**68.1**		**68.1**
B+ and below	**5.6**		**5.6**
Total	**$ 14,090.1**	**$ 184.1**	**$ 14,274.2**

	December 31, 2018		
	Brick and mortar	CTL	Total
		(in millions)	
A- and above	$ 12,735.2	$ 84.3	$ 12,819.5
BBB+ thru BBB-	977.3	105.7	1,083.0
BB+ thru BB-	88.3		88.3
B+ and below	5.5		5.5
Total	$ 13,806.3	$ 190.0	$ 13,996.3

Residential 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 residential mortgage loans as loans 90 days or greater delinquent or on non-accrual status.

The amortized cost of our performing and non-performing residential mortgage loans was as follows:

	March 31, 2019		
	First liens	**Home equity**	**Total**
		(in millions)	
Performing	**$ 1,324.0**	**$ 10.1**	**$ 1,334.1**
Non-performing	**12.8**	**4.0**	**16.8**
Total	**$ 1,336.8**	**$ 14.1**	**$ 1,350.9**

	December 31, 2018		
	First liens	**Home equity**	**Total**
		(in millions)	
Performing	$ 1,340.3	$ 10.8	$ 1,351.1
Non-performing	12.6	4.3	16.9
Total	$ 1,352.9	$ 15.1	$ 1,368.0

Table of Contents

Principal Financial Group, Inc.
Notes to Consolidated Financial Statements (continued)
March 31, 2019
(Unaudited)

Non-Accrual Mortgage Loans

Commercial and residential mortgage loans are placed on non-accrual status if we have concern regarding the collectability of future payments or if a loan 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 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 of the loan. When a loan 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. Residential first lien mortgages in the Chilean market are carried on accrual for a longer period of delinquency than domestic loans, as assessment of collectability is based on the nature of the loans and collection practices in that market.

The amortized cost of mortgage loans on non-accrual status was as follows:

	March 31, 2019	December 31, 2018
	(in millions)	
Residential:		
First liens	**$ 9.6**	$ 10.1
Home equity	**4.0**	4.3
Total	**$ 13.6**	$ 14.4

The aging of our mortgage loans, based on amortized cost, was as follows:

	March 31, 2019						
	30-59 days past due	60-89 days past due	90 days or more past due	Total past due	Current	Total loans	Recorded investment 90 days or more and accruing
				(in millions)			
Commercial-brick and mortar	**$ —**	**$ —**	**$ —**	**$ —**	**$ 14,090.1**	**$ 14,090.1**	**$ —**
Commercial-CTL					**184.1**	**184.1**	
Residential-first liens	**36.9**	**10.7**	**11.8**	**59.4**	**1,277.4**	**1,336.8**	**3.2**
Residential-home equity	**0.6**	**0.2**	**0.5**	**1.3**	**12.8**	**14.1**	
Total	**$ 37.5**	**$ 10.9**	**$ 12.3**	**$ 60.7**	**$ 15,564.4**	**$ 15,625.1**	**$ 3.2**

December 31, 2018

Recorded

	30-59 days past due	60-89 days past due	90 days or more past due	Total past due	Current	Total loans	investment 90 days or more and accruing
				(in millions)			
Commercial-brick and mortar	$	$	$	$	$ 13,806.3	$ 13,806.3	$
Commercial-CTL					190.0	190.0	
Residential-first liens	44.3	8.4	12.1	64.8	1,288.1	1,352.9	2.5
Residential-home equity	0.8	0.6	0.4	1.8	13.3	15.1	
Total	$ 45.1	$ 9.0	$ 12.5	$ 66.6	$ 15,297.7	$ 15,364.3	$ 2.5

Mortgage Loan Valuation Allowance

We establish a valuation allowance to provide for the risk of credit losses inherent in our portfolio. The valuation allowance includes loan specific reserves for loans that are deemed to be impaired as well as reserves for pools of loans with similar risk characteristics where a property risk or market specific risk has not been identified but for which we anticipate a loss may occur. Mortgage loans on real estate are considered impaired when, based on current information and events, it is probable we will be unable to collect all amounts due according to contractual terms of the loan agreement. When we determine a loan is impaired, a valuation allowance is established equal to the difference between the carrying amount of the mortgage loan and the

Principal Financial Group, Inc.
Notes to Consolidated Financial Statements (continued)
March 31, 2019
(Unaudited)

estimated value reduced by the cost to sell. Estimated value is based on either the present value of the expected future cash flows discounted at the loan s effective interest rate, the loan s observable market price or fair value of the collateral. Subsequent changes in the estimated value are reflected in the valuation allowance. Amounts on loans deemed to be uncollectible are charged off and removed from the valuation allowance. The change in the valuation allowance provision is included in net realized capital gains (losses) on our consolidated statements of operations.

The valuation allowance is maintained at a level believed adequate by management to absorb estimated probable credit losses. 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 loan portfolio, portfolio delinquency information, underwriting standards, peer group information, current economic conditions, loss experience and other relevant factors. The evaluation of our impaired loan component is subjective, as it requires the estimation of timing and amount of future cash flows expected to be received on impaired loans.

We review our commercial mortgage loan portfolio and analyze the need for a valuation allowance for any loan that is delinquent for 60 days or more, in process of foreclosure, restructured, on the internal watch list or that currently has a valuation allowance. In addition to establishing allowance levels for specifically identified impaired commercial mortgage loans, management determines an allowance for all other loans in the portfolio for which historical experience and current economic conditions indicate certain losses exist. These loans are segregated 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 environmental factors management believes to be relevant.

For our residential mortgage loan portfolio, we separate the loans into several homogeneous pools, each of which consist of loans of a similar nature including but not limited to loans similar in collateral, term and structure and loan purpose or type. We evaluate loan pools based on aggregated risk ratings, estimated specific loss potential in the different classes of credits, and historical loss experience by pool type. We adjust these quantitative factors for qualitative factors of present conditions. Qualitative factors include items such as economic and business conditions, changes in the portfolio, value of underlying collateral and concentrations. Residential mortgage loan pools exclude loans that have been restructured or impaired, as those loans are evaluated individually.

Table of Contents

Principal Financial Group, Inc.
Notes to Consolidated Financial Statements (continued)
March 31, 2019
(Unaudited)

A rollforward of our valuation allowance and ending balances of the allowance and loan balance by basis of impairment method was as follows:

	Commercial	Residential	Total
		(in millions)	
For the three months ended March 31, 2019			
Beginning balance	**$ 24.3**	**$ 3.1**	**$ 27.4**
Provision	**0.4**	**(0.8)**	**(0.4)**
Charge-offs		**(0.1)**	**(0.1)**
Recoveries		**0.7**	**0.7**
Ending balance	**$ 24.7**	**$ 2.9**	**$ 27.6**
Allowance ending balance by basis of impairment method:			
Individually evaluated for impairment	**$**	**$ 1.4**	**$ 1.4**
Collectively evaluated for impairment	**24.7**	**1.5**	**26.2**
Allowance ending balance	**$ 24.7**	**$ 2.9**	**$ 27.6**
Loan balance by basis of impairment method:			
Individually evaluated for impairment	**$**	**$ 8.1**	**$ 8.1**
Collectively evaluated for impairment	**14,274.2**	**1,342.8**	**15,617.0**
Loan ending balance	**$ 14,274.2**	**$ 1,350.9**	**$ 15,625.1**
For the three months ended March 31, 2018			
Beginning balance	$ 25.8	$ 6.9	$ 32.7
Provision	0.8	(1.0)	(0.2)
Charge-offs		(0.5)	(0.5)
Recoveries		1.0	1.0
Ending balance	$ 26.6	$ 6.4	$ 33.0
Allowance ending balance by basis of impairment method:			
Individually evaluated for impairment	$	$ 4.3	$ 4.3
Collectively evaluated for impairment	26.6	2.1	28.7
Allowance ending balance	$ 26.6	$ 6.4	$ 33.0
Loan balance by basis of impairment method:			
Individually evaluated for impairment	$	$ 12.1	$ 12.1
Collectively evaluated for impairment	13,169.9	1,337.3	14,507.2
Loan ending balance	$ 13,169.9	$ 1,349.4	$ 14,519.3

Impaired Mortgage Loans

Impaired mortgage loans are loans with a related specific valuation allowance, loans whose carrying amount has been reduced to the expected collectible amount because the impairment has been considered other than temporary or a loan modification has been classified as a troubled debt restructuring (TDR). 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 of the loan. Our recorded investment in and unpaid principal balance of impaired loans along with the related loan specific allowance for losses, if any, and the average recorded investment and interest income recognized during the time the loans were impaired were as follows:

	March 31, 2019		
	Recorded investment	Unpaid principal balance	Related allowance
		(in millions)	
With no related allowance recorded:			
Residential-first liens	$ **0.9**	$ **0.9**	$
With an allowance recorded:			
Residential-first liens	**2.1**	**2.2**	
Residential-home equity	**5.1**	**6.1**	**1.4**
Total:			
Residential	$ **8.1**	$ **9.2**	$ **1.4**

Principal Financial Group, Inc.
Notes to Consolidated Financial Statements (continued)
March 31, 2019
(Unaudited)

	December 31, 2018		
	Recorded investment	Unpaid principal balance	Related allowance
		(in millions)	
With no related allowance recorded:			
Residential-first liens	$ 1.6	$ 1.6	$
With an allowance recorded:			
Residential-first liens	2.2	2.2	
Residential-home equity	5.4	6.5	1.4
Total:			
Residential	$ 9.2	$ 10.3	$ 1.4

	Average recorded investment	Interest income recognized
	(in millions)	
For the three months ended March 31, 2019		
With no related allowance recorded:		
Residential-first liens	**$ 1.3**	**$**
With an allowance recorded:		
Residential-first liens	**2.2**	
Residential-home equity	**5.3**	
Total:		
Residential	**$ 8.8**	**$**
For the three months ended March 31, 2018		
With no related allowance recorded:		
Residential-first liens	$ 0.9	$
With an allowance recorded:		
Residential-first liens	4.0	
Residential-home equity	7.4	0.1
Total:		
Residential	$ 12.3	$ 0.1

Mortgage Loan Modifications

Our commercial and residential mortgage loan portfolios can include loans that have been modified. We assess loan modifications on a case-by-case basis to evaluate whether a TDR has occurred. When we have commercial mortgage loan TDRs, they are 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 are considered below market. When we have residential mortgage loan TDRs, they include modifications of interest-only payment periods, delays in principal balloon payments and interest rate reductions. Residential mortgage loan modifications result in delayed or decreased cash receipts and a decrease in interest income.

When we have commercial mortgage loan TDRs, they are 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 have residential mortgage loan TDRs, they are specifically reserved for in the mortgage loan valuation allowance if losses result from the modification. Residential mortgage loans that have defaulted or have been discharged through bankruptcy are 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, 2019 and 2018.

Table of Contents

Principal Financial Group, Inc.
Notes to Consolidated Financial Statements (continued)
March 31, 2019
(Unaudited)

Securities Posted as Collateral

As of March 31, 2019 and December 31, 2018, we posted $3,847.2 million and $3,761.3 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, 2019 and December 31, 2018, we posted $2,543.5 million and $2,402.5 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, 2019 and December 31, 2018, $136.6 million and $124.2 million, respectively, could be sold or repledged by the secured party.

Balance Sheet Offsetting

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

			Gross amounts not offset in the consolidated statements of financial position					
		Gross amount of recognized assets (1)		Financial instruments (2)		Collateral received		Net amount
				(in millions)				
March 31, 2019								
Derivative assets	**$**	**210.7**	**$**	**(75.1)**	**$**	**(132.1)**	**$**	**3.5**
Reverse repurchase agreements		**69.6**				**(69.6)**		
Total	**$**	**280.3**	**$**	**(75.1)**	**$**	**(201.7)**	**$**	**3.5**
December 31, 2018								
Derivative assets	$	186.3	$	(70.5)	$	(108.1)	$	7.7
Reverse repurchase agreements		53.0				(53.0)		
Total	$	239.3	$	(70.5)	$	(161.1)	$	7.7

(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

above excludes $9.2 million and $7.7 million of derivative assets as of March 31, 2019 and December 31, 2018, respectively, that are not subject to master netting agreements or similar agreements. 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		Net amount
		Financial instruments (2)	Collateral pledged	
		(in millions)		
March 31, 2019				
Derivative liabilities	**$ 166.1**	**$ (75.1)**	**$ (67.2)**	**$ 23.8**
December 31, 2018				
Derivative liabilities	$ 153.4	$ (70.5)	$ (52.3)	$ 30.6

(1) The gross amount of recognized derivative liabilities is reported with other liabilities on the consolidated statements of financial position. The above excludes $137.8 million and $138.3 million of derivative liabilities as of March 31, 2019 and December 31, 2018, respectively, 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.

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, 2019 and December 31, 2018.

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) liability. 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.

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.

Principal Financial Group, Inc.
Notes to Consolidated Financial Statements (continued)
March 31, 2019
(Unaudited)

A swaption is an option to enter into an interest rate swap at a future date. We purchase 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 have used exchange-traded futures to reduce market risks from changes in interest rates and to alter mismatches between the assets in a portfolio and the liabilities supported by those assets.

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 sometimes use currency forwards to hedge the currency risk associated with a business combination or to hedge certain net equity investments in or expected cash flows from our foreign operations.

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 use 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 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 liability 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.

Principal Financial Group, Inc.
Notes to Consolidated Financial Statements (continued)
March 31, 2019
(Unaudited)

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 also offer funds with embedded fixed-rate guarantees as investment options in our defined contribution plans in Hong Kong.

We have structured investment relationships with trusts we have determined to be VIEs, which are consolidated in our financial statements. The notes issued by these trusts include obligations to deliver an underlying security to residual interest holders and the obligations contain an embedded derivative of the forecasted transaction to deliver the underlying security.

We have fixed deferred annuities and universal life products that credit interest based on changes in an external equity index. We also have certain variable annuity products with a GMWB rider, which 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 fully exhausted. Declines in the equity markets may increase our exposure to benefits under contracts with the GMWB. We economically hedge the exposure in these contracts, as previously explained.

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.

Table of Contents

Principal Financial Group, Inc.
Notes to Consolidated Financial Statements (continued)
March 31, 2019
(Unaudited)

We posted $118.0 million and $106.6 million in cash and securities under collateral arrangements as of March 31, 2019 and December 31, 2018, 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, 2019 and December 31, 2018, was $133.6 million and $109.7 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 triggers, we posted collateral and initial margin of $118.0 million and $106.6 million as of March 31, 2019 and December 31, 2018, 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, 2019, we would be required to post an additional $25.4 million of collateral to our counterparties.

As of March 31, 2019 and December 31, 2018, we had received $100.5 million and $79.5 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.

Table of Contents

Principal Financial Group, Inc.
Notes to Consolidated Financial Statements (continued)
March 31, 2019
(Unaudited)

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, 2019	December 31, 2018
	(in millions)	
Notional amounts of derivative instruments		
Interest rate contracts:		
Interest rate swaps	**$ 34,783.8**	$ 34,393.7
Interest rate options	**1,127.0**	1,126.9
Interest rate futures	**181.0**	260.0
Swaptions	**62.0**	
Foreign exchange contracts:		
Currency forwards	**874.8**	863.6
Currency swaps	**863.5**	898.6
Currency options	**604.3**	525.2
Equity contracts:		
Equity options	**1,549.0**	1,522.5
Equity futures	**350.0**	491.7
Credit contracts:		
Credit default swaps	**390.0**	420.0
Other contracts:		
Embedded derivatives	**9,471.1**	9,452.3
Total notional amounts at end of period	**$ 50,256.5**	$ 49,954.5
Credit exposure of derivative instruments		
Interest rate contracts:		
Interest rate swaps	**$ 126.3**	$ 95.4
Interest rate options	**19.1**	16.3
Swaptions	**0.1**	
Foreign exchange contracts:		
Currency swaps	**62.0**	71.2
Currency forwards	**1.0**	2.8
Currency options	**0.9**	1.9
Equity contracts:		
Equity options	**17.7**	7.7
Credit contracts:		
Credit default swaps	**1.5**	2.4
Total gross credit exposure	**228.6**	197.7
Less: collateral received	**158.8**	122.9
Net credit exposure	**$ 69.8**	$ 74.8

Principal Financial Group, Inc.
Notes to Consolidated Financial Statements (continued)
March 31, 2019
(Unaudited)

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

	Derivative assets (1)		Derivative liabilities (2)	
	March 31, 2019	December 31, 2018	March 31, 2019	December 31, 2018
		(in millions)		
Derivatives designated as hedging instruments				
Interest rate contracts	**$**	$	**$ 18.3**	$ 16.1
Foreign exchange contracts	**33.0**	37.6	**17.4**	13.5
Total derivatives designated as hedging instruments	**$ 33.0**	$ 37.6	**$ 35.7**	$ 29.6
Derivatives not designated as hedging instruments				
Interest rate contracts	**$ 137.6**	$ 108.0	**$ 17.4**	$ 22.6
Foreign exchange contracts	**30.2**	38.4	**61.4**	72.9
Equity contracts	**17.7**	7.7	**52.6**	27.6
Credit contracts	**1.4**	2.3	**1.5**	4.4
Other contracts			**135.3**	134.6
Total derivatives not designated as hedging instruments	**186.9**	156.4	**268.2**	262.1
Total derivative instruments	**$ 219.9**	$ 194.0	**$ 303.9**	$ 291.7

(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 $40.5 million and $45.2 million as of March 31, 2019 and December 31, 2018, respectively, are reported with contractholder funds 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, 2019 and December 31, 2018, 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.

Table of Contents

Principal Financial Group, Inc.
Notes to Consolidated Financial Statements (continued)
March 31, 2019
(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, 2019			
	Notional amount	Fair value	Maximum future payments	Weighted average expected life (in years)
		(in millions)		
Single name credit default swaps				
Corporate debt				
AAA	**$ 10.0**	**$**	**$ 10.0**	**0.5**
A	**15.0**	**0.1**	**15.0**	**0.7**
BBB	**165.0**	**0.5**	**165.0**	**1.7**
BB	**10.0**		**10.0**	**0.2**
CCC	**10.0**	**(0.7)**	**10.0**	**0.6**
Government/municipalities				
AA	**20.0**	**0.1**	**20.0**	**0.7**
Sovereign				
A	**10.0**	**0.1**	**10.0**	**0.5**
BBB	**55.0**	**0.5**	**55.0**	**1.1**
Total credit default swap protection sold	**$ 295.0**	**$ 0.6**	**$ 295.0**	**1.3**

	December 31, 2018			
	Notional amount	Fair value	Maximum future payments	Weighted average expected life (in years)
		(in millions)		
Single name credit default swaps				
Corporate debt				
AAA	$ 10.0	$ 0.1	$ 10.0	0.7
A	15.0	0.1	15.0	1.0
BBB	190.0	0.4	190.0	1.7
BB	10.0		10.0	0.5
CCC	15.0	(3.6)	15.0	0.9
Government/municipalities				
AA	20.0	0.2	20.0	1.0
Sovereign				
A	10.0	0.1	10.0	0.7
BBB	55.0	0.4	55.0	1.3
Total credit default swap protection sold	$ 325.0	$ (2.3)	$ 325.0	1.4

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.

Table of Contents

Principal Financial Group, Inc.
Notes to Consolidated Financial Statements (continued)
March 31, 2019
(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 March 31, 2019	Amortized cost of hedged item December 31, 2018	Cumulative amount of fair value hedging basis adjustment included in the amortized cost of the hedged item March 31, 2019	Cumulative amount of fair value hedging basis adjustment included in the amortized cost of the hedged item December 31, 2018
	(in millions)			
Fixed maturities, available-for-sale:				
Active hedging relationships	**$ 139.2**	$ 137.0	**$ 14.8**	$ 12.4
Discontinued hedging relationships	**279.1**	298.9	**12.0**	13.3
Total fixed maturities, available-for-sale in active or discontinued hedging relationships	**$ 418.3**	$ 435.9	**$ 26.8**	$ 25.7

Cash Flow Hedges

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

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.

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 1.3 years. As of March 31, 2019, we had $0.0 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.

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, 2019	2018
		(in millions)	
Interest rate contracts	Fixed maturities, available-for-sale	**$ (4.2)**	$ (4.6)
Foreign exchange contracts	Fixed maturities, available-for-sale	**(8.6)**	(18.8)
Foreign exchange contracts	Investment contracts		(0.1)
Total		**$ (12.8)**	$ (23.5)

We expect to reclassify net gains of $21.9 million from AOCI into net income in the next 12 months, which includes both net deferred gains on discontinued hedges and net losses on periodic settlements of active hedges. Actual amounts may vary from this amount as a result of market conditions.

Table of Contents

Principal Financial Group, Inc.
Notes to Consolidated Financial Statements (continued)
March 31, 2019
(Unaudited)

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, 2019			
	Net investment income related to hedges of fixed maturities, available-for-sale	**Net realized capital gains related to hedges of fixed maturities, available-for-sale**	**Benefits, claims and settlement expenses related to hedges of investment contracts**	**Operating expenses related to hedges of debt**
		(in millions)		
Total amounts of consolidated statement of operations line items in which the effects of fair value and cash flow hedges are reported	**$ 961.0**	**$ 84.5**	**$ 2,195.1**	**$ 992.7**
Losses on fair value hedging relationships:				
Interest rate contracts:				
Gain recognized on hedged item	**$ 2.4**	**$**	**$**	**$**
Loss recognized on derivatives	**(2.5)**			
Amortization of hedged item basis adjustments	**(1.3)**			
Amounts related to periodic settlements on derivatives	**(0.8)**			
Total loss recognized for fair value hedging relationships	**$ (2.2)**	**$**	**$**	**$**
Gains (losses) on cash flow hedging relationships:				
Interest rate contracts:				
Gain (loss) reclassified from AOCI on derivatives	**$ 5.1**	**$**	**$**	**$ (2.8)**
Foreign exchange contracts:				
Amounts related to periodic settlements on derivatives	**1.6**			
Total gain (loss) recognized for cash flow hedging relationships	**$ 6.7**	**$**	**$**	**$ (2.8)**

Table of Contents

Principal Financial Group, Inc.
Notes to Consolidated Financial Statements (continued)
March 31, 2019
(Unaudited)

	For the three months ended March 31, 2018			
	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	Operating expenses related to hedges of debt
	(in millions)			
Total amounts of consolidated statement of operations line items in which the effects of fair value and cash flow hedges are reported	$ 902.2	$ (25.1)	$ 1,411.1	$ 985.0
Losses on fair value hedging relationships:				
Interest rate contracts:				
Loss recognized on hedged item	$	$ (5.5)	$	$
Gain recognized on derivatives		5.4		
Amortization of hedged item basis adjustments	(1.8)			
Amounts related to periodic settlements on derivatives	(2.0)			
Total loss recognized for fair value hedging relationships	$ (3.8)	$ (0.1)	$	$
Gains (losses) on cash flow hedging relationships:				
Interest rate contracts:				
Gain (loss) reclassified from AOCI on derivatives	$ 5.4	$	$	$ (2.6)
Gain reclassified from AOCI into net income as a result that a forecasted transaction is no longer probable of occurring		0.1		
Foreign exchange contracts:				
Loss reclassified from AOCI on derivatives		(0.4)		
Amounts related to periodic settlements on derivatives	1.6		(0.1)	
Total gain (loss) recognized for cash flow hedging relationships	$ 7.0	$ (0.3)	$ (0.1)	$ (2.6)

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.

Principal Financial Group, Inc.
Notes to Consolidated Financial Statements (continued)
March 31, 2019
(Unaudited)

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, 2019	2018
	(in millions)	
Interest rate contracts	**$ 67.3**	$ (48.0)
Foreign exchange contracts	**4.6**	8.8
Equity contracts	**(75.0)**	(15.2)
Credit contracts	**1.3**	0.1
Other contracts	**4.7**	63.7
Total	**$ 2.9**	$ 9.4

5. Insurance Liabilities

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, 2019	2018
	(in millions)	
Balance at beginning of period	**$ 2,252.7**	$ 2,130.5
Less: reinsurance recoverable	**404.3**	375.8
Net balance at beginning of period	**1,848.4**	1,754.7
Incurred:		
Current year	**325.5**	312.8
Prior years	**25.1**	(0.1)
Total incurred	**350.6**	312.7
Payments:		
Current year	**162.9**	146.9
Prior years	**157.6**	145.8
Total payments	**320.5**	292.7
Net balance at end of period	**1,878.5**	1,774.7
Plus: reinsurance recoverable	**397.5**	378.5
Balance at end of period	**$ 2,276.0**	$ 2,153.2

Amounts not included in the rollforward above:		
Claim adjustment expense liabilities	**$ 54.7**	$ 51.5

Incurred liability adjustments relating to prior years, which affected current operations during 2019 and 2018, 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.

Table of Contents

Principal Financial Group, Inc.
Notes to Consolidated Financial Statements (continued)
March 31, 2019
(Unaudited)

6. 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,			
	2019		2018	
U.S. corporate income tax rate	**21**	%	21	%
Dividends received deduction	**(5)**		(4)	
Tax credits	**(2)**		(3)	
Impact of equity method presentation	**(1)**		(1)	
Settled benefit from charitable contribution of capital gain property			(2)	
Other	**1**		1	
Effective income tax rate	**14**	%	12	%

7. Employee and Agent Benefits

Components of Net Periodic Benefit Cost

	Pension benefits For the three months ended March 31,				Other postretirement benefits For the three months ended March 31,			
	2019		2018		2019		2018	
				(in millions)				
Service cost	**$**	**16.8**	$	18.3	**$**		$	
Interest cost		**32.8**		29.9		**0.9**		0.9
Expected return on plan assets		**(35.5)**		(39.2)		**(8.3)**		(8.4)
Amortization of prior service benefit		**(0.9)**		(0.9)		**(0.3)**		(3.5)
Recognized net actuarial (gain) loss		**16.9**		16.9				(0.3)
Net periodic benefit cost (income)	**$**	**30.1**	$	25.0	**$**	**(7.7)**	$	(11.3)

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 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 2019 for a combined total of up to $25.0 million. During the three months ended March 31, 2019, we contributed $5.7 million to these plans.

8. Contingencies, Guarantees, Indemnifications and Leases

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

Table of Contents

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.

As of March 31, 2019, we had no litigation or regulatory contingencies for which we believe disclosure is appropriate.

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, 2019, was approximately $122.0 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 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, 2019, 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 and financing 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.

Leases

As a lessee, we lease office space, data processing equipment, office furniture and office equipment under various operating leases. We also lease buildings and hardware storage equipment under finance leases. Lease assets and liabilities are recognized at the commencement of a lease based on the present value of lease payments over the lease term. We generally use our incremental borrowing rate based on the information available at the lease commencement date to determine the present value of lease payments. Lease term may include options to extend or terminate the lease when it is reasonably certain we will exercise the option. Leases with an initial term of twelve months or less are not recorded on the consolidated statements of financial position. We recognize lease expense for leases on a straight-line basis over the lease term. Some of our lease agreements include payments for property taxes, insurance, utilities or common area maintenance, which are not based on an index or rate. These payments are recognized in net income in the period in which the obligation has occurred.

Principal Financial Group, Inc.
Notes to Consolidated Financial Statements (continued)
March 31, 2019
(Unaudited)

We sublease certain office space to third parties, which are primarily operating leases. We record sublease income on a straight-line basis over the lease term.

The lease assets and liabilities were as follows:

		March 31, 2019 (in millions)
Assets		
Operating lease assets (1)	$	**161.3**
Finance lease assets (1)		**35.4**
Total lease assets	$	**196.7**
Liabilities		
Operating lease liabilities (2)	$	**169.5**
Finance lease liabilities (2)		**35.6**
Total lease liabilities	$	**205.1**

(1) Operating and finance lease assets are primarily reported within property and equipment on the consolidated statements of financial position.

(2) Operating and finance lease liabilities are reported within other liabilities on the consolidated statements of financial position.

The lease cost was as follows:

		For the three months ended March 31, 2019 (in millions)
Finance lease cost (1):		
Amortization of right-of-use assets	$	**3.5**
Interest on lease liabilities		**0.3**
Operating lease cost (1)		**13.4**
Other lease cost (1) (2)		**2.8**
Sublease income (3)		**(0.4)**
Total lease cost	$	**19.6**

(1) Finance, operating and other lease costs are primarily included in operating expenses on the consolidated statements of operations.

(2) Other lease cost primarily reflects variable and short-term lease costs.

(3) Sublease income is included in fees and other revenues on the consolidated statements of operations.

The following represents payments due by period for lease obligations:

	Operating leases	Finance leases *(in millions)*	Total
For the twelve months ending March 31:			
2020	**$ 47.6**	**$ 14.4**	$ **62.0**
2021	**40.2**	**12.3**	**52.5**
2022	**30.2**	**8.6**	**38.8**
2023	**23.1**	**1.3**	**24.4**
2024	**13.4**	**0.3**	**13.7**
2025 and thereafter	**30.2**	**0.2**	**30.4**
Total lease payments	**184.7**	**37.1**	**221.8**
Less: interest	**15.2**	**1.5**	**16.7**
Present value of lease liabilities	**$ 169.5**	**$ 35.6**	$ **205.1**

Principal Financial Group, Inc.
Notes to Consolidated Financial Statements (continued)
March 31, 2019
(Unaudited)

The weighted-average remaining lease term and weighted-average discount rates were as follows:

	For the three months ended March 31, 2019
Weighted-average remaining lease term (in years):	
Operating leases	**6.6**
Finance leases	**2.9**
Weighted-average discount rate:	
Operating leases	**3.3%**
Finance leases	**2.9%**

9. Stockholders Equity

Common Stock Dividends

	For the three months ended March 31, 2019	2018
Dividends declared per common share	**$ 0.54**	$ 0.51

Reconciliation of Outstanding Common Shares

	For the three months ended March 31, 2019	2018
	(in millions)	
Beginning balance	**279.5**	289.0
Shares issued	**1.8**	1.9
Treasury stock acquired	**(3.1)**	(3.2)
Ending balance	**278.2**	287.7

In February 2016, our Board of Directors authorized a share repurchase program of up to $400.0 million of our outstanding common stock, which was completed in February 2018. In May 2017, our Board of Directors authorized a share repurchase program of up to $250.0 million of our outstanding common stock, which was completed in April 2018. In May 2018, our Board of Directors authorized a share repurchase program of up to $300.0 million of our outstanding common stock, which was completed in December 2018. In November 2018, our Board of

Directors authorized a share repurchase program of up to $500.0 million of our outstanding common stock. In the first quarter of 2019, we suspended purchases of the remaining $295.3 million available under the November 2018 authorization. Shares repurchased under these programs are accounted for as treasury stock, carried at cost and reflected as a reduction to stockholders equity.

Table of Contents

Principal Financial Group, Inc.
Notes to Consolidated Financial Statements (continued)
March 31, 2019
(Unaudited)

Other Comprehensive Income (Loss)

	For the three months ended March 31, 2019		
	Pre-Tax	Tax	After-Tax
		(in millions)	
Net unrealized gains on available-for-sale securities during the period	$ **1,817.0**	$ **(392.5)**	$ **1,424.5**
Reclassification adjustment for losses included in net income (1)	**8.7**	**(1.7)**	**7.0**
Adjustments for assumed changes in amortization patterns	**(122.1)**	**25.7**	**(96.4)**
Adjustments for assumed changes in policyholder liabilities	**(300.3)**	**69.5**	**(230.8)**
Net unrealized gains on available-for-sale securities	**1,403.3**	**(299.0)**	**1,104.3**
Noncredit component of impairment losses on fixed maturities, available-for-sale during the period	**(2.8)**	**0.6**	**(2.2)**
Adjustments for assumed changes in amortization patterns	**(0.4)**	**0.1**	**(0.3)**
Noncredit component of impairment losses on fixed maturities, available-for-sale (2)	**(3.2)**	**0.7**	**(2.5)**
Net unrealized losses on derivative instruments during the period	**(8.5)**	**1.8**	**(6.7)**
Reclassification adjustment for gains included in net income (3)	**(2.3)**	**0.3**	**(2.0)**
Adjustments for assumed changes in amortization patterns	**1.9**	**(0.4)**	**1.5**
Adjustments for assumed changes in policyholder liabilities	**3.6**	**(0.9)**	**2.7**
Net unrealized losses on derivative instruments	**(5.3)**	**0.8**	**(4.5)**
Foreign currency translation adjustment during the period	**40.9**	**(2.6)**	**38.3**
Reclassification adjustment for gains included in net income	**(0.4)**		**(0.4)**
Foreign currency translation adjustment	**40.5**	**(2.6)**	**37.9**
Amortization of amounts included in net periodic benefit cost (4)	**15.7**	**(4.2)**	**11.5**
Net unrecognized postretirement benefit obligation	**15.7**	**(4.2)**	**11.5**
Other comprehensive income	$ **1,451.0**	$ **(304.3)**	$ **1,146.7**

Table of Contents

Principal Financial Group, Inc.
Notes to Consolidated Financial Statements (continued)
March 31, 2019
(Unaudited)

	For the three months ended March 31, 2018		
	Pre-Tax	Tax	After-Tax
		(in millions)	
Net unrealized losses on available-for-sale securities during the period	$ (1,303.7)	$ 280.4	$ (1,023.3)
Reclassification adjustment for losses included in net income (1)	20.7	(4.4)	16.3
Adjustments for assumed changes in amortization patterns	86.2	(18.1)	68.1
Adjustments for assumed changes in policyholder liabilities	178.5	(45.1)	133.4
Net unrealized losses on available-for-sale securities	(1,018.3)	212.8	(805.5)
Noncredit component of impairment losses on fixed maturities, available-for-sale during the period	11.2	(2.4)	8.8
Adjustments for assumed changes in amortization patterns	1.3	(0.3)	1.0
Adjustments for assumed changes in policyholder liabilities	(0.6)	0.1	(0.5)
Noncredit component of impairment losses on fixed maturities, available-for-sale (2)	11.9	(2.6)	9.3
Net unrealized losses on derivative instruments during the period	(19.2)	4.0	(15.2)
Reclassification adjustment for gains included in net income (3)	(2.4)	0.4	(2.0)
Adjustments for assumed changes in amortization patterns	0.9	(0.2)	0.7
Adjustments for assumed changes in policyholder liabilities	2.8	(0.7)	2.1
Net unrealized losses on derivative instruments	(17.9)	3.5	(14.4)
Foreign currency translation adjustment	66.9	(1.1)	65.8
Amortization of amounts included in net periodic benefit cost (4)	12.2	(3.5)	8.7
Net unrecognized postretirement benefit obligation	12.2	(3.5)	8.7
Other comprehensive loss	$ (945.2)	$ 209.1	$ (736.1)

(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) Represents the net impact of (1) unrealized gains resulting from reclassification of previously recognized noncredit impairment losses from OCI to net realized capital gains (losses) for fixed maturities with bifurcated OTTI that had additional credit losses or fixed maturities that previously had bifurcated OTTI that have now been sold or are intended to be sold and (2) unrealized losses resulting from reclassification of noncredit impairment losses for fixed maturities with bifurcated OTTI from net realized capital gains (losses) to OCI.

(3) See Note 4, Derivative Financial Instruments Effect of Fair Value and Cash Flow Hedges on Consolidated Statements of Operations, for further details.

(4) 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 7, Employee and Agent Benefits Components of Net Periodic Benefit Cost, for further details.

Table of Contents

Principal Financial Group, Inc.
Notes to Consolidated Financial Statements (continued)
March 31, 2019
(Unaudited)

Accumulated Other Comprehensive Income (Loss)

	Net unrealized gains on available-for-sale securities	Noncredit component of impairment losses on fixed maturities available-for-sale	Net unrealized gains on derivative instruments	Foreign currency translation adjustment	Unrecognized postretirement benefit obligation	Accumulated other comprehensive income (loss)
			(in millions)			
Balances as of January 1, 2018	$ 1,470.7	$ (58.3)	$ 42.7	$ (918.5)	$ (371.1)	$ 165.5
Other comprehensive loss during the period, net of adjustments	(821.8)		(12.4)	64.9		(769.3)
Amounts reclassified from AOCI	16.3	9.3	(2.0)		8.7	32.3
Other comprehensive loss	(805.5)	9.3	(14.4)	64.9	8.7	(737.0)
Effects of implementation of accounting change related to equity investments, net	(1.0)					(1.0)
Effects of implementation of accounting change accounting change related to revenue recognition, net				25.6		25.6
Effects of implementation of accounting change related to the reclassification of certain tax effects, net	249.8	(15.2)	5.7	(81.8)	(80.9)	77.6
Balances as of March 31, 2018	$ 914.0	$ (64.2)	$ 34.0	$ (909.8)	$ (443.3)	$ (469.3)
Balances as of January 1, 2019	**$ 190.0**	**$ (47.1)**	**$ 64.4**	**$ (1,259.5)**	**$ (512.9)**	**$ (1,565.1)**
Other comprehensive income during the period, net of adjustments	**1,097.3**	**(2.5)**	**(2.5)**	**37.8**		**1,130.1**
Amounts reclassified from AOCI	**7.0**		**(2.0)**	**(0.4)**	**11.5**	**16.1**
Other comprehensive income	**1,104.3**	**(2.5)**	**(4.5)**	**37.4**	**11.5**	**1,146.2**
Balances as of March 31, 2019	**$ 1,294.3**	**$ (49.6)**	**$ 59.9**	**$ (1,222.1)**	**$ (501.4)**	**$ (418.9)**

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

Principal Financial Group, Inc.
Notes to Consolidated Financial Statements (continued)
March 31, 2019
(Unaudited)

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 (in millions):

	For the three months ended March 31,	
	2019	2018
	(in millions)	
Balance at beginning of period	**$ 391.2**	$ 101.3
Net income attributable to redeemable noncontrolling interest	**20.3**	0.8
Redeemable noncontrolling interest of deconsolidated entities (1)		(3.2)
Contributions from redeemable noncontrolling interest	**143.7**	39.0
Distributions to redeemable noncontrolling interest	**(20.3)**	(9.9)
Change in redemption value of redeemable noncontrolling interest	**2.7**	(0.6)
Other comprehensive income attributable to redeemable noncontrolling interest	**0.1**	0.4
Balance at end of period	**$ 537.7**	$ 127.8

(1) We deconsolidated certain sponsored investment funds as they no longer met the requirements for consolidation.

10. 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 or disclosed at fair value. 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 2019.

Principal Financial Group, Inc.
Notes to Consolidated Financial Statements (continued)
March 31, 2019
(Unaudited)

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, 2019, less than 1% 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.

Principal Financial Group, Inc.
Notes to Consolidated Financial Statements (continued)
March 31, 2019
(Unaudited)

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 may utilize the overnight indexed swap (OIS) 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 LIBOR interest rate curve to value our positions, which includes a credit spread. This credit spread incorporates an appropriate level of nonperformance risk into our valuations given the current ratings of our counterparties, as well as the collateral agreements in place. Counterparty credit risk is routinely monitored to ensure our adjustment for non-performance 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 non-performance risk on these trades.

Interest Rate Contracts. For non-cleared contracts we use discounted cash flow valuation techniques to determine the fair value of interest rate swaps and swaptions using observable swap curves as the inputs. 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 have interest rate options and have had swaptions that are valued using broker quotes. These are 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 and currency options are valued using observable market inputs, including forward currency exchange rates. These are reflected in Level 2. In addition, we have a limited number of non-standard currency swaps and currency options that are valued using broker quotes. These are 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 or broker prices to determine the fair value of credit default swaps. These are reflected in 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, commercial mortgage loans of consolidated VIEs for which the fair value option was elected, equity method real estate investments for which the fair value option was elected and certain redeemable preferred stock.

Invested assets of consolidated sponsored investment funds include equity securities, fixed maturities and other investments, 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.

Principal Financial Group, Inc.
Notes to Consolidated Financial Statements (continued)
March 31, 2019
(Unaudited)

Commercial mortgage loans of consolidated VIEs are valued using the more observable fair value of the liabilities of the consolidated collateralized financing entities (CCFEs) under the measurement alternative guidance and are reflected in Level 2. The liabilities are affiliated so are not reflected in our consolidated results.

Equity method real estate investments for which the fair value option was elected are reflected in Level 3. The equity method real estate investments consist of underlying real estate and debt. The real estate fair value is estimated using a discounted cash flow valuation model that utilizes public real estate market data inputs such as transaction prices, market rents, vacancy levels, leasing absorption, market cap rates and discount rates. The debt fair value is estimated using a discounted cash flow analysis based on our incremental borrowing rate for similar borrowing arrangements.

The fair value of certain redeemable preferred stock is based on an internal model using unobservable inputs, which is reflected in Level 3. In 2018, the fair value was based on observable inputs and was 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.

Investment Contracts

Certain annuity contracts 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, 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 embedded derivative liabilities are valued using stochastic models that incorporate a spread reflecting our own creditworthiness.

The assumption for our own non-performance risk for investment contracts and any embedded derivatives bifurcated from certain 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.

Other Liabilities

Certain obligations reported in other liabilities include embedded derivatives to deliver underlying securities of structured investments to third parties. The fair value of the embedded derivatives is calculated based on the value of the underlying securities that are valued based on prices obtained from third party pricing vendors as utilized and described in our discussion of how fair value is determined for fixed maturities, which are reflected in Level 2.

Table of Contents

Principal Financial Group, Inc.
Notes to Consolidated Financial Statements (continued)
March 31, 2019
(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:

[redacted]

Principal Financial Group, Inc.
Notes to Consolidated Financial Statements (continued)
March 31, 2019
(Unaudited)

[redacted]

(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) 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.
(4) 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 $26.6 million and $32.0 million as of March 31, 2019 and December 31, 2018, respectively. Separate account assets using the NAV practical expedient consist of hedge funds with varying investment strategies that also have a variety of redemption terms and conditions. We do not have unfunded commitments associated with these hedge funds.

57

Principal Financial Group, Inc.
Notes to Consolidated Financial Statements (continued)
March 31, 2019
(Unaudited)

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, 2019							
		Total realized/unrealized gains (losses)						
	Beginning asset/ (liability) balance as of December 31, 2018	Included in net income (1)	Included in other comprehensive income (3)	Net purchases, sales, issuances and settlements (4)	Transfers into Level 3	Transfers out of Level 3	Ending asset/ (liability) balance as of March 31, 2019	Changes in unrealized gains (losses) included in net income relating to positions still held (1)
				(in millions)				
Assets								
Fixed maturities, available-for-sale:								
Non-U.S. governments	$ 4.6	$	$	$ (0.4)	$	$	$ 4.2	$
Corporate	57.9		0.4	0.2			58.5	
Commercial mortgage-backed securities	9.5		0.3	2.2			12.0	
Collateralized debt obligations	8.3	(2.5)	(0.2)	0.3			5.9	(2.5)
Other debt obligations	58.5		1.1	9.8		(26.0)	43.4	
Total fixed maturities, available-for-sale	138.8	(2.5)	1.6	12.1		(26.0)	124.0	(2.5)
Equity securities			0.4				0.4	
Other investments	17.2	2.2			10.0		29.4	2.2
Separate account assets (2)	8,615.5	174.6	(0.4)	(70.3)		(0.7)	8,718.7	180.7
Liabilities								
Investment contracts	(45.2)	4.3	0.1	0.3			(40.5)	5.6
Derivatives								
Net derivative assets (liabilities)	3.1	(1.6)		1.9			3.4	(1.3)

Principal Financial Group, Inc.
Notes to Consolidated Financial Statements (continued)
March 31, 2019
(Unaudited)

	For the three months ended March 31, 2018							
		Total realized/unrealized gains (losses)						
	Beginning asset/ (liability) balance as of December 31, 2017	Included in net income (1)	Included in other comprehensive income (3)	Net purchases, sales, issuances and settlements (4)	Transfers into Level 3	Transfers out of Level 3	Ending asset/ (liability) balance as of March 31, 2018	Changes in unrealized gains (losses) included in net income relating to positions still held (1)
				(in millions)				
Assets								
Fixed maturities, available-for-sale:								
Non-U.S. governments	$ 7.4	$	$ (0.1)	$ (0.3)	$	$	$ 7.0	$
Corporate	128.0	1.1	0.4	2.4	0.6	(28.7)	103.8	
Commercial mortgage-backed securities	10.6	(2.5)	0.6	(0.1)	2.5		11.1	(2.5)
Collateralized debt obligations	125.0	(0.6)	1.0	(25.5)	0.1	(19.3)	80.7	(0.6)
Other debt obligations	2.3	0.1	(0.1)	(0.2)			2.1	
Total fixed maturities, available-for-sale	273.3	(1.9)	1.8	(23.7)	3.2	(48.0)	204.7	(3.1)
Equity securities	2.7	12.2					14.9	12.2
Other investments	6.5	1.5		1.3			9.3	1.5
Separate account assets (2)	7,651.4	164.4	(0.7)	176.8			7,991.9	143.4
Liabilities								
Investment contracts	(160.3)	63.7	0.2	0.2			(96.2)	63.1
Derivatives								
Net derivative assets (liabilities)	18.1	(5.0)		3.7			16.8	(4.7)

(1) Both realized gains (losses) and mark-to-market unrealized gains (losses) are generally reported in net realized capital gains (losses) 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.

(2) 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 segment separate account assets are recorded in AOCI and are offset by foreign currency translation adjustments of the corresponding separate account liabilities.

(3) Includes foreign currency translation adjustments related to our Principal International segment.

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

Table of Contents

Principal Financial Group, Inc.
Notes to Consolidated Financial Statements (continued)
March 31, 2019
(Unaudited)

	For the three months ended March 31, 2019				
	Purchases	**Sales**	**Issuances** *(in millions)*	**Settlements**	**Net purchases, sales, issuances and settlements**
Assets					
Fixed maturities, available-for-sale:					
Non-U.S. governments	**$**	**$**	**$**	**$ (0.4)**	**$ (0.4)**
Corporate	**0.5**	**(0.2)**		**(0.1)**	**0.2**
Commercial mortgage-backed securities	**2.4**			**(0.2)**	**2.2**
Collateralized debt obligations				**0.3**	**0.3**
Other debt obligations	**10.0**			**(0.2)**	**9.8**
Total fixed maturities, available-for-sale	**12.9**	**(0.2)**		**(0.6)**	**12.1**
Separate account assets (5)	**79.0**	**(101.7)**	**(47.3)**	**(0.3)**	**(70.3)**
Liabilities					
Investment contracts			**(1.3)**	**1.6**	**0.3**
Derivatives					
Net derivative assets (liabilities)		**1.9**			**1.9**

	For the three months ended March 31, 2018				
	Purchases	**Sales**	**Issuances** *(in millions)*	**Settlements**	**Net purchases, sales, issuances and settlements**
Assets					
Fixed maturities, available-for-sale:					
Non-U.S. governments	$	$	$	$ (0.3)	$ (0.3)
Corporate	11.3	(4.2)		(4.7)	2.4
Commercial mortgage-backed securities				(0.1)	(0.1)
Collateralized debt obligations				(25.5)	(25.5)
Other debt obligations				(0.2)	(0.2)
Total fixed maturities, available-for-sale	11.3	(4.2)		(30.8)	(23.7)
Other investments	1.3				1.3
Separate account assets (5)	340.4	(104.4)	(45.5)	(13.7)	176.8
Liabilities					
Investment contracts			(0.5)	0.7	0.2
Derivatives					
Net derivative assets (liabilities)	3.1	0.6			3.7

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

Table of Contents

Principal Financial Group, Inc.
Notes to Consolidated Financial Statements (continued)
March 31, 2019
(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, 2019					
	Transfers out of Level 1 into Level 2	Transfers out of Level 1 into Level 3	Transfers out of Level 2 into Level 1	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:						
U.S. government and agencies	$	$	$ **1.1**	$	$	$
Other debt obligations			**1.1**			**26.0**
Total fixed maturities, available-for-sale			**2.2**			**26.0**
Other investments				**10.0**		
Separate account assets						**0.7**

	For the three months ended March 31, 2018					
	Transfers out of Level 1 into Level 2	Transfers out of Level 1 into Level 3	Transfers out of Level 2 into Level 1	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	$	$	$	$ 0.6	$	$ 28.7
Commercial mortgage-backed securities				2.5		
Collateralized debt obligations				0.1		19.3
Total fixed maturities, available-for-sale				3.2		48.0
Separate account assets	292.4		0.7			

Transfers between fair value hierarchy levels are recognized at the beginning of the reporting period.

Separate account assets transferred from Level 1 to Level 2 during the three months ended March 31, 2018, primarily included cash equivalents as a result of additional analysis to clarify the source of the price.

Assets transferred into Level 3 during the three months ended March 31, 2019 and 2018, 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. In addition, other investments transferred from Level 2 into Level 3 during the three months ended March 31, 2019, included certain redeemable preferred stock for which at least one significant unobservable input is now used to determine fair value.

Assets transferred out of Level 3 during the three months ended March 31, 2019 and 2018, 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 or the measurement alternative for CCFEs. Refer to Assets and liabilities measured at fair value on a recurring basis for a complete valuation hierarchy summary.

Principal Financial Group, Inc.
Notes to Consolidated Financial Statements (continued)
March 31, 2019
(Unaudited)

	March 31, 2019				
	Assets / (liabilities) measured at fair value *(in millions)*	**Valuation technique(s)**	**Unobservable input description**	**Input/range of inputs**	**Weighted average**
Assets					
Fixed maturities, available-for-sale:					
Non-U.S. governments	$ **4.2**	Discounted cash flow	Discount rate (1)	3.2%	3.2%
			Illiquidity premium	50 basis points (bps)	50bps
			Comparability adjustment	(25)bps	(25)bps
Corporate	**26.0**	Discounted cash flow	Discount rate (1)	2.6%-3.5%	3.0%
			Illiquidity premium	0bps-60bps	37bps
Other debt obligations	**2.1**	Discounted cash flow	Discount rate (1)	5.0%	5.0%
			Illiquidity premium	500bps	500bps
Separate account assets	**8,546.8**	Discounted cash flow - mortgage loans	Discount rate (1)	3.0%-4.5%	3.6%
			Illiquidity premium	0bps-60bps	58bps
			Credit spread rate	62bps-160bps	135bps
		Discounted cash flow - real estate	Discount rate (1)	5.6%-14.0%	6.7%
			Terminal capitalization rate	4.3%-9.3%	5.8%
			Average market rent growth rate	1.8%-16.5%	3.1%
		Discounted cash flow - real estate debt	Loan to value	11.0%-85.9%	47.5%
			Market interest rate	3.6%-6.0%	4.0%
Liabilities					
Investment contracts (5)	**(40.5)**	Discounted cash flow	Long duration interest rate	2.6%-2.7% (2)	
			Long-term equity market volatility		

	15.0%-26.4%
Non-performance risk	0.3%-1.4%
Utilization rate	See note (3)
Lapse rate	1.3%-16.0%
Mortality rate	See note (4)

Table of Contents

Principal Financial Group, Inc.
Notes to Consolidated Financial Statements (continued)
March 31, 2019
(Unaudited)

	December 31, 2018				
	Assets / (liabilities) measured at fair value *(in millions)*	**Valuation technique(s)**	**Unobservable input description**	**Input/range of inputs**	**Weighted average**
Assets					
Fixed maturities, available-for-sale:					
Non-U.S. governments	$ 4.6	Discounted cash flow	Discount rate (1)	3.2%	3.2%
			Illiquidity premium	50 bps	50bps
			Comparability adjustment	(25)bps	(25)bps
Corporate	25.4	Discounted cash flow	Discount rate (1)	3.3%-4.5%	3.9%
			Illiquidity premium	0bps-60bps	36bps
Other debt obligations	1.7	Discounted cash flow	Discount rate (1)	5.0%	5.0%
			Illiquidity premium	500bps	500bps
Separate account assets	8,440.8	Discounted cash flow - mortgage loans	Discount rate (1)	3.3%-4.7%	4.2%
			Illiquidity premium	0bps-60bps	56bps
			Credit spread rate	85bps-172bps	168bps
		Discounted cash flow - real estate	Discount rate (1)	5.6%-11.5%	6.7%
			Terminal capitalization rate	4.3%-9.3%	5.8%
			Average market rent growth rate	2.0%-4.7%	2.9%
		Discounted cash flow - real estate debt	Loan to value	11.0%-69.3%	45.9%
			Market interest rate	3.9%-6.0%	4.3%
Liabilities					
Investment contracts (5)	(45.2)	Discounted cash flow	Long duration interest rate	2.8%-2.9% (2)	
			Long-term equity market volatility	16.7%-27.8%	

Non-performance risk	0.6%-1.6%
Utilization rate	See note (3)
Lapse rate	1.3%-16.0%
Mortality rate	See note (4)

(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.

Principal Financial Group, Inc.
Notes to Consolidated Financial Statements (continued)
March 31, 2019
(Unaudited)

(3) This input factor is the number of contractholders taking withdrawals as well as the amount and timing of the withdrawals and a range does not provide a meaningful presentation.

(4) This input is based on an appropriate industry mortality table and a range does not provide a meaningful presentation.

(5) 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. Increases or decreases in the credit spreads on the comparable assets could cause 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. Increases or decreases in this illiquidity premium could cause significant decreases or increases, respectively, in the fair value of the asset.

Embedded derivatives within our investment 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. Increases or decreases in market volatilities could cause significant decreases or increases, respectively, in the fair value of embedded derivatives in investment 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 amount of claims will increase if account value is not sufficient to cover guaranteed withdrawals. Increases or decreases in risk-free rates could cause the fair value of the embedded derivative to significantly increase or decrease, respectively. Increases or decreases in our own credit risks, which impact the rates used to discount future cash flows, could significantly increase or decrease, respectively, the fair value of the embedded derivative. All of these changes in fair value would impact net income.

Decreases or increases in the mortality rate assumption could cause the fair value of the embedded derivative to decrease or increase, respectively. Decreases or increases in the overall lapse rate assumption could cause the fair value of the embedded derivative to decrease or increase, respectively. The lapse rate assumption varies dynamically based on the relationship of the guarantee and associated account value. A stronger or weaker dynamic lapse rate assumption could cause the fair value of the embedded derivative to decrease or increase, respectively. 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. Increases or decreases in the assumption of the number of contractholders taking withdrawals could cause the fair value of the embedded derivative to decrease or increase, respectively. Assuming contractholders take withdrawals earlier or later could cause the fair value of the embedded derivative to decrease or increase, respectively. Assuming contractholders take more or less of their benefit could cause 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, 2019 and 2018.

Fair Value Option

We elected fair value accounting for:

- Certain commercial mortgage loans of consolidated VIEs for which it was not practicable for us to determine the carrying value.

- Certain real estate ventures that are subject to the equity method of accounting because the nature of the investments is to add value to the properties and generate income from the operations of the properties. Other equity method real estate investments are not fair valued because the investments mainly generate income from the operations of the underlying properties.

Table of Contents

Principal Financial Group, Inc.
Notes to Consolidated Financial Statements (continued)
March 31, 2019
(Unaudited)

The following tables present information regarding the assets and liabilities for which the fair value option was elected.

	March 31, 2019	December 31, 2018
	(in millions)	
Commercial mortgage loans of consolidated VIEs (1) (2)		
Fair value	**$ 5.9**	$ 6.4
Aggregate contractual principal	**6.0**	6.5
Real estate ventures (1)		
Fair value	**19.4**	17.2

(1) Reported with other investments in the consolidated statements of financial position.

(2) None of the loans were more than 90 days past due or in non-accrual status.

	For the three months ended March 31, 2019	2018
	(in millions)	
Commercial mortgage loans of consolidated VIEs		
Change in fair value pre-tax loss (1) (2)	**$**	$ (0.1)
Interest income (3)	**0.1**	0.2
Real estate ventures		
Change in fair value pre-tax gain (4)	**2.2**	1.5

(1) None of the change in fair value related to instrument-specific credit risk.

(2) Reported in net realized capital gains (losses) on the consolidated statements of operations.

(3) Reported in net investment income on the consolidated statements of operations and recorded based on the effective interest rates as determined at the closing of the loan.

(4) Reported in net investment income on the consolidated statements of operations.

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, 2019				
			Fair value hierarchy level		
	Carrying amount	Fair value	Level 1	Level 2	Level 3
			(in millions)		
Assets (liabilities)					
Mortgage loans	$ 15,597.5	$ 15,913.2	$	$	$ 15,913.2
Policy loans	798.5	1,017.1			1,017.1
Other investments	254.9	253.4		165.4	88.0
Cash and cash equivalents	1,203.8	1,203.8	1,134.2	69.6	
Investment contracts	(32,489.3)	(31,823.5)		(4,109.9)	(27,713.6)
Short-term debt	(43.9)	(43.9)		(43.9)	
Long-term debt	(3,266.4)	(3,395.3)		(3,261.1)	(134.2)
Separate account liabilities	(144,418.0)	(143,222.4)			(143,222.4)
Bank deposits (1)	(490.6)	(482.4)		(482.4)	
Cash collateral payable	(100.5)	(100.5)	(100.5)		

Principal Financial Group, Inc.

Notes to Consolidated Financial Statements (continued)

March 31, 2019

(Unaudited)

	December 31, 2018				
			Fair value hierarchy level		
	Carrying amount	Fair value	Level 1	Level 2	Level 3
			(in millions)		
Assets (liabilities)					
Mortgage loans	$ 15,336.9	$ 15,383.6	$	$	$ 15,383.6
Policy loans	801.4	965.5			965.5
Other investments	247.4	239.8		157.5	82.3
Cash and cash equivalents	1,201.6	1,201.6	1,148.6	53.0	
Investment contracts	(32,572.1)	(31,428.2)		(4,085.7)	(27,342.5)
Short-term debt	(42.9)	(42.9)		(42.9)	
Long-term debt	(3,259.6)	(3,257.1)		(3,129.3)	(127.8)
Separate account liabilities	(132,562.9)	(131,491.4)			(131,491.4)
Bank deposits (1)	(500.0)	(489.1)		(489.1)	
Cash collateral payable	(79.5)	(79.5)	(79.5)		

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

11. Segment Information

We provide financial products and services through the following segments: Retirement and Income Solutions, Principal Global Investors, Principal International and U.S. Insurance Solutions. 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.

The Retirement and Income Solutions segment provides retirement and related financial products and services primarily to businesses, their employees and other individuals. The segment is organized into Retirement and Income Solutions Fee, which includes full service accumulation, trust services and individual variable annuities; and Retirement and Income Solutions Spread, which includes individual fixed annuities, investment only, pension risk transfer and banking services.

The Principal Global Investors segment provides asset management services to our asset accumulation business, our insurance operations, the Corporate segment and third party clients. This segment also includes our mutual fund business.

The Principal International segment has operations in Latin America (Brazil, Chile and Mexico) and Asia (China, Hong Kong Special Administrative Region, India and Southeast Asia). We focus on locations with large middle classes, favorable demographics and growing long-term savings, ideally with voluntary or mandatory pension markets. We entered these locations through acquisitions, start-up operations and joint ventures.

The U.S. Insurance Solutions segment focuses on solutions for individuals and small-to-medium sized businesses and their employees. The segment is organized into Specialty Benefits insurance, which provides group dental and vision insurance, individual and group disability insurance, critical illness, accident, group life insurance and non-medical fee-for-service claims administration; and Individual Life insurance, which provides universal life, variable universal life, indexed universal life and traditional life insurance.

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); RobustWealth, Inc. (RobustWealth), our financial technology company; and our exited group medical and long-term care insurance businesses are reported in this segment.

Effective January 1, 2019, we made changes to the allocation of certain compensation and other expenses and net investment income among the reportable segments. These allocation changes were made as a result of a global financial process improvement project. The expense allocation changes simplify the allocation processes, increase transparency and allow for more effective expense management across the enterprise. The net investment income allocation changes better align our internal capital allocation with enterprise capital targets. Segment results for prior periods were recast so they are reported on a comparable basis, with no impact to total company financial results.

Principal Financial Group, Inc.
Notes to Consolidated Financial Statements (continued)
March 31, 2019
(Unaudited)

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 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 and
- Certain market value adjustments of embedded derivatives.

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,
- Recognition of deferred front-end fee revenues for sales charges on retirement and life insurance products and services,
- Related changes in the amortization pattern of DAC and related 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 their impact on:
- 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 and
- Recognition of deferred front-end fee revenues for sales charges on retirement and life insurance products and services.
- 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.

Table of Contents

Principal Financial Group, Inc.
Notes to Consolidated Financial Statements (continued)
March 31, 2019
(Unaudited)

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, 2019	December 31, 2018
	(in millions)	
Assets:		
Retirement and Income Solutions	**$ 176,073.5**	$ 163,833.6
Principal Global Investors	**2,296.9**	2,301.0
Principal International	**49,477.5**	46,701.2
U.S. Insurance Solutions	**26,370.0**	25,388.2
Corporate	**5,202.0**	4,812.1
Total consolidated assets	**$ 259,419.9**	$ 243,036.1

[redacted]

(1) Reflects inter-segment revenues of $85.7 million and $101.7 million for the three months ended March 31, 2019 and 2018, respectively.

(2) Reflects inter-segment revenues of $61.5 million and $62.2 million for the three months ended March 31, 2019 and 2018, respectively.

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

Principal Financial Group, Inc.
Notes to Consolidated Financial Statements (continued)
March 31, 2019
(Unaudited)

	For the three months ended March 31, 2019	2018
	(in millions)	
Net realized capital gains (losses):		
Net realized capital gains (losses)	**$ 84.5**	$ (25.1)
Derivative and hedging-related revenue adjustments	**(11.5)**	(17.8)
Adjustments related to equity method investments	**(0.4)**	0.2
Adjustments related to sponsored investment funds	**8.0**	2.1
Recognition of front-end fee revenue	**3.1**	(1.6)
Net realized capital gains (losses), net of related revenue adjustments	**83.7**	(42.2)
Amortization of deferred acquisition costs and other actuarial balances	**(16.4)**	5.6
Capital (gains) losses distributed	**(8.7)**	10.6
Market value adjustments of embedded derivatives	**7.0**	2.4
Pre-tax net realized capital gains (losses), as adjusted (a)	**$ 65.6**	$ (23.6)

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

12. 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, 2019	2018
	(in millions)	
Revenue from contracts with customers by segment:		
Retirement and Income Solutions:		
Retirement and Income Solutions Fee	**$ 58.4**	$ 61.7
Retirement and Income Solutions Spread	**2.9**	2.7
Total Retirement and Income Solutions	**61.3**	64.4
Principal Global Investors	**332.3**	360.3
Principal International	**114.9**	121.1
U.S. Insurance Solutions:		
Specialty Benefits insurance	**3.7**	3.7
Individual Life insurance	**12.0**	9.4
Total U.S. Insurance Solutions	**15.7**	13.1
Corporate	**37.0**	43.9
Total segment revenue from contracts with customers	**561.2**	602.8
Adjustments for fees and other revenues not within the scope of revenue recognition guidance (1)	**409.2**	410.1

Pre-tax other adjustments (2)		**3.1**		(1.6)
Total fees and other revenues per consolidated statements of operations	**$**	**973.5**	$	1,011.3

(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 the recognition of deferred front-end fee revenues for sales charges on retirement and life insurance products and certain market value adjustments to fee revenues.

Retirement and Income Solutions - Fee

Retirement and Income Solutions - Fee offers service and trust agreements for defined contribution 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 trust services are also available through an affiliated trust company.

Principal Financial Group, Inc.
Notes to Consolidated Financial Statements (continued)
March 31, 2019
(Unaudited)

Fees and other revenues are earned for administrative activities performed for the defined contribution plans including recordkeeping and reporting as well as trust, asset management and investment services. 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.

Fees and other 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 investment portfolio each day. If the consideration for this series of performance obligations is based on daily market value, it is considered variable each day as the services are performed over time. The consideration becomes unconstrained and thus recognized as revenue for each day s series of distinct services once the market value of the clients investment portfolios is determined at market close or carried over at the end of the day for days when the market is closed. Additionally, fixed fees and other revenues are recognized point-in-time as fee-for-service transactions upon completion.

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

	For the three months ended March 31,			
		2019		**2018**
		(in millions)		
Administrative service fee revenue	**$**	**58.2**	$	61.6
Other fee revenue		**0.2**		0.1
Total revenues from contracts with customers		**58.4**		61.7
Fees and other revenues not within the scope of revenue recognition guidance		**271.8**		286.4
Total fees and other revenues		**330.2**		348.1
Premiums and other considerations		**1.1**		1.5
Net investment income		**99.5**		98.2
Total operating revenues	**$**	**430.8**	$	447.8

Retirement and Income Solutions - Spread

Retirement and Income Solutions Spread offers individual retirement accounts (IRAs) through Principal Bank, which 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. Revenues are earned through fees 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.

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

	For the three months ended March 31,	
	2019	**2018**
	(in millions)	
Deposit account fee revenue	**$ 2.9**	$ 2.7
Total revenues from contracts with customers	**2.9**	2.7
Fees and other revenues not within the scope of revenue recognition guidance	**4.9**	2.7
Total fees and other revenues	**7.8**	5.4
Premiums and other considerations	**957.5**	288.3
Net investment income	**495.8**	437.4
Total operating revenues	**$ 1,461.1**	$ 731.1

Principal Financial Group, Inc.
Notes to Consolidated Financial Statements (continued)
March 31, 2019
(Unaudited)

Principal Global Investors

Fees and other revenues earned for asset management, investment advisory and distribution services provided to institutional and retail clients are based largely upon contractual rates applied to the specified amounts of the clients portfolios. Each service is a distinct performance obligation, or a series of distinct services that are a single performance obligation in that the services 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.

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

	For the three months ended March 31,	
	2019	**2018**
	(in millions)	
Management fee revenue	**$ 292.8**	$ 316.3
Other fee revenue	**39.5**	44.0
Total revenues from contracts with customers	**332.3**	360.3
Fees and other revenues not within the scope of revenue recognition guidance	**4.3**	6.7
Total fees and other revenues	**336.6**	367.0
Net investment income	**2.4**	1.5
Total operating revenues	**$ 339.0**	$ 368.5

Principal International

Fees and other revenues are earned for asset management and distribution services provided to retail and institutional clients in addition to trustee and/or administrative services performed for retirement savings plans. Each service is considered 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 are typically based upon contractual rates applied to the market value of the clients investment portfolios and are considered variable consideration. The transaction price generally includes the amount determined at the end of the reporting period, whereby fees are deducted from the clients investment portfolios and are recognized as revenue when no longer constrained and satisfied as the services are performed over time utilizing the output method. In addition, payments to customers can take the form of an incentive given by us to entice the customer to purchase its goods or services. Incentives offered to customers are recognized as part of the transaction price as a reduction of revenue either over the period the customer remains in order to receive the incentive or monthly throughout the life of the contract.

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.

Fees for managing customers mandatory retirement savings accounts in Chile 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.

Principal Financial Group, Inc.
Notes to Consolidated Financial Statements (continued)
March 31, 2019
(Unaudited)

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

	For the three months ended March 31, 2019	2018
	(in millions)	
Management fee revenue	**$ 114.3**	$ 120.1
Other fee revenue	**0.6**	1.0
Total revenues from contracts with customers	**114.9**	121.1
Fees and other revenues not within the scope of revenue recognition guidance	**1.7**	2.0
Total fees and other revenues	**116.6**	123.1
Premiums and other considerations	**117.5**	97.9
Net investment income	**146.4**	162.1
Total operating revenues	**$ 380.5**	$ 383.1
Revenues from contracts with customers by region:		
Latin America	**$ 88.1**	$ 92.5
Asia	**27.0**	28.7
Principal International corporate / regional offices	**0.2**	0.3
Eliminations	**(0.4)**	(0.4)
Total revenues from contracts with customers	**$ 114.9**	**$** 121.1

U.S. Insurance Solutions

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 Consolidated Financial Statements (continued)
March 31, 2019
(Unaudited)

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

	For the three months ended March 31, 2019	2018
	(in millions)	
Specialty Benefits Insurance:		
Administrative service fees	**$ 3.7**	$ 3.7
Total revenues from contracts with customers	**3.7**	3.7
Fees and other revenues not within the scope of revenue recognition guidance	**4.9**	5.2
Total fees and other revenues	**8.6**	8.9
Premiums and other considerations	**555.9**	517.0
Net investment income	**37.3**	39.5
Total operating revenues	**$ 601.8**	$ 565.4
Individual Life Insurance:		
Administrative service fees	**$ 5.9**	$ 5.8
Commission income	**6.1**	3.6
Total revenues from contracts with customers	**12.0**	9.4
Fees and other revenues not within the scope of revenue recognition guidance	**192.2**	185.7
Total fees and other revenues	**204.2**	195.1
Premiums and other considerations	**92.9**	90.5
Net investment income	**169.2**	165.7
Total operating revenues	**$ 466.3**	$ 451.3

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 a 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 Consolidated Financial Statements (continued)
March 31, 2019
(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, 2019	2018
	(in millions)	
Commission income	**$ 75.8**	$ 79.0
Other fee revenue	**8.8**	8.0
Eliminations	**(47.6)**	(43.1)
Total revenues from contracts with customers	**37.0**	43.9
Fees and other revenues not within the scope of revenue recognition guidance	**(70.6)**	(78.6)
Total fees and other revenues	**(33.6)**	(34.7)
Net investment income	**34.8**	34.7
Total operating revenues	**$ 1.2**	$

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 $142.6 million and $137.6 million as of March 31, 2019 and December 31, 2018, 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, 2019 and 2018, $5.6 million and $5.7 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.

13. Stock-Based Compensation Plans

As of March 31, 2019, we had 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). As of May 20, 2014, no new grants will be made under the Amended and Restated 2010 Stock Incentive Plan or the 2005 Directors Stock Plan. No grants have been made under the Stock Incentive Plan or the Directors Stock Plan since at least 2005. Under the terms of the 2014 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. The 2014 Directors Stock Plan provides for the grant of nonqualified stock options, restricted stock, restricted stock units or other stock-based awards to our nonemployee directors. To date, we have not granted any incentive stock options, restricted stock or performance units under any plans.

As of March 31, 2019, the maximum number of new shares of common stock available for grant under the 2014 Stock Incentive Plan and the 2014 Directors Stock Plan was 6.8 million.

Principal Financial Group, Inc.
Notes to Consolidated Financial Statements (continued)
March 31, 2019
(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,	
	2019	**2018**
	(in millions)	
Compensation cost	**$ 24.3**	$ 23.7
Related income tax benefit	**4.8**	5.2
Capitalized as part of an asset	**0.6**	0.5

Nonqualified Stock Options

Nonqualified stock options were granted to certain employees under the 2014 Stock Incentive Plan. Total options granted were 1.2 million for the three months ended March 31, 2019. The fair value of stock options is estimated using the Black-Scholes option pricing model. The following is a summary of the assumptions used in this model for the stock options granted during the period:

	For the three months ended March 31, 2019
Expected volatility	**23.3%**
Expected term (in years)	**7.0**
Risk-free interest rate	**2.6%**
Expected dividend yield	**4.07%**
Weighted average estimated fair value per common share	**$ 10.00**

As of March 31, 2019, we had $10.7 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 1.3 years.

Performance Share Awards

Performance share awards were granted to certain employees under the 2014 Stock Incentive Plan. Total performance share awards granted were 0.2 million for the three months ended March 31, 2019. 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 150% of the initial target awards. The fair value of performance share awards 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 performance share awards granted was $53.09 per common share.

As of March 31, 2019, we had $11.2 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 1.3 years.

Restricted Stock Units

Restricted stock units were issued to certain employees pursuant to the 2014 Stock Incentive Plan and non-employee directors pursuant to the 2014 Directors Stock Plan. Total restricted stock units granted were 1.0 million for the three months ended March 31, 2019. 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 $53.08 per common share.

As of March 31, 2019, we had $79.6 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 2.1 years.

Employee Stock Purchase Plan

Under the Employee Stock Purchase Plan, employees purchased 0.4 million shares for the three months ended March 31, 2019. The weighted average fair value of the discount on the stock purchased was $12.48 per share.

Table of Contents

Principal Financial Group, Inc.
Notes to Consolidated Financial Statements (continued)
March 31, 2019
(Unaudited)

As of March 31, 2019, a total of 1.8 million of new shares were available to be made issuable by us for this plan.

14. Earnings Per Common Share

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

	For the three months ended March 31,			
	2019		**2018**	
	(in millions, except per share data)			
Net income	**$**	**452.1**	$	402.5
Subtract:				
Net income attributable to noncontrolling interest		**22.2**		5.4
Total	**$**	**429.9**	$	397.1
Weighted-average shares outstanding:				
Basic		**278.7**		289.4
Dilutive effects:				
Stock options		**0.7**		1.4
Restricted stock units		**1.5**		1.9
Performance share awards				0.2
Diluted		**280.9**		292.9
Net income per common share:				
Basic	**$**	**1.54**	$	1.37
Diluted	**$**	**1.53**	$	1.36

The calculation of diluted earnings per share for the three months ended March 31, 2019 and 2018, excludes the incremental effect related to certain outstanding stock-based compensation grants due to their anti-dilutive effect.

15. Condensed Consolidating Financial Information

Principal Life has established special purpose entities to issue secured medium-term notes. Under the program, the payment obligations of principal and interest on the notes are secured by funding agreements issued by Principal Life. Principal Life s payment obligations on the funding agreements are fully and unconditionally guaranteed by PFG. All of the outstanding stock of Principal Life is indirectly owned by PFG and PFG is the only guarantor of the payment obligations of the funding agreements.

The following tables set forth condensed consolidating financial information of (i) PFG, (ii) Principal Life, (iii) Principal Financial Services, Inc. (PFS) and all other direct and indirect subsidiaries of PFG on a combined basis and (iv) the eliminations necessary to arrive at the information for PFG on a consolidated basis as of March 31, 2019 and December 31, 2018, and for the three months ended March 31, 2019 and 2018.

In presenting the condensed consolidating financial statements, the equity method of accounting has been applied to (i) PFG s interest in all direct subsidiaries of PFG, (ii) Principal Life s interest in all direct subsidiaries of Principal Life and (iii) PFS s interest in Principal Life even though all such subsidiaries meet the requirements to be consolidated under U.S. GAAP. Earnings of subsidiaries are, therefore, reflected in the parent s investment and earnings. All intercompany balances and transactions, including elimination of the parent s investment in subsidiaries, between PFG, Principal Life and PFS and all other subsidiaries have been eliminated, as shown in the column Eliminations. These condensed consolidating financial statements should be read in conjunction with the consolidated financial statements. The financial information may not necessarily be indicative of results of operations, cash flows or financial position had the subsidiaries operated as independent entities.

PFG sponsors nonqualified benefit plans for select employees and agents and is responsible for the obligations of these plans. Nonqualified plan assets are held in Rabbi trusts for the benefit of all nonqualified plan participants. The Rabbi trusts are separate legal entities and are not a part of PFG on a stand-alone basis. The plan assets are available to satisfy the claims of general creditors only in the event of bankruptcy and are, therefore, consolidated in our statements of financial position.

Table of Contents

Principal Financial Group, Inc.
Notes to Consolidated Financial Statements (continued)
March 31, 2019
(Unaudited)

Condensed Consolidating Statements of Financial Position

March 31, 2019

	Principal Financial Group, Inc. Parent Only	Principal Life Insurance Company Only	Principal Financial Services, Inc. and Other Subsidiaries Combined (1)	Eliminations	Principal Financial Group, Inc. Consolidated
			(in millions)		
Assets					
Fixed maturities, available-for-sale	$ 210.2	$ 56,038.1	$ 7,237.3	$ (362.6)	$ 63,123.0
Fixed maturities, trading	305.2	198.7	165.0		668.9
Equity securities		86.6	1,777.5		1,864.1
Mortgage loans		14,733.9	1,615.3	(751.7)	15,597.5
Real estate		2.8	1,733.9		1,736.7
Policy loans		749.0	49.5		798.5
Investment in unconsolidated entities	15,275.6	1,834.2	8,361.0	(24,566.5)	904.3
Other investments	10.7	6,418.1	2,824.5	(5,402.4)	3,850.9
Cash and cash equivalents	270.2	730.7	1,845.2	(586.4)	2,259.7
Accrued investment income	1.5	601.0	79.9	(2.8)	679.6
Premiums due and other receivables		2,035.3	3,954.4	(4,348.6)	1,641.1
Deferred acquisition costs		3,603.2	13.3		3,616.5
Property and equipment		755.9	177.3		933.2
Goodwill		54.3	1,056.3		1,110.6
Other intangibles		19.2	1,291.1		1,310.3
Separate account assets		117,897.1	40,045.7		157,942.8
Other assets	364.4	1,112.4	4,539.4	(4,634.0)	1,382.2
Total assets	$ 16,437.8	$ 206,870.5	$ 76,766.6	$ (40,655.0)	$ 259,419.9
Liabilities					
Contractholder funds	$	$ 36,752.9	$ 3,249.3	$ (352.9)	$ 39,649.3
Future policy benefits and claims		31,614.1	6,477.8	(1,200.7)	36,891.2
Other policyholder funds		771.8	170.4	(3.1)	939.1
Short-term debt			43.9		43.9
Long-term debt	3,130.2		851.9	(715.7)	3,266.4
Income taxes currently payable			58.2	(35.9)	22.3
Deferred income taxes	1.0	761.7	1,054.7	(498.7)	1,318.7
Separate account liabilities		117,897.1	40,045.7		157,942.8
Other liabilities	612.2	9,076.3	9,064.4	(12,706.6)	6,046.3
Total liabilities	3,743.4	196,873.9	61,016.3	(15,513.6)	246,120.0
Redeemable noncontrolling interest			537.7		537.7
Stockholders equity					
Common stock	4.8	2.5		(2.5)	4.8
Additional paid-in capital	10,090.8	6,315.0	9,461.1	(15,776.1)	10,090.8
Retained earnings	10,571.9	2,569.8	6,136.3	(8,706.1)	10,571.9
Accumulated other comprehensive income (loss)	(418.9)	1,109.3	(452.6)	(656.7)	(418.9)

Treasury stock, at cost		**(7,554.2)**								**(7,554.2)**
Total stockholders equity attributable to PFG		**12,694.4**		**9,996.6**		**15,144.8**		**(25,141.4)**		**12,694.4**
Noncontrolling interest						**67.8**				**67.8**
Total stockholders equity		**12,694.4**		**9,996.6**		**15,212.6**		**(25,141.4)**		**12,762.2**
Total liabilities and stockholders equity	**$**	**16,437.8**	**$**	**206,870.5**	**$**	**76,766.6**	**$**	**(40,655.0)**	**$**	**259,419.9**

(1) PFG sponsors nonqualified benefit plans. Nonqualified benefit plan assets and liabilities held in Rabbi trusts were $680.5 million and $549.8 million, respectively.

Table of Contents

Principal Financial Group, Inc.
Notes to Consolidated Financial Statements (continued)
March 31, 2019
(Unaudited)

Condensed Consolidating Statements of Financial Position

December 31, 2018

	Principal Financial Group, Inc. Parent Only	Principal Life Insurance Company Only	Principal Financial Services, Inc. and Other Subsidiaries Combined (1)	Eliminations	Principal Financial Group, Inc. Consolidated
			(in millions)		
Assets					
Fixed maturities, available-for-sale	$ 211.5	$ 53,401.7	$ 6,857.9	$ (362.6)	$ 60,108.5
Fixed maturities, trading	308.9	165.5	161.7		636.1
Equity securities		84.8	1,758.9		1,843.7
Mortgage loans		14,478.0	1,615.5	(756.6)	15,336.9
Real estate		1.9	1,727.8		1,729.7
Policy loans		755.9	45.5		801.4
Investment in unconsolidated entities	13,862.4	2,324.4	6,853.8	(22,171.8)	868.8
Other investments	10.7	5,549.1	2,517.6	(4,635.9)	3,441.5
Cash and cash equivalents	334.9	1,323.9	2,014.8	(696.1)	2,977.5
Accrued investment income	1.4	563.2	77.5	(5.9)	636.2
Premiums due and other receivables		1,818.1	3,781.3	(4,186.3)	1,413.1
Deferred acquisition costs		3,680.2	13.3		3,693.5
Property and equipment		661.3	106.0		767.3
Goodwill		54.3	1,045.7		1,100.0
Other intangibles		19.7	1,295.4		1,315.1
Separate account assets		107,343.0	37,644.9		144,987.9
Other assets	375.0	1,135.1	4,418.3	(4,549.5)	1,378.9
Total assets	$ 15,104.8	$ 193,360.1	$ 71,935.9	$ (37,364.7)	$ 243,036.1
Liabilities					
Contractholder funds	$	$ 36,861.7	$ 3,189.2	$ (351.2)	$ 39,699.7
Future policy benefits and claims		30,690.3	6,128.6	(1,154.1)	35,664.8
Other policyholder funds		725.7	165.3	(2.6)	888.4
Short-term debt			42.9		42.9
Long-term debt	3,129.8		851.2	(721.4)	3,259.6
Income taxes currently payable			80.7	(55.4)	25.3
Deferred income taxes		405.3	1,056.4	(503.3)	958.4
Separate account liabilities		107,343.0	37,644.9		144,987.9
Other liabilities	585.0	8,503.2	8,586.5	(12,012.8)	5,661.9
Total liabilities	3,714.8	184,529.2	57,745.7	(14,800.8)	231,188.9
Redeemable noncontrolling interest			391.2		391.2
Stockholders equity					
Common stock	4.8	2.5		(2.5)	4.8
Additional paid-in capital	10,060.7	6,331.6	9,461.2	(15,792.8)	10,060.7
Retained earnings	10,290.2	2,441.2	5,855.0	(8,296.2)	10,290.2
Accumulated other comprehensive income (loss)	(1,565.1)	55.6	(1,583.2)	1,527.6	(1,565.1)

Treasury stock, at cost		(7,400.6)								(7,400.6)
Total stockholders equity attributable to PFG		11,390.0		8,830.9		13,733.0		(22,563.9)		11,390.0
Noncontrolling interest						66.0				66.0
Total stockholders equity		11,390.0		8,830.9		13,799.0		(22,563.9)		11,456.0
Total liabilities and stockholders equity	$	15,104.8	$	193,360.1	$	71,935.9	$	(37,364.7)	$	243,036.1

(1) PFG sponsors nonqualified benefit plans. Nonqualified benefit plan assets and liabilities held in Rabbi trusts were $671.7 million and $542.4 million, respectively.

Principal Financial Group, Inc.
Notes to Consolidated Financial Statements (continued)
March 31, 2019
(Unaudited)

Condensed Consolidating Statements of Operations

For the three months ended March 31, 2019

	Principal Financial Group, Inc. Parent Only	Principal Life Insurance Company Only	Principal Financial Services, Inc. and Other Subsidiaries Combined	Eliminations	Principal Financial Group, Inc. Consolidated
			(in millions)		
Revenues					
Premiums and other considerations	$	$ 1,542.4	$ 182.5	$	$ 1,724.9
Fees and other revenues		544.6	520.6	(91.7)	973.5
Net investment income	5.0	702.5	546.0	(292.5)	961.0
Net realized capital gains (losses), excluding impairment losses on available-for-sale securities	5.3	403.5	(317.5)		91.3
Net other-than-temporary impairment losses on available-for-sale securities		(9.5)	(0.1)		(9.6)
Other-than-temporary impairment losses on fixed maturities, available-for-sale reclassified to other comprehensive income		2.8			2.8
Net impairment losses on available-for-sale securities		(6.7)	(0.1)		(6.8)
Net realized capital gains (losses)	5.3	396.8	(317.6)		84.5
Total revenues	10.3	3,186.3	931.5	(384.2)	3,743.9
Expenses					
Benefits, claims and settlement expenses		1,944.4	253.6	(2.9)	2,195.1
Dividends to policyholders		30.1			30.1
Operating expenses	56.1	585.6	438.1	(87.1)	992.7
Total expenses	56.1	2,560.1	691.7	(90.0)	3,217.9
Income (loss) before income taxes	(45.8)	626.2	239.8	(294.2)	526.0
Income taxes (benefits)	(11.3)	95.2	(9.8)	(0.2)	73.9
Equity in the net income (loss) of subsidiaries	464.4	(235.7)	233.1	(461.8)	
Net income	429.9	295.3	482.7	(755.8)	452.1
Net income attributable to noncontrolling interest			19.8	2.4	22.2
Net income attributable to PFG	$ 429.9	$ 295.3	$ 462.9	$ (758.2)	$ 429.9
Net income	$ 429.9	$ 295.3	$ 482.7	$ (755.8)	$ 452.1
Other comprehensive income	1,141.3	1,053.9	1,174.2	(2,222.7)	1,146.7
Comprehensive income	$ 1,571.2	$ 1,349.2	$ 1,656.9	$ (2,978.5)	$ 1,598.8

Table of Contents

Principal Financial Group, Inc.
Notes to Consolidated Financial Statements (continued)
March 31, 2019
(Unaudited)

Condensed Consolidating Statements of Operations

For the three months ended March 31, 2018

	Principal Financial Group, Inc. Parent Only	Principal Life Insurance Company Only	Principal Financial Services, Inc. and Other Subsidiaries Combined	Eliminations	Principal Financial Group, Inc. Consolidated
			(in millions)		
Revenues					
Premiums and other considerations	$	$ 841.0	$ 154.2	$	$ 995.2
Fees and other revenues		549.0	558.9	(96.6)	1,011.3
Net investment income	6.0	626.6	556.2	(286.6)	902.2
Net realized capital gains (losses), excluding impairment losses on available-for-sale securities	(6.3)	(238.5)	229.6		(15.2)
Net other-than-temporary impairment (losses) recoveries on available-for-sale securities		2.8	(1.5)		1.3
Other-than-temporary impairment losses on fixed maturities, available-for-sale reclassified from other comprehensive income		(9.8)	(1.4)		(11.2)
Net impairment losses on available-for-sale securities		(7.0)	(2.9)		(9.9)
Net realized capital gains (losses)	(6.3)	(245.5)	226.7		(25.1)
Total revenues	(0.3)	1,771.1	1,496.0	(383.2)	2,883.6
Expenses					
Benefits, claims and settlement expenses		1,173.8	240.3	(3.0)	1,411.1
Dividends to policyholders		30.5			30.5
Operating expenses	46.2	583.0	446.1	(90.3)	985.0
Total expenses	46.2	1,787.3	686.4	(93.3)	2,426.6
Income (loss) before income taxes	(46.5)	(16.2)	809.6	(289.9)	457.0
Income taxes (benefits)	(15.1)	(35.5)	105.2	(0.1)	54.5
Equity in the net income (loss) of subsidiaries	428.5	273.4	(274.4)	(427.5)	
Net income	397.1	292.7	430.0	(717.3)	402.5
Net income attributable to noncontrolling interest			5.4		5.4
Net income attributable to PFG	$ 397.1	$ 292.7	$ 424.6	$ (717.3)	$ 397.1
Net income	$ 397.1	$ 292.7	$ 430.0	$ (717.3)	$ 402.5
Other comprehensive loss	(731.3)	(783.1)	(767.4)	1,545.7	(736.1)
Comprehensive loss	$ (334.2)	$ (490.4)	$ (337.4)	$ 828.4	$ (333.6)

Table of Contents

Principal Financial Group, Inc.
Notes to Consolidated Financial Statements (continued)
March 31, 2019
(Unaudited)

Condensed Consolidating Statements of Cash Flows

For the three months ended March 31, 2019

	Principal Financial Group, Inc. Parent Only	Principal Life Insurance Company Only	Principal Financial Services, Inc. and Other Subsidiaries Combined	Eliminations	Principal Financial Group, Inc. Consolidated
			(in millions)		
Operating activities					
Net cash provided by operating activities	$ 27.5	$ 1,376.1	$ 634.4	$ (861.6)	$ 1,176.4
Investing activities					
Fixed maturities available-for-sale and equity securities with intent to hold:					
Purchases	(150.2)	(2,329.5)	(408.1)	1.1	(2,886.7)
Sales		104.9	237.7		342.6
Maturities	153.1	1,277.7	118.1		1,548.9
Mortgage loans acquired or originated		(581.2)	(46.1)	2.2	(625.1)
Mortgage loans sold or repaid		323.3	64.9	(5.8)	382.4
Real estate acquired			(10.5)		(10.5)
Net purchases of property and equipment		(12.1)	(17.3)		(29.4)
Dividends and returns of capital received from unconsolidated entities	208.9	0.6	193.9	(403.4)	
Net change in other investments	(6.0)	(374.6)	(800.7)	968.0	(213.3)
Net cash provided by (used in) investing activities	205.8	(1,590.9)	(668.1)	562.1	(1,491.1)
Financing activities					
Issuance of common stock	5.8				5.8
Acquisition of treasury stock	(153.6)				(153.6)
Payments for financing element derivatives		(6.5)			(6.5)
Dividends to common stockholders	(150.2)				(150.2)
Issuance of long-term debt			6.7		6.7
Principal repayments of long-term debt			(6.1)	5.8	(0.3)
Net proceeds from short-term borrowings			0.1		0.1
Dividends and capital paid to parent		(193.9)	(209.5)	403.4	
Investment contract deposits		1,755.2	117.0		1,872.2
Investment contract withdrawals		(1,938.9)	(8.5)		(1,947.4)
Net decrease in banking operation deposits			(35.4)		(35.4)
Other		5.7	(0.2)		5.5
Net cash used in financing activities	(298.0)	(378.4)	(135.9)	409.2	(403.1)
Net decrease in cash and cash equivalents	(64.7)	(593.2)	(169.6)	109.7	(717.8)
Cash and cash equivalents at beginning of period	334.9	1,323.9	2,014.8	(696.1)	2,977.5
Cash and cash equivalents at end of period	$ 270.2	$ 730.7	$ 1,845.2	$ (586.4)	$ 2,259.7

81

Table of Contents

Principal Financial Group, Inc.
Notes to Consolidated Financial Statements (continued)
March 31, 2019
(Unaudited)

Condensed Consolidating Statements of Cash Flows

For the three months ended March 31, 2018

	Principal Financial Group, Inc. Parent Only	Principal Life Insurance Company Only	Principal Financial Services, Inc. and Other Subsidiaries Combined	Eliminations	Principal Financial Group, Inc. Consolidated
			(in millions)		
Operating activities					
Net cash provided by (used in) operating activities	$ (3.1)	$ 1,568.3	$ 173.8	$ (992.5)	$ 746.5
Investing activities					
Fixed maturities available-for-sale and equity securities with intent to hold:					
Purchases	(200.8)	(2,633.7)	(499.4)	3.1	(3,330.8)
Sales		1,019.8	253.7		1,273.5
Maturities	0.2	1,402.9	151.9		1,555.0
Mortgage loans acquired or originated		(614.7)	(112.2)	83.9	(643.0)
Mortgage loans sold or repaid		272.3	69.9	(10.4)	331.8
Real estate acquired			(14.7)		(14.7)
Real estate sold			56.5		56.5
Net purchases of property and equipment		(15.8)	(10.2)		(26.0)
Purchase of interests in subsidiaries, net of cash acquired			(113.9)		(113.9)
Dividends and returns of capital received from unconsolidated entities	196.0	41.6	221.0	(458.6)	
Net change in other investments	(0.6)	(631.0)	(353.2)	916.5	(68.3)
Net cash used in investing activities	(5.2)	(1,158.6)	(350.6)	534.5	(979.9)
Financing activities					
Issuance of common stock	32.5				32.5
Acquisition of treasury stock	(199.6)				(199.6)
Payments for financing element derivatives		(19.3)			(19.3)
Dividends to common stockholders	(147.3)				(147.3)
Issuance of long-term debt			100.6	(82.6)	18.0
Principal repayments of long-term debt			(10.8)	10.5	(0.3)
Net proceeds from short-term borrowings			38.0		38.0
Dividends and capital paid to parent		(221.0)	(237.6)	458.6	
Investment contract deposits		1,656.8	126.2		1,783.0
Investment contract withdrawals		(1,521.5)	(14.0)		(1,535.5)
Net increase in banking operation deposits			124.1		124.1
Other		4.7			4.7
Net cash provided by (used in) financing activities	(314.4)	(100.3)	126.5	386.5	98.3
Net increase (decrease) in cash and cash equivalents	(322.7)	309.4	(50.3)	(71.5)	(135.1)
Cash and cash equivalents at beginning of period	842.8	426.7	1,526.4	(325.1)	2,470.8

Cash and cash equivalents at end of period	$	520.1	$	736.1	$	1,476.1	$	(396.6)	$	2,335.7

Table of Contents

Principal Financial Group, Inc.
Notes to Consolidated Financial Statements (continued)
March 31, 2019
(Unaudited)

Under our current shelf registration that was filed with the SEC and became effective May 3, 2017, 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.

The following tables set forth condensed consolidating financial information of (i) PFG, (ii) PFS, (iii) Principal Life and all other direct and indirect subsidiaries of PFG on a combined basis and (iv) the eliminations necessary to arrive at the information for PFG on a consolidated basis as of March 31, 2019 and December 31, 2018, and for the three months ended March 31, 2019 and 2018.

In presenting the condensed consolidating financial statements, the equity method of accounting has been applied to (i) PFG s interest in all direct subsidiaries of PFG and (ii) PFS s interest in Principal Life and all other subsidiaries, where applicable, even though all such subsidiaries meet the requirements to be consolidated under U.S. GAAP. Earnings of subsidiaries are, therefore, reflected in the parent s investment and earnings. All intercompany balances and transactions, including elimination of the parent s investment in subsidiaries, between PFG, PFS and Principal Life and all other subsidiaries have been eliminated, as shown in the column Eliminations. These condensed consolidating financial statements should be read in conjunction with the consolidated financial statements. The financial information may not necessarily be indicative of results of operations, cash flows or financial position had the subsidiaries operated as independent entities.

PFG sponsors nonqualified benefit plans for select employees and agents and is responsible for the obligations of these plans. Nonqualified plan assets are held in Rabbi trusts for the benefit of all nonqualified plan participants. The Rabbi trusts are separate legal entities and are not a part of PFG on a stand-alone basis. The plan assets are available to satisfy the claims of general creditors only in the event of bankruptcy and are, therefore, consolidated in our statements of financial position.

Principal Financial Group, Inc.
Notes to Consolidated Financial Statements (continued)
March 31, 2019
(Unaudited)

Condensed Consolidating Statements of Financial Position

March 31, 2019

	Principal Financial Group, Inc. Parent Only	Principal Financial Services, Inc. Only	Principal Life Insurance Company and Other Subsidiaries Combined (1)	Eliminations	Principal Financial Group, Inc. Consolidated
			(in millions)		
Assets					
Fixed maturities, available-for-sale	$ 210.2	$	$ 62,912.8	$	$ 63,123.0
Fixed maturities, trading	305.2		363.7		668.9
Equity securities		13.6	1,850.5		1,864.1
Mortgage loans			15,597.5		15,597.5
Real estate			1,736.7		1,736.7
Policy loans			798.5		798.5
Investment in unconsolidated entities	15,275.6	15,770.2	742.9	(30,884.4)	904.3
Other investments	10.7	104.8	3,735.4		3,850.9
Cash and cash equivalents	270.2	426.1	2,484.6	(921.2)	2,259.7
Accrued investment income	1.5		678.1		679.6
Premiums due and other receivables		15.5	1,986.1	(360.5)	1,641.1
Deferred acquisition costs			3,616.5		3,616.5
Property and equipment			933.2		933.2
Goodwill			1,110.6		1,110.6
Other intangibles			1,310.3		1,310.3
Separate account assets			157,942.8		157,942.8
Other assets	364.4	41.6	1,503.5	(527.3)	1,382.2
Total assets	$ 16,437.8	$ 16,371.8	$ 259,303.7	$ (32,693.4)	$ 259,419.9
Liabilities					
Contractholder funds	$	$	$ 39,649.3	$	$ 39,649.3
Future policy benefits and claims			36,891.2		36,891.2
Other policyholder funds			939.1		939.1
Short-term debt			43.9		43.9
Long-term debt	3,130.2	360.0	136.2	(360.0)	3,266.4
Income taxes currently payable		(0.4)	40.6	(17.9)	22.3
Deferred income taxes	1.0	19.7	1,795.2	(497.2)	1,318.7
Separate account liabilities			157,942.8		157,942.8
Other liabilities	612.2	847.2	5,049.0	(462.1)	6,046.3
Total liabilities	3,743.4	1,226.5	242,487.3	(1,337.2)	246,120.0
Redeemable noncontrolling interest			537.7		537.7
Stockholders equity					
Common stock	4.8		11.0	(11.0)	4.8
Additional paid-in capital	10,090.8	9,099.9	12,224.4	(21,324.3)	10,090.8
Retained earnings	10,571.9	5,996.9	3,753.0	(9,749.9)	10,571.9
	(418.9)	48.5	224.5	(273.0)	(418.9)

Accumulated other comprehensive income (loss)					
Treasury stock, at cost	**(7,554.2)**		**(2.0)**	**2.0**	**(7,554.2)**
Total stockholders equity attributable to PFG	**12,694.4**	**15,145.3**	**16,210.9**	**(31,356.2)**	**12,694.4**
Noncontrolling interest			**67.8**		**67.8**
Total stockholders equity	**12,694.4**	**15,145.3**	**16,278.7**	**(31,356.2)**	**12,762.2**
Total liabilities and stockholders equity	**$ 16,437.8**	**$ 16,371.8**	**$ 259,303.7**	**$ (32,693.4)**	**$ 259,419.9**

(1) PFG sponsors nonqualified benefit plans. Nonqualified benefit plan assets and liabilities held in Rabbi trusts were $680.5 million and $549.8 million, respectively.

Principal Financial Group, Inc.
Notes to Consolidated Financial Statements (continued)
March 31, 2019
(Unaudited)

Condensed Consolidating Statements of Financial Position

December 31, 2018

	Principal Financial Group, Inc. Parent Only	Principal Financial Services, Inc. Only	Principal Life Insurance Company and Other Subsidiaries Combined (1)	Eliminations	Principal Financial Group, Inc. Consolidated
			(in millions)		
Assets					
Fixed maturities, available-for-sale	$ 211.5	$	$ 59,897.0	$	$ 60,108.5
Fixed maturities, trading	308.9		327.2		636.1
Equity securities		11.9	1,831.8		1,843.7
Mortgage loans			15,336.9		15,336.9
Real estate			1,729.7		1,729.7
Policy loans			801.4		801.4
Investment in unconsolidated entities	13,862.4	14,325.5	726.0	(28,045.1)	868.8
Other investments	10.7	100.9	3,329.9		3,441.5
Cash and cash equivalents	334.9	649.0	3,096.8	(1,103.2)	2,977.5
Accrued investment income	1.4	0.3	634.5		636.2
Premiums due and other receivables		0.5	1,779.6	(367.0)	1,413.1
Deferred acquisition costs			3,693.5		3,693.5
Property and equipment			767.3		767.3
Goodwill			1,100.0		1,100.0
Other intangibles			1,315.1		1,315.1
Separate account assets			144,987.9		144,987.9
Other assets	375.0	38.7	1,521.9	(556.7)	1,378.9
Total assets	$ 15,104.8	$ 15,126.8	$ 242,876.5	$ (30,072.0)	$ 243,036.1
Liabilities					
Contractholder funds	$	$	$ 39,699.7	$	$ 39,699.7
Future policy benefits and claims			35,664.8		35,664.8
Other policyholder funds			888.4		888.4
Short-term debt			42.9		42.9
Long-term debt	3,129.8	366.7	129.9	(366.8)	3,259.6
Income taxes currently payable		9.8	61.5	(46.0)	25.3
Deferred income taxes		13.9	1,446.4	(501.9)	958.4
Separate account liabilities			144,987.9		144,987.9
Other liabilities	585.0	1,002.9	4,838.1	(764.1)	5,661.9
Total liabilities	3,714.8	1,393.3	227,759.6	(1,678.8)	231,188.9
Redeemable noncontrolling interest			391.2		391.2
Stockholders equity					
Common stock	4.8		11.0	(11.0)	4.8
Additional paid-in capital	10,060.7	9,100.0	12,004.5	(21,104.5)	10,060.7
Retained earnings	10,290.2	5,716.8	3,549.8	(9,266.6)	10,290.2
Accumulated other comprehensive loss	(1,565.1)	(1,083.3)	(903.6)	1,986.9	(1,565.1)

Treasury stock, at cost		(7,400.6)				(2.0)		2.0		(7,400.6)
Total stockholders equity attributable to PFG		11,390.0		13,733.5		14,659.7		(28,393.2)		11,390.0
Noncontrolling interest						66.0				66.0
Total stockholders equity		11,390.0		13,733.5		14,725.7		(28,393.2)		11,456.0
Total liabilities and stockholders equity	$	15,104.8	$	15,126.8	$	242,876.5	$	(30,072.0)	$	243,036.1

(1) PFG sponsors nonqualified benefit plans. Nonqualified benefit plan assets and liabilities held in Rabbi trusts were $671.7 million and $542.4 million, respectively.

Table of Contents

Principal Financial Group, Inc.
Notes to Consolidated Financial Statements (continued)
March 31, 2019
(Unaudited)

Condensed Consolidating Statements of Operations

For the three months ended March 31, 2019

	Principal Financial Group, Inc. Parent Only	Principal Financial Services, Inc. Only	Principal Life Insurance Company and Other Subsidiaries Combined	Eliminations	Principal Financial Group, Inc. Consolidated
			(in millions)		
Revenues					
Premiums and other considerations	$	$	$ 1,724.9	$	$ 1,724.9
Fees and other revenues		0.1	976.4	(3.0)	973.5
Net investment income (loss)	5.0	(2.3)	956.5	1.8	961.0
Net realized capital gains, excluding impairment losses on available-for-sale securities	5.3	6.6	79.4		91.3
Net other-than-temporary impairment losses on available-for-sale securities			(9.6)		(9.6)
Other-than-temporary impairment losses on fixed maturities, available-for-sale reclassified to other comprehensive income			2.8		2.8
Net impairment losses on available-for-sale securities			(6.8)		(6.8)
Net realized capital gains	5.3	6.6	72.6		84.5
Total revenues	10.3	4.4	3,730.4	(1.2)	3,743.9
Expenses					
Benefits, claims and settlement expenses			2,195.1		2,195.1
Dividends to policyholders			30.1		30.1
Operating expenses	56.1	22.8	916.5	(2.7)	992.7
Total expenses	56.1	22.8	3,141.7	(2.7)	3,217.9
Income (loss) before income taxes	(45.8)	(18.4)	588.7	1.5	526.0
Income taxes (benefits)	(11.3)	1.2	84.0		73.9
Equity in the net income of subsidiaries	464.4	482.5		(946.9)	
Net income	429.9	462.9	504.7	(945.4)	452.1
Net income attributable to noncontrolling interest			22.2		22.2
Net income attributable to PFG	$ 429.9	$ 462.9	$ 482.5	$ (945.4)	$ 429.9
Net income	$ 429.9	$ 462.9	$ 504.7	$ (945.4)	$ 452.1
Other comprehensive income	1,141.3	1,126.9	1,128.7	(2,250.2)	1,146.7
Comprehensive income	$ 1,571.2	$ 1,589.8	$ 1,633.4	$ (3,195.6)	$ 1,598.8

Principal Financial Group, Inc.
Notes to Consolidated Financial Statements (continued)
March 31, 2019
(Unaudited)

Condensed Consolidating Statements of Operations

For the three months ended March 31, 2018

	Principal Financial Group, Inc. Parent Only	Principal Financial Services, Inc. Only	Principal Life Insurance Company and Other Subsidiaries Combined *(in millions)*	Eliminations	Principal Financial Group, Inc. Consolidated
Revenues					
Premiums and other considerations	$	$	$ 995.2	$	$ 995.2
Fees and other revenues		0.1	1,014.8	(3.6)	1,011.3
Net investment income (loss)	6.0	(1.7)	893.4	4.5	902.2
Net realized capital gains (losses), excluding impairment losses on available-for-sale securities	(6.3)	(9.6)	0.8	(0.1)	(15.2)
Net other-than-temporary impairment recoveries on available-for-sale securities			1.3		1.3
Other-than-temporary impairment losses on fixed maturities, available-for-sale reclassified from other comprehensive income			(11.2)		(11.2)
Net impairment losses on available-for-sale securities			(9.9)		(9.9)
Net realized capital losses	(6.3)	(9.6)	(9.1)	(0.1)	(25.1)
Total revenues	(0.3)	(11.2)	2,894.3	0.8	2,883.6
Expenses					
Benefits, claims and settlement expenses			1,411.1		1,411.1
Dividends to policyholders			30.5		30.5
Operating expenses	46.2	8.2	933.5	(2.9)	985.0
Total expenses	46.2	8.2	2,375.1	(2.9)	2,426.6
Income (loss) before income taxes	(46.5)	(19.4)	519.2	3.7	457.0
Income taxes (benefits)	(15.1)	(3.1)	72.9	(0.2)	54.5
Equity in the net income of subsidiaries	428.5	440.9		(869.4)	
Net income	397.1	424.6	446.3	(865.5)	402.5
Net income attributable to noncontrolling interest			5.4		5.4
Net income attributable to PFG	$ 397.1	$ 424.6	$ 440.9	$ (865.5)	$ 397.1
Net income	$ 397.1	$ 424.6	$ 446.3	$ (865.5)	$ 402.5
Other comprehensive loss	(731.3)	(744.8)	(754.8)	1,494.8	(736.1)
Comprehensive loss	$ (334.2)	$ (320.2)	$ (308.5)	$ 629.3	$ (333.6)

Table of Contents

Principal Financial Group, Inc.
Notes to Consolidated Financial Statements (continued)
March 31, 2019
(Unaudited)

Condensed Consolidating Statements of Cash Flows

For the three months ended March 31, 2019

	Principal Financial Group, Inc. Parent Only	Principal Financial Services, Inc. Only	Principal Life Insurance Company and Other Subsidiaries Combined	Eliminations	Principal Financial Group, Inc. Consolidated
			(in millions)		
Operating activities					
Net cash provided by (used in) operating activities	$ 27.5	$ (22.1)	$ 1,033.5	$ 137.5	$ 1,176.4
Investing activities					
Fixed maturities available-for-sale and equity securities with intent to hold:					
Purchases	(150.2)	(0.2)	(2,736.3)		(2,886.7)
Sales		0.2	342.4		342.6
Maturities	153.1		1,395.8		1,548.9
Mortgage loans acquired or originated			(625.1)		(625.1)
Mortgage loans sold or repaid			382.4		382.4
Real estate acquired			(10.5)		(10.5)
Net purchases of property and equipment		(0.5)	(28.9)		(29.4)
Dividends and returns of capital received from unconsolidated entities	208.9	89.0		(297.9)	
Net change in other investments	(6.0)	(73.6)	(171.4)	37.7	(213.3)
Net cash provided by (used in) investing activities	205.8	14.9	(1,451.6)	(260.2)	(1,491.1)
Financing activities					
Issuance of common stock	5.8				5.8
Acquisition of treasury stock	(153.6)				(153.6)
Payments for financing element derivatives			(6.5)		(6.5)
Dividends to common stockholders	(150.2)				(150.2)
Issuance of long-term debt		2.6	6.7	(2.6)	6.7
Principal repayments of long-term debt		(9.4)	(0.3)	9.4	(0.3)
Net proceeds from short-term borrowings			0.1		0.1
Dividends and capital paid to parent		(208.9)	(89.0)	297.9	
Investment contract deposits			1,872.2		1,872.2
Investment contract withdrawals			(1,947.4)		(1,947.4)
Net decrease in banking operation deposits			(35.4)		(35.4)
Other			5.5		5.5
Net cash used in financing activities	(298.0)	(215.7)	(194.1)	304.7	(403.1)
Net decrease in cash and cash equivalents	(64.7)	(222.9)	(612.2)	182.0	(717.8)
Cash and cash equivalents at beginning of period	334.9	649.0	3,096.8	(1,103.2)	2,977.5
Cash and cash equivalents at end of period	$ 270.2	$ 426.1	$ 2,484.6	$ (921.2)	$ 2,259.7

Table of Contents

Principal Financial Group, Inc.
Notes to Consolidated Financial Statements (continued)
March 31, 2019
(Unaudited)

Condensed Consolidating Statements of Cash Flows

For the three months ended March 31, 2018

	Principal Financial Group, Inc. Parent Only	Principal Financial Services, Inc. Only	Principal Life Insurance Company and Other Subsidiaries Combined	Eliminations	Principal Financial Group, Inc. Consolidated
			(in millions)		
Operating activities					
Net cash provided by (used in) operating activities	$ (3.1)	$ 48.4	$ 733.3	$ (32.1)	$ 746.5
Investing activities					
Fixed maturities available-for-sale and equity securities with intent to hold:					
Purchases	(200.8)		(3,130.0)		(3,330.8)
Sales			1,273.5		1,273.5
Maturities	0.2		1,554.8		1,555.0
Mortgage loans acquired or originated			(643.0)		(643.0)
Mortgage loans sold or repaid			331.8		331.8
Real estate acquired			(14.7)		(14.7)
Real estate sold			56.5		56.5
Net purchases of property and equipment			(26.0)		(26.0)
Purchase of interests in subsidiaries, net of cash acquired			(113.9)		(113.9)
Dividends and returns of capital received from unconsolidated entities	196.0	109.2		(305.2)	
Net change in other investments	(0.6)	(19.7)	(85.1)	37.1	(68.3)
Net cash provided by (used in) investing activities	(5.2)	89.5	(796.1)	(268.1)	(979.9)
Financing activities					
Issuance of common stock	32.5				32.5
Acquisition of treasury stock	(199.6)				(199.6)
Payments for financing element derivatives			(19.3)		(19.3)
Dividends to common stockholders	(147.3)				(147.3)
Issuance of long-term debt		2.9	18.0	(2.9)	18.0
Principal repayments of long-term debt		(9.6)	(0.3)	9.6	(0.3)
Net proceeds from short-term borrowings			38.0		38.0
Dividends and capital paid to parent		(196.0)	(109.2)	305.2	
Investment contract deposits			1,783.0		1,783.0
Investment contract withdrawals			(1,535.5)		(1,535.5)
Net increase in banking operation deposits			124.1		124.1
Other			4.7		4.7
Net cash provided by (used in) financing activities	(314.4)	(202.7)	303.5	311.9	98.3
Net increase (decrease) in cash and cash equivalents	(322.7)	(64.8)	240.7	11.7	(135.1)
	842.8	617.4	2,001.1	(990.5)	2,470.8

Cash and cash equivalents at beginning of period										
Cash and cash equivalents at end of period	$	520.1	$	552.6	$	2,241.8	$	(978.8)	$	2,335.7

Table of Contents

Principal Financial Group, Inc.
Notes to Consolidated Financial Statements (continued)
March 31, 2019
(Unaudited)

16. Subsequent Event

On April 9, 2019, we announced the signing of a definitive agreement with Wells Fargo Bank, N.A. to acquire its Institutional Retirement & Trust business (the Business), which includes defined contribution, defined benefit, executive deferred compensation, employee stock ownership plans, institutional trust and custody, and institutional asset advisory businesses. The agreed upon purchase price consists of (i) $1.2 billion cash paid at closing and (ii) an additional earn-out payment of up to $150.0 million based upon the retention of fee revenue of the Business through December 31, 2020. The transaction is expected to close during the third quarter 2019, subject to regulatory approval, and will be funded with available cash and debt financing.

Table of Contents

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, 2019, compared with December 31, 2018, and our consolidated results of operations for the three months ended March 31, 2019 and 2018, 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, 2018, filed with the SEC and the unaudited consolidated financial statements and the related notes to the financial statements and the other financial information included elsewhere in this Form 10-Q.

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 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 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 sustained 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) 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; (6) our valuation of investments and the determinations of the amount of allowances and impairments taken on our investments may include methodologies, estimations and assumptions which are subject to differing interpretations and, if changed, could materially adversely affect our results of operations or financial condition; (7) any impairments of or valuation allowances against our deferred tax assets could adversely affect our results of operations and financial condition; (8) we may face losses on our insurance and annuity products if our actual experience differs significantly from our pricing and reserving assumptions; (9) the pattern of amortizing our DAC asset and other actuarial balances on our universal life-type insurance contracts, participating life insurance policies and certain investment contracts may change, impacting both the level of our DAC asset and other actuarial balances and the timing of our net income; (10) changes in laws or regulations may reduce our profitability; (11) we may not be able to protect our intellectual property and may be subject to infringement claims; (12) our ability to pay stockholder dividends and meet our obligations may be constrained by the limitations on dividends 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) technological and societal changes may disrupt our business model and impair our ability to retain existing customers, attract new customers and maintain our profitability; (19) damage to our reputation may adversely affect our revenues and profitability; (20) a downgrade in our financial strength or credit ratings may increase policy surrenders and withdrawals, reduce new sales and terminate relationships with distributors, impact existing liabilities and increase our cost of capital, any of which could adversely affect our profitability and financial condition; (21) client terminations or withdrawals or changes in investor preferences may lead to a reduction in revenues for our asset management and accumulation businesses; (22) 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; (23) if we are unable to attract 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; (24) an interruption in telecommunication, information technology, or other systems, 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; (25) our international businesses face political, legal, operational and other risks that could reduce our profitability in those businesses; (26) we face risks arising from our participation in joint ventures; (27) we may need to fund deficiencies in our Closed Block assets; (28) a pandemic, terrorist attack, military action or other catastrophic event could adversely affect our net income; (29) our reinsurers could default on their obligations or increase their rates, which could adversely impact our net income and financial condition; (30) we face risks arising from acquisitions of businesses; (31) 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; (32) our enterprise risk management framework may not be fully effective in identifying or mitigating all of the risks to which we are exposed and (33) our financial results may be adversely impacted by global climate changes. With respect to the acquisition of the Business (the Acquisition) in particular, additional risks and uncertainties that could cause actual results to differ materially from results anticipated in forward-looking statements include, but are not limited to: risks related to purchase price adjustments; our ability to obtain regulatory approvals; the successful fulfillment or waiver of all closing conditions to the Acquisition without unexpected delays or conditions; the successful closing of the Acquisition within the estimated timeframe or at all; and the failure to realize the expected synergies and benefits of the Acquisition or any delay in the realization thereof.

Overview

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

- Retirement and Income Solutions is organized into Retirement and Income Solutions Fee, which includes full service accumulation, trust services and individual variable annuities; and Retirement and Income Solutions Spread, which includes individual fixed annuities, investment only, full service payout and banking services. We offer a comprehensive portfolio of products and services for retirement savings and retirement income:

- To businesses of all sizes with a concentration on small and medium-sized businesses, 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); and

- To employees of businesses and other individuals, we offer the ability to accumulate savings for retirement and other purposes through mutual funds, individual annuities and bank products, along with retirement income options.

- Principal Global Investors, which includes our mutual fund business, manages assets for sophisticated investors around the world, using a multi-boutique strategy that provides diverse investment capabilities including equity, fixed income, real estate and other alternative investments. We also have experience in asset allocation, stable value management and other structured investment strategies. We focus on providing services to our other segments in addition to our retail mutual fund and third party institutional clients.

- Principal International, which offers pension accumulation products and services, mutual funds, asset management, income annuities and life insurance accumulation products through operations in Latin America (Brazil, Chile and Mexico) and Asia (China, Hong Kong Special Administrative Region, India and Southeast Asia).

- U.S. Insurance Solutions is organized into Specialty Benefits insurance, which provides group dental and vision insurance, individual and group disability insurance, critical illness, accident, group life insurance and non-medical fee-for-service claims administration; and Individual Life insurance, which provides universal life, variable universal life, indexed universal life and traditional life insurance. We focus on solutions for individuals and small-to-medium sized businesses and their 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; RobustWealth, our financial technology company; and our exited group medical and long-term care insurance businesses are reported in this segment.

Effective January 1, 2019, we made changes to the allocation of certain compensation and other expenses and net investment income among the reportable segments. These allocation changes were made as a result of a global financial process improvement project. The expense allocation changes simplify the allocation processes, increase transparency and allow for more effective expense management across the enterprise. The net investment income allocation changes better align our internal capital allocation with enterprise capital targets. Segment results for prior periods were recast so they are reported on a comparable basis, with no impact to total company financial results.

Recent Event

Wells Fargo Institutional Retirement & Trust Business

On April 9, 2019, we announced the signing of a definitive agreement with Wells Fargo Bank, N.A. to acquire its Institutional Retirement & Trust business, which includes defined contribution, defined benefit, executive deferred compensation, employee stock ownership plans, institutional trust and custody, and institutional asset advisory businesses. The agreed upon purchase price consists of (i) $1.2 billion cash paid at closing and (ii) an additional earn-out payment of up to $150.0 million based upon the retention of fee revenue of the Business through December 31, 2020. The transaction is expected to close during the third quarter 2019, subject to regulatory approval, and will be funded with available cash and debt financing.

Transactions Affecting Comparability of Results of Operations

Acquisitions

RobustWealth. On July 2, 2018, we finalized the acquisition of RobustWealth, a financial technology company. The acquisition adds RobustWealth s digital capabilities to our industry knowledge, asset management experience and technology to help consumers meet their financial goals on an enhanced digital advice platform. The RobustWealth platform will retain its open architecture philosophy, and RobustWealth will continue to sell its platform to outside firms as part of its growth strategy. RobustWealth is consolidated within the Corporate segment due to its strategic benefits across the organization with the majority of goodwill allocated to the Principal Global Investors segment.

INTERNOS. On April 16, 2018, we finalized the acquisition of INTERNOS, a London-based European real estate investment manager. Upon acquisition, INTERNOS became Principal Real Estate Europe Limited and operates as our dedicated European real estate private equity investment boutique, expanding our global real estate capabilities. At the time of closing, the acquisition increased our AUM by $3.5 billion. Principal Real Estate Europe Limited is reported within the Principal Global Investors segment.

MetLife Afore, S.A. de C.V. On February 20, 2018, we finalized the acquisition of MetLife Afore, S.A. de C.V., which was MetLife, Inc. s pension fund management business in Mexico. At the time of closing, the acquisition increased our AUM by $3.8 billion, making us the fifth largest AFORE in Mexico in terms of AUM. The results of this acquisition are reflected in the Principal International segment.

Other

Real Estate Realignment. Effective August 1, 2018, we agreed to a realignment of one of our real estate investment teams. With the realignment, we no longer manage $9.2 billion of assets for a large real estate client but accelerated the recognition of a significant performance fee that was earned due to our successful management of the assets, which drove market value appreciation of the real estate investments. During the third quarter we recognized, within the Principal Global Investors segment, $253.1 million of fees and other revenue related to the performance fee. This was partially offset by $151.9 million of operating expenses related to revenue sharing arrangements, resulting in a $101.2 million increase to pre-tax operating earnings within the Principal Global Investors segment. Ongoing impacts to segment pre-tax operating earnings are not expected to be material.

CIMB Joint Ventures. On May 25, 2018, we and CIMB completed new ownership agreements in our joint ventures, CPAM and CPIAM. With the completion we increased our ownership stake to 60% with CIMB retaining 40% ownership and co-management of both CPAM and CPIAM. Our investment in both entities will continue to be reported using the equity method within the Principal International segment.

Other Factor 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 countries 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 segment where pre-tax operating earnings were negatively impacted $10.0 million for the three months ended March 31, 2019, 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.

Table of Contents

Recent Accounting Changes

For recent accounting changes, see Item 1. Financial Statements, Notes to Unaudited Consolidated Financial Statements, Note 1, Nature of Operations and Significant Accounting Policies under the caption, Recent Accounting Pronouncements.

Results of Operations

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

	For the three months ended March 31,		
	2019	**2018**	**Increase (decrease)**
		(in millions)	
Revenues:			
Premiums and other considerations	**$ 1,724.9**	$ 995.2	$ 729.7
Fees and other revenues	**973.5**	1,011.3	(37.8)
Net investment income	**961.0**	902.2	58.8
Net realized capital gains (losses), excluding impairment losses on available-for-sale securities	**91.3**	(15.2)	106.5
Net other-than-temporary impairment (losses) recoveries on available-for-sale securities	**(9.6)**	1.3	(10.9)
Other-than-temporary impairment losses on fixed maturities, available-for-sale reclassified to (from) other comprehensive income	**2.8**	(11.2)	14.0
Net impairment losses on available-for-sale securities	**(6.8)**	(9.9)	3.1
Net realized capital gains (losses)	**84.5**	(25.1)	109.6
Total revenues	**3,743.9**	2,883.6	860.3
Expenses:			
Benefits, claims and settlement expenses	**2,195.1**	1,411.1	784.0
Dividends to policyholders	**30.1**	30.5	(0.4)
Operating expenses	**992.7**	985.0	7.7
Total expenses	**3,217.9**	2,426.6	791.3
Income before income taxes	**526.0**	457.0	69.0
Income taxes	**73.9**	54.5	19.4
Net income	**452.1**	402.5	49.6
Net income attributable to noncontrolling interest	**22.2**	5.4	16.8
Net income attributable to Principal Financial Group, Inc.	**$ 429.9**	$ 397.1	$ 32.8

Three Months Ended March 31, 2019 Compared to Three Months Ended March 31, 2018

Net Income Attributable to Principal Financial Group, Inc.

Net income attributable to Principal Financial Group, Inc. increased primarily due to after-tax net realized capital gains in 2019 as compared to after-tax net realized capital losses in 2018 primarily due to a $35.7 million increase from sponsored investment funds related primarily to mark-to-market changes and a $34.3 million increase from fixed maturities, available-for-sale and trading noncredit. These increases were partially offset by a $31.9 million decrease in after-tax fees and other revenues due to lower average AUM.

Total Revenues

Premiums increased $668.8 million for the Retirement and Income Solutions segment primarily due to higher sales of single premium group and individual 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 $30.4 million for the Principal Global Investors segment primarily due to lower average AUM.

Net investment income increased primarily due to $40.8 million attributable to higher average invested assets in our U.S. operations and $20.3 million attributable to higher investment yields on invested assets. For additional information, see Investments Investment Results Net Investment Income.

Net realized capital gains (losses) can be volatile due to other-than-temporary impairments of invested assets, mark-to-market adjustments of certain invested assets and our decision to sell invested assets. We had net realized capital gains in 2019 as compared to net realized capital losses in 2018 primarily due to a $48.9 million increase from sponsored investment funds related primarily to mark-to-market changes and a $43.4 million increase from fixed maturities, available-for-sale and trading noncredit. For additional information, see Investments Investment Results Net Realized Capital Gains (Losses).

Total Expenses

Benefits, claims and settlement expenses increased $712.5 million for the Retirement and Income Solutions segment primarily due to an increase in reserves, stemming from higher sales of single premium group and individual annuities with life contingencies.

Operating expenses increased $22.1 million for the U.S. Insurance Solution segment primarily due to growth in our Specialty Benefits insurance business. Operating expenses increased $14.0 million for the Corporate segment primarily due to increased pension and OPEB expenses. Operating expenses decreased $11.8 million for the Principal Global Investors segment largely due to one-time items primarily consisting of a favorable legal settlement. Operating expenses decreased for the Principal International segment primarily in Latin America due to $5.2 million attributable to weakening of the Latin American currencies against the U.S. dollar and $2.8 million in Mexico primarily due to the MetLife Afore integration costs in the prior year quarter. Operating expenses decreased for the Retirement and Income Solutions segment primarily due to a $19.9 million decrease in DAC and contract cost amortization expense primarily stemming from favorable equity markets in first quarter of 2019, which was partially offset by an $8.6 million increase in commission expense due to growth in the business.

Income Taxes

The effective income tax rates were 14% and 12% for the three months ended March 31, 2019 and 2018, respectively. See Item 1. Financial Statements, Notes to Unaudited Consolidated Financial Statements, Note 6, Income Taxes.

Results of Operations by Segment

For results of operations by segment see Item 1. Financial Statements, Notes to Unaudited Consolidated Financial Statements, Note 11, Segment Information.

Retirement and Income Solutions Segment

Retirement and Income Solutions Segment Summary Financial Data

Net revenue is a key metric used to understand Retirement and Income Solutions earnings growth. Net revenue is defined as operating revenues less benefits, claims and settlement expenses less dividends to policyholders. Net revenue from Retirement and Income Solutions Fee is primarily fee based and is impacted by changes in the equity markets. Net revenue from Retirement and Income Solutions Spread is driven by the difference between investment income earned on the underlying general account assets and the interest rate credited to the contracts.

The following table presents the Retirement and Income Solutions net revenue for the periods indicated:

	For the three months ended March 31,		
	2019	**2018**	**Increase (decrease)**
		(in millions)	
Retirement and Income Solutions Fee	**$ 379.7**	$ 401.1	$ (21.4)
Retirement and Income Solutions Spread	**169.2**	152.2	17.0
Total Retirement and Income Solutions	**$ 548.9**	$ 553.3	$ (4.4)

Table of Contents

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,		
	2019	**2018**	**Increase (decrease)**
		(in millions)	
Operating revenues:			
Premiums and other considerations	**$ 958.6**	$ 289.8	$ 668.8
Fees and other revenues	**338.0**	353.5	(15.5)
Net investment income	**595.3**	535.6	59.7
Total operating revenues	**1,891.9**	1,178.9	713.0
Expenses:			
Benefits, claims and settlement expenses, including dividends to policyholders	**1,343.0**	625.6	717.4
Operating expenses	**308.3**	309.4	(1.1)
Total expenses	**1,651.3**	935.0	716.3
Pre-tax operating earnings	**$ 240.6**	$ 243.9	$ (3.3)

Three Months Ended March 31, 2019 Compared to Three Months Ended March 31, 2018

Pre-Tax Operating Earnings

Pre-tax operating earnings decreased in our Spread business due to increased expenses stemming from growth in the block of business.

Net Revenue

Net revenue decreased in our Fee business primarily due to unfavorable equity market performance in the latter half of 2018. Net revenue increased in our Spread business primarily due to growth in the block of business.

Operating Expenses

Operating expenses decreased in our Fee business due to a $16.7 million decrease in DAC and contract cost amortization expense primarily stemming from favorable equity markets in first quarter of 2019 and a $4.8 million decrease in commission expense relating to changes in commission arrangements with advisors. Operating expenses increased in our Spread business due to a $20.7 million increase resulting from growth in the business.

Principal Global Investors Segment

Principal Global Investors Segment Summary Financial Data

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.

Table of Contents

The following table presents the AUM rollforward for assets managed by Principal Global Investors for the periods indicated:

	For the three months ended March 31, 2019	2018
	(in billions)	
AUM, beginning of period	**$ 393.5**	$ 430.9
Net cash flow	**0.5**	(6.2)
Investment performance (1)	**28.2**	(1.2)
Other (2)	**0.9**	0.3
AUM, end of period	**$ 423.1**	$ 423.8

(1) Variations in investment performance are primarily the result of fluctuations in market performance over time.

(2) Primarily reflects the January 2019 movement of Claritas, our investment management company in Brazil, from the Principal International segment to the Principal Global Investors segment and the effect of exchange rates.

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

	For the three months ended March 31, 2019	2018	Increase (decrease)
		(in millions)	
Operating revenues:			
Fees and other revenues	**$ 336.6**	$ 367.0	$ (30.4)
Net investment income	**2.4**	1.5	0.9
Total operating revenues	**339.0**	368.5	(29.5)
Expenses:			
Total expenses	**237.0**	253.1	(16.1)
Pre-tax operating earnings attributable to noncontrolling interest	**1.3**	1.7	(0.4)
Pre-tax operating earnings	**$ 100.7**	$ 113.7	$ (13.0)

Three Months Ended March 31, 2019 Compared to Three Months Ended March 31, 2018

Pre-Tax Operating Earnings

Pre-tax operating earnings decreased primarily due to $23.6 million lower management fee revenue as a result of decreased average AUM. This was partially offset by an $8.2 million decrease in expenses, which included one-time items primarily consisting of a favorable legal settlement.

Principal International Segment

Principal International Segment Summary Financial Data

AUM is generally a key indicator of earnings growth for the segment, 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 countries 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.

Table of Contents

The following table presents the Principal International segment AUM rollforward for the periods indicated:

	For the three months ended March 31, 2019	2018
	(in billions)	
AUM, beginning of period	**$ 155.5**	$ 160.7
Net cash flow	**0.8**	2.3
Investment performance (1)	**5.5**	2.2
Operations acquired (2)		3.8
Effect of exchange rates	**1.0**	2.3
Other (3)	**(1.4)**	(0.2)
AUM, end of period	**$ 161.4**	$ 171.1

(1) Variations in investment performance are primarily the result of fluctuations in market performance over time.

(2) Reflects the February 2018 acquisition of MetLife, Inc. s pension fund management business in Mexico.

(3) Primarily reflects the January 2019 movement of Claritas, our investment management company in Brazil, from the Principal International segment to the Principal Global Investors segment.

Net revenue is a key metric used to understand the earnings growth for the Principal International segment. The following table presents the net revenue of the Principal International segment for the periods indicated.

	For the three months ended March 31, 2019	2018	Increase (decrease)
		(in millions)	
Net revenue	**$ 214.2**	$ 202.7	$ 11.5

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

	For the three months ended March 31, 2019	2018	Increase (decrease)
		(in millions)	
Operating revenues:			
Premiums and other considerations	**$ 117.5**	$ 97.9	$ 19.6
Fees and other revenues	**116.6**	123.1	(6.5)

Net investment income		**146.4**		162.1		(15.7)
Total operating revenues		**380.5**		383.1		(2.6)
Expenses:						
Benefits, claims and settlement expenses		**166.3**		180.4		(14.1)
Operating expenses		**102.0**		110.5		(8.5)
Total expenses		**268.3**		290.9		(22.6)
Pre-tax operating earnings attributable to noncontrolling interest		**1.1**		0.7		0.4
Pre-tax operating earnings	**$**	**111.1**	$	91.5	$	19.6

Three Months Ended March 31, 2019 Compared to Three Months Ended March 31, 2018

Pre-Tax Operating Earnings

Pre-tax operating earnings increased $20.1 million in Latin America primarily due to $22.3 million of favorable relative market performance on our required regulatory investments relative to the year earlier period and $6.1 million from growth in our Mexico operations, partially offset by $9.1 million due to weakening of the Latin American currencies against the U.S. dollar.

Table of Contents

Net Revenue

Net revenue increased $10.4 million in Latin America due to $22.7 million of favorable relative market performance on our required regulatory investments, partially offset by $14.4 million due to the weakening of the Latin American currencies against the U.S. dollar.

U.S. Insurance Solutions Segment

U.S. Insurance Solutions Segment Summary Financial Data

Premium and fees are a key metric for growth in the U.S. Insurance Solutions segment. We receive premiums on our specialty benefits insurance products as well as our traditional life insurance products. Fees are generated from our specialty benefits fee-for-service products as well as 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 is reported net of reinsurance premiums.

In our Specialty Benefits insurance business, premium and fees growth is a result of strong retention, sales and in-group growth. In our Individual Life insurance business, premium and fees growth is driven by recurring premiums and sales with a focus on maintaining a balanced product portfolio.

The following table presents the U.S. Insurance Solutions segment premium and fees for the periods indicated:

	For the three months ended March 31,		
	2019	**2018**	**Increase (decrease)**
		(in millions)	
Premium and fees:			
Specialty Benefits insurance	**$ 564.5**	$ 525.9	$ 38.6
Individual Life insurance	**297.1**	285.6	11.5

The following table presents certain summary financial data relating to the U.S. Insurance Solutions segment for the periods indicated:

	For the three months ended March 31,		
	2019	**2018**	**Increase (decrease)**
		(in millions)	
Operating revenues:			
Premiums and other considerations	**$ 648.8**	$ 607.5	$ 41.3

Fees and other revenues	**212.8**	204.0	8.8
Net investment income	**206.5**	205.2	1.3
Total operating revenues	**1,068.1**	1,016.7	51.4
Expenses:			
Benefits, claims and settlement expenses	**653.6**	606.8	46.8
Dividends to policyholders	**30.0**	30.5	(0.5)
Operating expenses	**273.8**	264.4	9.4
Total expenses	**957.4**	901.7	55.7
Pre-tax operating earnings	**$ 110.7**	$ 115.0	$ (4.3)

Three Months Ended March 31, 2019 Compared to Three Months Ended March 31, 2018

Pre-Tax Operating Earnings

Pre-tax operating earnings decreased $6.5 million in our Specialty Benefits insurance business primarily due to a return to expected claims in first quarter of 2019 compared to very low claims in first quarter of 2018.

Table of Contents

Revenues

Premiums and fees increased primarily due to growth in the business.

Total Expenses

Benefits, claims and settlement expenses increased primarily due to $35.3 million resulting from growth in the business. In addition, benefits, claims and settlement expenses increased $7.7 million primarily due to a return to expected claims in first quarter of 2019 compared to very low claims in first quarter of 2018.

Operating expenses increased $11.3 million in our Specialty Benefits insurance business primarily 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,		
	2019	**2018**	**Increase (decrease)**
		(in millions)	
Operating revenues:			
Total operating revenues	**$ 1.2**	$	$ 1.2
Expenses:			
Total expenses	**85.8**	64.5	21.3
Pre-tax operating earnings (losses) attributable to noncontrolling interest	**(0.2)**	3.1	(3.3)
Pre-tax operating losses	**$ (84.4)**	$ (67.6)	$ (16.8)

Three Months Ended March 31, 2019 Compared to Three Months Ended March 31, 2018

Pre-Tax Operating Losses

Pre-tax operating losses increased primarily due to a $10.3 million increase in pension and OPEB expenses and $5.1 million in RobustWealth operations due to the acquisition on July 2, 2018.

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. Our legal entity structure has an impact on our ability to meet cash flow needs as an organization. Following is a simplified organizational structure.

Table of Contents

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, 2019, approximately $9.2 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, 2019.

	Contractholder funds *(in millions)*	Percentage
Not subject to discretionary withdrawal	**$ 10,223.3**	**32.2%**
Subject to discretionary withdrawal with adjustments:		
Specified surrender charges	**8,697.0**	**27.4**
Market value adjustments	**7,166.3**	**22.5**
Subject to discretionary withdrawal without adjustments	**5,698.3**	**17.9**
Total domestic investment contracts	**$ 31,784.9**	**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, 2019:

Obligor/Applicant	**Financing structure**	**Maturity**		**Capacity**		**Amount outstanding (3)**
				(in millions)		
PFG, Principal Financial Services, Inc., and Principal Life as co-borrowers (1)	Credit facility	November 2023	**$**	**600.0**	**$**	
PFG, Principal Financial Services, Inc., Principal Life and Principal Financial Services V (UK) LTD as co-borrowers (1)	Credit facility	November 2023		**200.0**		
Principal International Chile (2)	Unsecured lines of credit			**144.0**		**43.9**
Principal Life	Unsecured line of credit	September 2019		**60.0**		
Total			**$**	**1,004.0**	**$**	**43.9**

(1) The credit facility was extended during the fourth quarter of 2018 and is supported by eighteen banks.

(2) The unsecured lines of credit can be used for repurchase agreements or other borrowings. Each line has a maturity of

less 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. 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: Principal Financial Group, Inc. and Principal Financial Services, Inc. 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 of Directors and will depend on our overall financial condition, results of operations, capital levels, cash requirements, future prospects, receipt of dividends 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 from Principal Life, our primary subsidiary, are limited by Iowa law. Under Iowa law, Principal Life may pay dividends 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, 2018, the ordinary stockholder dividend limitation for Principal Life is approximately $1,085.7 million in 2019. However, because the dividend test is based on dividends previously paid over rolling 12-month periods, if paid before a specified date during 2019, 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, 2019, were $170.0 million, all of which was extraordinary and approved by the Commissioner. As of March 31, 2019, we had $1,702.5 million of cash and liquid assets held in our holding companies and other subsidiaries, which is available for corporate purposes. This includes assets in excess of targeted statutory capital ratios and immediate working capital needs.

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 $1,176.4 million and $746.5 million for the three months ended March 31, 2019 and 2018, 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 in 2019 compared to 2018 was primarily the result of fluctuations in receivables and payables associated with the timing of settlements.

Net cash used in investing activities was $1,491.1 million and $979.9 million for the three months ended March 31, 2019 and 2018, respectively. The increase in cash used in investing activities was driven by decreased net sales of fixed maturities available-for-sale and equity securities with intent to hold.

Net cash used in financing activities was $403.1 million for the three months ended March 31, 2019, compared to net cash provided by financing activities of $98.3 million for the three months ended March 31, 2018. The increase in cash used in financing activities was the result of higher net investment contract withdrawals in 2019 as compared to 2018 and a net decrease in banking operation deposits.

Shelf Registration. 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.

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

	March 31, 2019		December 31, 2018	
		(in millions)		
Other recourse short-term debt	**$**	**43.9**	$	42.9
Total short-term debt	**$**	**43.9**	$	42.9

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. As of March 31, 2019, no significant changes have occurred to long-term debt since December 31, 2018.

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 dividends to stockholders and repurchase of common stock.

	For the three months ended March 31, 2019		For the year ended December 31, 2018	
		(in millions)		
Dividends to stockholders	**$**	**150.2**	$	598.6
Repurchase of common stock		**153.6**		671.6
Total cash returned to common stockholders	**$**	**303.8**	$	1,270.2

For additional stockholders equity information, see Item 1. Financial Statements, Notes to Unaudited Consolidated Financial Statements, Note 9, Stockholders Equity.

Capitalization

The following table summarizes our capital structure:

	March 31, 2019	December 31, 2018
	($ in millions)	
Debt:		
Short-term debt	**$ 43.9**	$ 42.9
Long-term debt	**3,266.4**	3,259.6
Total debt	**3,310.3**	3,302.5
Total stockholders equity attributable to PFG	**12,694.4**	11,390.0
Total capitalization	**$ 16,004.7**	$ 14,692.5
Debt to equity	**26%**	29%
Debt to capitalization	**21%**	22%

Contractual Obligations and Contractual Commitments

As of March 31, 2019, no significant changes to contractual obligations and contractual commitments have occurred since December 31, 2018.

Table of Contents

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 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, 2019, no significant changes to guarantees and indemnifications have occurred since December 31, 2018. For guarantee and indemnification information, see Item 1. Financial Statements, Notes to Unaudited Consolidated Financial Statements, Note 8, Contingencies, Guarantees, Indemnifications and Leases 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.

On April 9, 2019, we announced the signing of a definitive agreement with Wells Fargo Bank, N.A. to acquire its Institutional Retirement & Trust business. Following the acquisition announcement in April 2019, Fitch and S&P affirmed our ratings and stable outlook. A.M. Best commented that ratings remain unchanged, while Moody s commented the acquisition is a credit positive. For more information on the definitive agreement, see Item 1. Financial Statements, Notes to Unaudited Consolidated Financial Statements, Note 16, Subsequent Event.

In February 2019, A.M. Best affirmed the financial strength ratings of Principal Life and Principal National Life Insurance Company (PNLIC) at A+ . The outlook remains stable for all financial strength ratings. The affirmation reflects Principal s very strong balance sheet strength as well as its strong operating performance, favorable business profile and appropriate enterprise risk management. The outlook for the Long-Term Issuer credit rating was upgraded from stable to positive . The outlook upgrade reflects Principal s continued strength and evolution of enterprise risk management capabilities.

In August 2018, Fitch affirmed the AA- financial strength ratings of Principal Life and PNLIC. Fitch also affirmed PFG s senior unsecured debt at A- . The outlook on all ratings remains stable . The rating reflects very strong and stable operating profitability and a very strong business profile, reflecting strong market position and significant operating scale focusing on small and midsize businesses in the retirement market.

In April 2018, S&P affirmed the financial strength ratings of Principal Life and PNLIC at A+ . S&P upgraded PFG s senior unsecured debt rating to A- from BBB+ . The outlook remains stable for all ratings. Principal Life s enterprise risk management rating was affirmed as Strong . The rating affirmation reflects S&P s view that we have a very strong competitive position as a leader in the U.S. small to midsize 401(k) market, with strong asset management and insurance solution capabilities. The upgrade of the senior debt rating reflects growth in unregulated cash flow available to the holding company.

In the fourth quarter of 2018, A.M. Best changed its outlook on the U.S. life insurance sector to stable from negative due to increased profitability, improved regulatory and tax environments and a strengthening U.S. economy, along with overall reduced balance sheet risk due to a proactive approach taken by companies in recent years. Fitch, S&P and Moody s continue to maintain a stable outlook as well.

Table of Contents

The following table summarizes our significant financial strength and debt ratings from the major independent rating organizations. The debt ratings shown are indicative ratings. Outstanding issuances are rated the same as indicative ratings unless otherwise noted. Actual ratings can differ from indicative ratings based on contractual terms. 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	S&P	Moody s
Principal Financial Group				
Senior Unsecured Debt (1)	a-	A-	A-	Baa2
Junior Subordinated Debt (2)	bbb+		BBB+	Baa3
Long-Term Issuer Default Rating		A		
Principal Financial Services				
Senior Unsecured Debt	a-		A-	Baa1
Long-Term Issuer Default Rating		A		
Principal Life Insurance Company				
Insurer Financial Strength	A+	AA-	A+	A1
Issuer Credit Rating	aa-			
Commercial Paper	AMB-1+		A-1+	P-1
Enterprise Risk Management Rating			Strong	
Principal National Life Insurance Company				
Insurer Financial Strength	A+	AA-	A+	A1

(1) Principal Financial Group s senior debt issuance has been rated Baa1 by Moody s.

(2) Principal Financial Group s junior subordinated debt issuance has been rated BBB by S&P and Baa2 by Moody s.

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 Consolidated Financial Statements, Note 10, Fair Value Measurements for further details, including a reconciliation of changes in Level 3 fair value measurements.

As of March 31, 2019, 40% of our net assets (liabilities) were Level 1, 56% were Level 2 and 4% were Level 3. Excluding separate account assets as of March 31, 2019, 3% of our net assets (liabilities) were Level 1, 97% were Level 2 and 0% were Level 3.

As of December 31, 2018, 39% of our net assets (liabilities) were Level 1, 57% were Level 2 and 4% were Level 3. Excluding separate account assets as of December 31, 2018, 3% of our net assets (liabilities) were Level 1, 97% were Level 2 and 0% 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, 2019, were $8,835.4 million as compared to $8,729.4 million as of December 31, 2018. The increase was primarily related to gains, partially offset by net sales in our separate account assets.

Net assets (liabilities) measured at fair value on a recurring basis using significant unobservable inputs (Level 3) as of March 31, 2018, were $8,141.4 million as compared to $7,791.7 million as of December 31, 2017. The increase was primarily related to net purchases and gains in our separate account assets.

Investments

We had total consolidated assets as of March 31, 2019, of $259,419.9 million, of which $88,543.9 million were invested assets. The rest of our total consolidated assets are comprised primarily of separate account assets for which we do not

Table of Contents

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, 2019, 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. The remainder is invested in other investments, equity securities, real estate and residential mortgage loans. In addition, policy loans are included in our invested assets.

	March 31, 2019		December 31, 2018	
	Carrying amount	% of total	Carrying amount	% of total
		($ in millions)		
Fixed maturities:				
Public	**$ 41,942.8**	**47%**	$ 40,168.2	48%
Private	**21,849.1**	**25**	20,576.4	24
Equity securities	**1,864.1**	**2**	1,843.7	2
Mortgage loans:				
Commercial	**14,249.5**	**16**	13,972.0	16
Residential	**1,348.0**	**2**	1,364.9	2
Real estate held for sale	**217.6**		209.6	
Real estate held for investment	**1,519.1**	**2**	1,520.1	2
Policy loans	**798.5**	**1**	801.4	1
Other investments	**4,755.2**	**5**	4,310.3	5
Total invested assets	**88,543.9**	**100%**	84,766.6	100%
Cash and cash equivalents	**2,259.7**		2,977.5	
Total invested assets and cash	**$ 90,803.6**		$ 87,744.1	

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,					
	2019		2018		Increase (decrease)	
	Yield	Amount	Yield	Amount	Yield	Amount
			($ in millions)			
Fixed maturities (1)	**4.2%**	**$ 635.0**	4.2%	$ 605.3	%	$ 29.7
Equity securities	**9.8**	**45.6**	3.7	17.7	6.1	27.9
Mortgage loans - commercial	**4.2**	**149.4**	4.1	133.4	0.1	16.0

Mortgage loans - residential	**4.4**	**14.9**	5.4	17.6	(1.0)	(2.7)
Real estate	**6.4**	**27.9**	11.9	51.3	(5.5)	(23.4)
Policy loans	**5.5**	**11.0**	5.6	11.2	(0.1)	(0.2)
Cash and cash equivalents	**2.5**	**16.2**	1.6	9.5	0.9	6.7
Other investments (1)	**7.9**	**89.6**	8.8	80.1	(0.9)	9.5
Total	**4.5**	**989.6**	4.5	926.1		63.5
Investment expenses	**(0.1)**	**(28.6)**	(0.1)	(23.9)		(4.7)
Net investment income	**4.4%**	**$ 961.0**	4.4%	$ 902.2	%	$ 58.8

(1) Upon adoption of authoritative guidance effective January 1, 2019, 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. Prior to 2019, 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 were reported in net realized capital gains (losses).

Table of Contents

Three Months Ended March 31, 2019 Compared to Three Months Ended March 31, 2018

Net investment income from fixed maturities increased primarily due to higher average invested assets in our U.S. operations.

Net investment income from equity securities increased primarily due to favorable relative market performance on our required regulatory investments in our Latin America business.

Net investment income from commercial mortgage loans increased primarily due to higher average invested assets in our U.S. operations.

Net investment income from real estate decreased primarily due to the sale of certain value-add real estate in the first quarter of 2018.

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,		
	2019	**2018**	**Increase (decrease)**
		(in millions)	
Fixed maturities, available-for-sale credit impairments (1)	**$ (6.8)**	$ (9.9)	$ 3.1
Commercial mortgage loans credit impairments	**(0.5)**	(0.7)	0.2
Other credit impairments	**0.8**	1.1	(0.3)
Fixed maturities, available-for-sale and trading noncredit	**10.7**	(32.7)	43.4
Derivatives and related hedge activities (2)	**13.8**	4.6	9.2
Other gains	**66.5**	12.5	54.0
Net realized capital gains (losses)	**$ 84.5**	$ (25.1)	$ 109.6

(1) Includes credit impairments as well as losses on sales of fixed maturities to reduce credit risk, net of realized credit recoveries on the sale of previously impaired securities.

(2) Includes fixed maturities, trading net gains (losses) of $4.5 million and $(0.4) million for the three months ended March 31, 2019 and 2018, respectively, which are a component of the GMWB embedded derivative hedging program net realized capital gains (losses) reflected in this line. Upon adoption of authoritative guidance effective January 1, 2019, 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. Prior to 2019, 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

were reported in net realized capital gains (losses).

Three Months Ended March 31, 2019 Compared to Three Months Ended March 31, 2018

Fixed maturities, available-for-sale and trading noncredit had net gains in 2019 as compared to net losses in 2018 primarily due to higher available-for-sale noncredit losses related to portfolio rebalancing during 2018 and gains versus losses on trading securities related to changes in interest rates and credit spreads.

Other gains increased primarily due to net gains in 2019 versus net losses in 2018 on sponsored investment funds related primarily to mark-to-market changes.

U.S. Investment Operations

Of our invested assets, $80,685.5 million were held by our U.S. operations as of March 31, 2019. Our U.S. invested assets are managed primarily by our Principal Global Investors segment. Our Investment Committee, appointed by our Board of Directors, 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 documented 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 $95.0 million as of both March 31, 2019 and December 31, 2018. 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 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 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 strategies 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, 2019	**December 31, 2018**	**March 31, 2019**	**December 31, 2018**
New mortgages	**42%**	50%	**2.3X**	2.2X
Entire mortgage portfolio	**45%**	45%	**2.5X**	2.5X

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 $2,971.8 million and 3.7%, respectively, as of March 31, 2019, and $3,027.6 million and 3.6%, respectively, as of December 31, 2018. In addition, the amortized cost and weighted average yield of residential mortgage-backed pass-through securities (RMBS), residential collateralized mortgage obligations, and asset-backed securities - home equity with material prepayment risk were $6,593.6 million and 3.4%, respectively, as of March 31, 2019, and $6,474.6 million and 3.3%, respectively, as of December 31, 2018.

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 commercial mortgage loans. The remainder is invested in other investments, real estate, residential mortgage loans and equity securities. In addition, policy loans are included in our invested assets. The following discussion analyzes the composition of U.S. invested assets, but excludes invested assets of the separate accounts.

	March 31, 2019		December 31, 2018	
	Carrying amount	**% of total**	**Carrying amount**	**% of total**
		($ in millions)		
Fixed maturities:				
Public	**$ 38,162.4**	**47%**	$ 36,599.0	47%
Private	**21,786.0**	**27**	20,527.8	27
Equity securities	**434.5**	**1**	418.6	1
Mortgage loans:				
Commercial	**13,982.2**	**17**	13,721.2	18

Residential		**882.3**	**1**		905.8	1
Real estate held for sale		**216.8**			207.7	
Real estate held for investment		**1,517.6**	**2**		1,518.6	2
Policy loans		**776.3**	**1**		779.8	1
Other investments		**2,927.4**	**4**		2,596.0	3
Total invested assets		**80,685.5**	**100%**		77,274.5	100%
Cash and cash equivalents		**2,009.8**			2,728.1	
Total invested assets and cash	**$**	**82,695.3**		$	80,002.6	

Fixed Maturities

Fixed maturities include bonds, ABS, redeemable preferred stock and certain non-redeemable preferred securities. Included in the privately placed category as of March 31, 2019 and December 31, 2018, were $15.9 billion and $15.2 billion, respectively, of securities subject to certain holding periods and resale restrictions pursuant to Rule 144A of the Securities Act of 1933.

Table of Contents

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

	March 31, 2019		December 31, 2018	
	Carrying amount	Percent of total	Carrying amount	Percent of total
	($ in millions)			
U.S. government and agencies	**$ 1,476.2**	**2%**	$ 1,419.0	2%
States and political subdivisions	**6,614.5**	**11**	6,214.1	11
Non-U.S. governments	**810.2**	**1**	732.0	1
Corporate - public	**19,515.7**	**33**	18,939.8	33
Corporate - private	**14,144.3**	**24**	13,502.8	24
Residential mortgage-backed pass-through securities	**2,796.2**	**5**	2,775.6	5
Commercial mortgage-backed securities	**4,228.3**	**7**	3,927.8	7
Residential collateralized mortgage obligations	**3,563.9**	**6**	3,368.7	6
Asset-backed securities	**6,799.1**	**11**	6,247.0	11
Total fixed maturities	**$ 59,948.4**	**100%**	$ 57,126.8	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. In the CMBS market, there is a material difference in the outlook for the performance of loans originated in 2004 and earlier relative to loans originated in 2005 through 2008. For loans originated prior to 2005, underwriting assumptions were more conservative regarding required debt service coverage and loan-to-value ratios. For the 2005 through 2008 vintages, real estate values peaked and the underwriting expectations were that values would continue to increase, which makes those loan values more sensitive to market declines. The 2009 and later vintages represent a return to debt service coverage ratios and loan-to-value ratios that more closely resemble loans originated prior to 2005.

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.

Table of Contents

The international exposure held in our U.S. operation s fixed maturities portfolio was 19% of total fixed maturities as of March 31, 2019 and 20% as of December 31, 2018. It is comprised of corporate and foreign government fixed maturities. The following table presents the carrying amount of our international exposure for our U.S. operation s fixed maturities portfolio for the periods indicated.

	March 31, 2019	December 31, 2018
	(in millions)	
European Union, excluding UK	**$ 3,278.6**	$ 3,276.6
United Kingdom	**2,375.2**	2,343.5
Asia-Pacific	**1,599.3**	1,634.3
Australia/New Zealand	**1,519.7**	1,477.0
Latin America	**1,088.9**	1,014.5
Europe, non-European Union	**742.7**	759.2
Middle East and Africa	**628.0**	552.1
Other (1)	**357.3**	317.9
Total	**$ 11,589.7**	$ 11,375.1

(1) Includes exposure from two countries and various supranational organizations as of both March 31, 2019, and December 31, 2018.

International fixed maturities exposure is determined by the country of domicile of the parent entity of an individual asset. 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, 2019 and December 31, 2018, our investments in Canada totaled $1,846.9 million and $1,833.6 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 following table presents our top ten exposures as of March 31, 2019.

	Amortized cost
	(in millions)
People s Republic of China (1)	**$ 231.0**
Mars, Incorporated	**210.2**
The Walt Disney Company	**203.8**
Berkshire Hathaway Inc.	**197.8**
Duke Energy Corporation	**191.4**
JPMorgan Chase & Co.	**188.3**
SBA Communications Corporation	**182.4**
Microsoft Corporation	**180.2**
Wells Fargo & Company	**178.5**
Comcast Corporation	**177.8**
Total top ten exposures	**$ 1,941.4**

(1) Primarily includes exposure to state-owned entities operating in the energy, electric and chemical sectors.

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 Consolidated Financial Statements, Note 10, 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 impaired bonds for which 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 b S&P.

However, 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. Prior to December 31, 2018, other loan-backed and structured securities may have also been subject to an intrinsic price matrix as provided by the NAIC. 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.

	March 31, 2019			December 31, 2018		
NAIC designation	Amortized cost	Carrying amount	Percent of carrying amount	Amortized cost	Carrying amount	Percent of carrying amount
			($in millions)			
1	**$ 40,590.6**	**$ 41,766.8**	**70%**	$ 39,482.7	$ 39,638.6	69%
2	**15,333.4**	**15,857.3**	**26**	15,332.9	15,293.1	27
3	**1,923.5**	**1,948.4**	**3**	1,932.9	1,873.3	3
4	**274.9**	**255.9**	**1**	288.2	266.7	1
5	**65.6**	**55.1**		48.6	32.6	
6	**73.8**	**64.9**		24.2	22.5	
Total fixed maturities	**$ 58,261.8**	**$ 59,948.4**	**100%**	$ 57,109.5	$ 57,126.8	100%

Fixed maturities included 29 securities with an amortized cost of $475.2 million, gross gains of $10.2 million, gross losses of $0.1 million and a carrying amount of $485.3 million as of March 31, 2019, 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, 2019, based on amortized cost, 99% of our CMBS portfolio had an NAIC designation of 1 and 96% was issued during the more conservative underwriting periods prior to 2005 and after 2008.

Table of Contents

The following tables present our exposure by credit quality, based on NAIC designations, and vintage for our CMBS portfolio as of the periods indicated.

	March 31, 2019							
	2004 and prior		2005 to 2008		2009 and after		Total	
NAIC designation	Amortized cost	Carrying amount	Amortized cost	Carrying amount	Amortized cost	Carrying amount	Amortized cost	Carrying amount
	(in millions)							
1	**$ 24.6**	**$ 24.9**	**$ 151.5**	**$ 154.1**	**$ 4,001.8**	**$ 4,011.9**	**$ 4,177.9**	**$ 4,190.9**
2			**12.7**	**12.1**	**6.4**	**6.2**	**19.1**	**18.3**
3			**4.4**	**3.1**			**4.4**	**3.1**
4			**6.2**	**4.8**			**6.2**	**4.8**
5			**9.1**	**8.7**			**9.1**	**8.7**
6	**0.7**	**0.4**	**2.6**	**2.1**			**3.3**	**2.5**
Total (1)	**$ 25.3**	**$ 25.3**	**$ 186.5**	**$ 184.9**	**$ 4,008.2**	**$ 4,018.1**	**$ 4,220.0**	**$ 4,228.3**

(1) The CMBS portfolio included agency CMBS with a $280.0 million amortized cost and a $276.2 million carrying amount.

	December 31, 2018							
	2004 and prior		2005 to 2008		2009 and after		Total	
NAIC designation	Amortized cost	Carrying amount	Amortized cost	Carrying amount	Amortized cost	Carrying amount	Amortized cost	Carrying amount
	(in millions)							
1	$ 27.0	$ 27.6	$ 176.4	$ 179.4	$ 3,763.6	$ 3,686.7	$ 3,967.0	$ 3,893.7
2			5.5	5.2	6.3	5.9	11.8	11.1
3			5.8	4.6			5.8	4.6
4			5.9	5.7			5.9	5.7
5	0.1		10.0	9.6			10.1	9.6
6	0.9	0.6	2.8	2.5			3.7	3.1
Total (1)	$ 28.0	$ 28.2	$ 206.4	$ 207.0	$ 3,769.9	$ 3,692.6	$ 4,004.3	$ 3,927.8

(1) The CMBS portfolio included agency CMBS with a $279.6 million amortized cost and a $272.6 million carrying amount.

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, 2019	December 31, 2018
	($ in millions)	
Total fixed maturities (public and private)	**$ 59,948.4**	$ 57,126.8
Problem fixed maturities (1)	**$ 71.7**	$ 69.0
Potential problem fixed maturities	**52.5**	50.0
Restructured fixed maturities	**2.6**	2.5
Total problem, potential problem and restructured fixed maturities	**$ 126.8**	$ 121.5
Total problem, potential problem and restructured fixed maturities as a percent of total fixed maturities	**0.21%**	0.21%

(1) The problem fixed maturities carrying amount is net of other-than-temporary impairment losses.

Fixed Maturities Impairments. We have a process in place to identify securities that could potentially have an impairment that is other than temporary. 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, 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 an other-than-temporary decline in value exists and whether losses should be recognized. 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.

We consider relevant facts and circumstances in evaluating whether a credit or interest rate- related impairment of a security is other than temporary. Relevant facts and circumstances considered include: (1) the extent and length of time the fair value has been 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; (4) for structured securities, the adequacy of the expected cash flows and (5) our intent to sell the security or whether it is more likely than not we will be required to sell the security before recovery of its amortized cost which, in some cases, may extend to maturity. To the extent we determine a security is deemed to be other than temporarily impaired, an impairment loss is recognized. For additional details, see Item 1. Financial Statements, Notes to Unaudited Consolidated Financial Statements, Note 3, Investments.

We would not consider a security with unrealized losses to be other than temporarily impaired 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 impairments and determining if an impairment is other than temporary. 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 other-than-temporary credit impairments and credit related sales of fixed maturities was $6.8 million and $9.9 million for the three months ended March 31, 2019 and 2018, respectively.

Table of Contents

Fixed Maturities Available-for-Sale

The following tables present our fixed maturities available-for-sale by industry category and the associated gross unrealized gains and losses, including other-than-temporary impairment losses reported in AOCI, as of the periods indicated.

	March 31, 2019			
	Amortized cost	Gross unrealized gains	Gross unrealized losses	Carrying amount
	(in millions)			
Finance Banking	$ 4,186.2	$ 106.5	$ 35.9	$ 4,256.8
Finance Brokerage	432.5	9.1	3.4	438.2
Finance Finance Companies	341.9	6.2	1.8	346.3
Finance Financial Other	491.5	20.2	5.2	506.5
Finance Insurance	2,476.1	216.8	11.8	2,681.1
Finance Real estate investment trusts (REITs)	1,542.5	38.6	9.2	1,571.9
Industrial Basic Industry	1,028.6	52.6	6.8	1,074.4
Industrial Capital Goods	2,139.1	63.7	18.9	2,183.9
Industrial Communications	2,593.5	200.5	7.4	2,786.6
Industrial Consumer Cyclical	1,607.0	55.2	13.6	1,648.6
Industrial Consumer Non-Cyclical	3,946.4	151.0	35.6	4,061.8
Industrial Energy	2,369.7	188.2	21.5	2,536.4
Industrial Other	437.5	12.7	2.4	447.8
Industrial Technology	1,942.1	52.3	16.2	1,978.2
Industrial Transportation	1,651.8	40.5	15.6	1,676.7
Utility Electric	3,143.8	149.3	37.7	3,255.4
Utility Natural Gas	355.4	10.3	3.0	362.7
Utility Other	272.6	7.8	3.3	277.1
Government guaranteed	1,339.7	104.8	4.5	1,440.0
Total corporate securities	32,297.9	1,486.3	253.8	33,530.4
Residential mortgage-backed pass-through securities	2,464.7	37.8	25.1	2,477.4
Commercial mortgage-backed securities	4,201.5	51.3	43.0	4,209.8
Residential collateralized mortgage obligations	3,548.9	39.3	30.2	3,558.0
Asset-backed securities Home equity (1)	255.3	12.5	1.9	265.9
Asset-backed securities All other	3,738.5	17.2	14.9	3,740.8
Collateralized debt obligations Credit	16.8		3.9	12.9
Collateralized debt obligations CMBS	0.1			0.1
Collateralized debt obligations Loans	2,769.8	0.2	17.3	2,752.7
Total mortgage-backed and other asset-backed securities	16,995.6	158.3	136.3	17,017.6
U.S. government and agencies	1,445.1	40.2	9.1	1,476.2
States and political subdivisions	6,287.4	351.6	27.1	6,611.9
Non-U.S. governments	731.4	80.1	3.6	807.9
Total fixed maturities, available-for-sale	$ 57,757.4	$ 2,116.5	$ 429.9	$ 59,444.0

(1) This exposure is all related to sub-prime mortgage loans.

Table of Contents

	December 31, 2018			
	Amortized cost	Gross unrealized gains	Gross unrealized losses	Carrying amount
	(in millions)			
Finance Banking	$ 4,556.4	$ 48.2	$ 119.6	$ 4,485.0
Finance Brokerage	416.6	4.2	11.5	409.3
Finance Finance Companies	342.5	2.7	9.0	336.2
Finance Financial Other	415.5	15.2	9.2	421.5
Finance Insurance	2,441.0	158.3	43.7	2,555.6
Finance REITs	1,482.5	9.1	38.9	1,452.7
Industrial Basic Industry	1,052.8	32.2	27.3	1,057.7
Industrial Capital Goods	2,148.3	29.3	62.2	2,115.4
Industrial Communications	2,567.7	137.4	46.1	2,659.0
Industrial Consumer Cyclical	1,580.7	31.2	46.6	1,565.3
Industrial Consumer Non-Cyclical	3,900.9	77.1	119.1	3,858.9
Industrial Energy	2,377.9	115.9	55.8	2,438.0
Industrial Other	424.2	5.2	8.7	420.7
Industrial Technology	1,858.7	12.3	46.7	1,824.3
Industrial Transportation	1,595.8	19.7	53.4	1,562.1
Utility Electric	3,020.0	83.6	81.6	3,022.0
Utility Natural Gas	476.7	14.1	16.4	474.4
Utility Other	301.5	4.3	7.7	298.1
Government guaranteed	1,321.3	73.5	21.6	1,373.2
Total corporate securities	32,281.0	873.5	825.1	32,329.4
Residential mortgage-backed pass-through securities	2,481.3	21.5	49.8	2,453.0
Commercial mortgage-backed securities	3,990.5	17.1	93.6	3,914.0
Residential collateralized mortgage obligations	3,400.8	18.9	56.4	3,363.3
Asset-backed securities Home equity (1)	264.5	12.0	2.9	273.6
Asset-backed securities All other	3,551.5	8.4	23.4	3,536.5
Collateralized debt obligations Credit	16.8		3.9	12.9
Collateralized debt obligations CMBS	0.2			0.2
Collateralized debt obligations Loans	2,434.3		26.6	2,407.7
Total mortgage-backed and other asset-backed securities	16,139.9	77.9	256.6	15,961.2
U.S. government and agencies	1,419.6	16.2	16.8	1,419.0
States and political subdivisions	6,110.7	195.9	95.0	6,211.6
Non-U.S. governments	683.5	61.2	13.9	730.8
Total fixed maturities, available-for-sale	$ 56,634.7	$ 1,224.7	$ 1,207.4	$ 56,652.0

(1) This exposure is all related to sub-prime mortgage loans.

Of the $429.9 million in gross unrealized losses as of March 31, 2019, $3.1 million in losses were attributed to securities scheduled to mature in one year or less, $34.4 million attributed to securities scheduled to mature between one to five years, $76.3 million attributed to securities scheduled to mature between five to ten years, $179.8 million attributed to securities scheduled to mature after ten years and $136.3 million related to mortgage-backed and other ABS that are not classified by maturity year. As of March 31, 2019, we were in a $1,686.6 million net unrealized gain position as compared to a $17.3 million net unrealized gain position as of December 31, 2018. The $1,669.3 million increase in net unrealized gains for the three months ended March 31, 2019, can be attributed to tightening of credit spreads and an approximate 28 basis points decrease in interest rates.

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

Table of Contents

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 and the associated gross unrealized gains and losses, including the other-than-temporary impairment losses reported in AOCI, as of the periods indicated.

	March 31, 2019				December 31, 2018			
	Amortized cost	Gross unrealized gains	Gross unrealized losses	Carrying amount	Amortized cost	Gross unrealized gains	Gross unrealized losses	Carrying amount
	(in millions)							
Investment grade:								
Public	**$ 35,420.8**	**$ 1,570.1**	**$ 238.4**	**$ 36,752.5**	$ 35,064.8	$ 938.0	$ 729.4	$ 35,273.4
Private	**20,037.1**	**502.0**	**133.6**	**20,405.5**	19,311.8	266.4	358.9	19,219.3
Below investment grade:								
Public	**1,000.4**	**20.4**	**31.9**	**988.9**	974.7	6.4	62.5	918.6
Private	**1,299.1**	**24.0**	**26.0**	**1,297.1**	1,283.4	13.9	56.6	1,240.7
Total fixed maturities, available-for-sale	**$ 57,757.4**	**$ 2,116.5**	**$ 429.9**	**$ 59,444.0**	$ 56,634.7	$ 1,224.7	$ 1,207.4	$ 56,652.0

The following tables present the carrying amount and the gross unrealized losses, including other-than-temporary impairment losses reported in AOCI, on investment grade fixed maturities available-for-sale by aging category as of the periods indicated.

	March 31, 2019					
	Public		Private		Total	
	Carrying amount	Gross unrealized losses	Carrying amount	Gross unrealized losses	Carrying amount	Gross unrealized losses
	(in millions)					
Three months or less	**$ 126.9**	**$ 1.0**	**$ 334.6**	**$ 0.9**	**$ 461.5**	**$ 1.9**
Greater than three to six months	**171.6**	**3.7**	**824.0**	**5.7**	**995.6**	**9.4**
Greater than six to nine months	**225.5**	**6.0**	**676.3**	**7.0**	**901.8**	**13.0**
Greater than nine to twelve months	**653.0**	**24.3**	**837.7**	**8.9**	**1,490.7**	**33.2**
Greater than twelve to twenty-four months	**6,866.8**	**114.9**	**4,750.8**	**80.9**	**11,617.6**	**195.8**
Greater than twenty-four to thirty-six months	**2,231.2**	**76.6**	**829.3**	**21.5**	**3,060.5**	**98.1**
Greater than thirty-six months	**291.9**	**11.9**	**101.3**	**8.7**	**393.2**	**20.6**
Total fixed maturities, available-for-sale	**$ 10,566.9**	**$ 238.4**	**$ 8,354.0**	**$ 133.6**	**$ 18,920.9**	**$ 372.0**

	December 31, 2018					
	Public		Private		Total	
	Carrying amount	Gross unrealized losses	Carrying amount	Gross unrealized losses	Carrying amount	Gross unrealized losses
	(in millions)					

Three months or less	$ 1,615.5	$ 31.8	$ 1,874.6	$ 26.4	$ 3,490.1	$ 58.2
Greater than three to six months	2,507.5	56.7	1,767.5	26.8	4,275.0	83.5
Greater than six to nine months	2,727.4	100.6	2,081.4	45.9	4,808.8	146.5
Greater than nine to twelve months	7,077.1	271.1	3,641.4	116.3	10,718.5	387.4
Greater than twelve to twenty-four months	4,002.7	119.5	2,553.6	91.7	6,556.3	211.2
Greater than twenty-four to thirty-six months	2,241.1	134.7	859.6	42.2	3,100.7	176.9
Greater than thirty-six months	287.2	15.0	96.7	9.6	383.9	24.6
Total fixed maturities, available-for-sale	$ 20,458.5	$ 729.4	$ 12,874.8	$ 358.9	$ 33,333.3	$ 1,088.3

Table of Contents

The following tables present the carrying amount and the gross unrealized losses, including other-than-temporary impairment losses reported in AOCI, on below investment grade fixed maturities available-for-sale by aging category as of the periods indicated.

	March 31, 2019					
	Public		Private		Total	
	Carrying amount	Gross unrealized losses	Carrying amount	Gross unrealized losses	Carrying amount	Gross unrealized losses
	(in millions)					
Three months or less	**$ 14.4**	**$ 0.1**	**$ 128.3**	**$ 0.6**	**$ 142.7**	**$ 0.7**
Greater than three to six months	**57.2**	**1.8**	**206.3**	**1.6**	**263.5**	**3.4**
Greater than six to nine months	**21.3**	**0.6**	**64.9**	**8.2**	**86.2**	**8.8**
Greater than nine to twelve months	**45.9**	**3.7**	**103.5**	**2.6**	**149.4**	**6.3**
Greater than twelve to twenty-four months	**133.0**	**10.1**	**124.9**	**3.8**	**257.9**	**13.9**
Greater than twenty-four to thirty-six months	**5.6**	**2.0**			**5.6**	**2.0**
Greater than thirty-six months	**60.0**	**13.6**	**38.5**	**9.2**	**98.5**	**22.8**
Total fixed maturities, available-for-sale	**$ 337.4**	**$ 31.9**	**$ 666.4**	**$ 26.0**	**$ 1,003.8**	**$ 57.9**

	December 31, 2018					
	Public		Private		Total	
	Carrying amount	Gross unrealized losses	Carrying amount	Gross unrealized losses	Carrying amount	Gross unrealized losses
	(in millions)					
Three months or less	$ 354.1	$ 9.7	$ 511.8	$ 15.6	$ 865.9	$ 25.3
Greater than three to six months	73.4	3.7	93.8	6.3	167.2	10.0
Greater than six to nine months	76.1	6.8	148.2	7.6	224.3	14.4
Greater than nine to twelve months	146.6	15.0	227.9	14.1	374.5	29.1
Greater than twelve to twenty-four months	58.7	4.5	35.9	3.0	94.6	7.5
Greater than twenty-four to thirty-six months	6.4	2.3	4.3	0.2	10.7	2.5
Greater than thirty-six months	57.2	20.5	38.1	9.8	95.3	30.3
Total fixed maturities, available-for-sale	$ 772.5	$ 62.5	$ 1,060.0	$ 56.6	$ 1,832.5	$ 119.1

The following tables present the carrying amount and the gross unrealized losses, including other-than-temporary impairment losses reported in AOCI, on fixed maturities available-for-sale where the estimated fair value had declined and remained below amortized cost by 20% or more as of the periods indicated.

	March 31, 2019					
	Problem, potential problem and restructured		All other fixed maturity securities		Total	
	Carrying amount	Gross unrealized losses	Carrying amount	Gross unrealized losses	Carrying amount	Gross unrealized losses
	(in millions)					
Three months or less	**$**	**$**	**$ 39.7**	**$ 11.5**	**$ 39.7**	**$ 11.5**

Greater than three to six months	**5.9**	**2.5**	**18.1**	**5.3**	**24.0**	**7.8**
Greater than six to nine months	**7.0**	**5.3**	**4.9**	**2.0**	**11.9**	**7.3**
Greater than nine to twelve months	**0.2**	**0.8**	**12.0**	**3.2**	**12.2**	**4.0**
Greater than twelve months	**9.6**	**5.5**	**5.7**	**2.3**	**15.3**	**7.8**
Total fixed maturities, available-for-sale	**$ 22.7**	**$ 14.1**	**$ 80.4**	**$ 24.3**	**$ 103.1**	**$ 38.4**

Table of Contents

	December 31, 2018					
	Problem, potential problem and restructured		All other fixed maturity securities		Total	
	Carrying amount	Gross unrealized losses	Carrying amount	Gross unrealized losses	Carrying amount	Gross unrealized losses
	(in millions)					
Three months or less	$ 10.4	$ 5.7	$ 66.6	$ 20.8	$ 77.0	$ 26.5
Greater than three to six months	6.5	5.8	14.9	6.1	21.4	11.9
Greater than six to nine months	0.4	0.5	11.7	3.6	12.1	4.1
Greater than twelve months	9.2	6.5	5.3	2.7	14.5	9.2
Total fixed maturities, available-for-sale	$ 26.5	$ 18.5	$ 98.5	$ 33.2	$ 125.0	$ 51.7

Mortgage Loans

Mortgage loans consist of commercial mortgage loans on real estate and residential mortgage loans. The carrying amount of our commercial mortgage loan portfolio was $13,982.2 million and $13,721.2 million as of March 31, 2019 and December 31, 2018, respectively. The carrying amount of our residential mortgage loan portfolio was $882.3 million and $905.8 million as of March 31, 2019 and December 31, 2018, respectively.

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 21% of our commercial mortgage loan portfolio before valuation allowance as of both March 31, 2019 and December 31, 2018. 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 loan portfolio is a single purpose entity or single asset entity. As of March 31, 2019 and December 31, 2018, the total number of commercial mortgage loans outstanding was 787 and 795, of which 47% and 48% were for loans with principal balances less than $10.0 million, respectively. The average loan size of our commercial mortgage portfolio was $17.8 million and $17.3 million as of March 31, 2019 and December 31, 2018, 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 Consolidated Financial Statements, Note 3, Investments under the caption, Mortgage Loan 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. Valuation allowances or charge-offs have been recognized on most 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.

The following table presents the carrying amounts of problem, potential problem and restructured commercial mortgages relative to the carrying amount of all commercial mortgages for the periods indicated.

	March 31, 2019		December 31, 2018	
	($ in millions)			
Total commercial mortgages	**$**	**13,982.2**	$	13,721.2
Potential problem commercial mortgages	**$**		$	5.9
Total problem, potential problem and restructured commercial mortgages	**$**		$	5.9
Total problem, potential problem and restructured commercial mortgages as a percent of total commercial mortgages		**%**		0.04%

Commercial Mortgage Loan Valuation Allowance. The valuation allowance for commercial mortgage loans includes loan specific reserves for loans that are deemed to be impaired as well as reserves for pools of loans with similar risk characteristics where a property risk or market specific risk has not been identified but for which we anticipate a loss may occur. For further details on the commercial mortgage loan valuation allowance, see Item 1. Financial Statements, Notes to Unaudited Consolidated Financial Statements, Note 3, Investments under the caption, Mortgage Loan Valuation Allowance.

The following table represents our commercial mortgage loan valuation allowance for the periods indicated.

	For the three months ended March 31, 2019		For the year ended December 31, 2018	
	($ in millions)			
Balance, beginning of period	**$**	**24.3**	$	25.8
Provision		**0.4**		(1.5)
Balance, end of period	**$**	**24.7**	$	24.3
Valuation allowance as % of carrying value before reserves		**0.18%**		0.18%

Residential Mortgage Loans. The residential mortgage loan portfolio is composed of first lien mortgages with an amortized cost of $870.6 million and $893.3 million and home equity mortgages with an amortized cost of $14.1 million and $15.1 million as of March 31, 2019 and December 31, 2018, respectively. The home equity loans are generally second lien mortgages made up of closed-end loans and lines of credit. Non-performing residential mortgage loans, which are defined as loans 90 days or greater delinquent plus non-accrual loans, totaled $6.3 million and $7.2 million as of March 31, 2019 and December 31, 2018, respectively.

We establish the residential mortgage loan valuation allowance at levels considered adequate to absorb estimated probable losses within the portfolio based on management s evaluation of the size and current risk characteristics of the portfolio. Such evaluation considers numerous factors, including, but not limited to net charge-off trends, loss forecasts, collateral values, geographic location, borrower credit scores, delinquency rates, industry condition and economic trends. The changes in the valuation allowance are reported in net realized capital gains (losses) on our consolidated statements of operations.

The following table represents our residential mortgage loan valuation allowance for the periods indicated.

	For the three months ended March 31, 2019	For the year ended December 31, 2018
	($ in millions)	
Balance, beginning of period	**$ 2.6**	$ 6.4
Provision	**(0.8)**	(4.5)
Charge-offs	**(0.1)**	(2.4)
Recoveries	**0.7**	3.1
Balance, end of period	**$ 2.4**	$ 2.6
Valuation allowance as % of carrying value before reserves	**0.27%**	0.29%

Real Estate

Real estate consists primarily of commercial equity real estate. As of March 31, 2019 and December 31, 2018, the carrying amount of our equity real estate investment was $1,734.4 million and $1,726.3 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. Real estate held for investment totaled $1,517.6 million and $1,518.6 million as of March 31, 2019 and December 31, 2018, respectively. 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, 2019 or for the year ended December 31, 2018.

The carrying amount of real estate held for sale was $216.8 million and $207.7 million as of March 31, 2019 and December 31, 2018, respectively. 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, 2019 or for the year ended December 31, 2018.

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, 2019, our largest equity real estate portfolio concentration was in the Pacific (42%) region of the United States. By property type, our largest concentrations were in apartments (33%), office (31%), and industrial (25%) as of March 31, 2019.

Other Investments

Our other investments totaled $2,927.4 million as of March 31, 2019, compared to $2,596.0 million as of December 31, 2018. 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 life insurance; derivative assets and other investments.

Table of Contents

International Investment Operations

Of our invested assets, $7,858.4 million were held by our Principal International segment as of March 31, 2019. 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, 2019		December 31, 2018	
	Carrying amount	Percent of total	Carrying amount	Percent of total
	($ in millions)			
Fixed maturities:				
Public	**$ 3,780.4**	**48%**	$ 3,569.2	48%
Private	**63.1**	**1**	48.6	1
Equity securities	**1,429.6**	**18**	1,425.1	19
Mortgage loans:				
Commercial	**267.3**	**4**	250.8	3
Residential	**465.7**	**6**	459.1	6
Real estate held for sale	**0.8**		1.9	
Real estate held for investment	**1.5**		1.5	
Policy loans	**22.2**		21.6	
Other investments:				
Direct financing leases	**850.9**	**11**	830.7	11
Investment in unconsolidated entities	**954.6**	**12**	864.5	12
Derivative assets and other investments	**22.3**		19.1	
Total invested assets	**7,858.4**	**100%**	7,492.1	100%
Cash and cash equivalents	**249.9**		249.4	
Total invested assets and cash	**$ 8,108.3**		$ 7,741.5	

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 pension and OPEB obligations;

- estimated gross profits and the amortization of our DAC asset and related actuarial balances;
- 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 reserves, DAC, other actuarial balances 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 our reserves and/or unlocking of our DAC asset and other actuarial balances. For additional information, see Item 7. Management s Discussion and Analysis of Financial Condition and Results of Operations Critical Accounting Policies and Estimates Deferred Acquisition Costs and Other Actuarial Balances in our Annual Report on Form 10-K for the year ended December 31, 2018.

In addition, we have implemented reinsurance transactions utilizing affiliated reinsurers and highly rated third parties to finance a portion of the statutory reserves for our term life insurance policies and universal life insurance policies with secondary guarantees. We calculate an economic reserve, which represents an estimate of our liability associated with these contracts. The excess of the required statutory reserve over the economic reserve is secured by financing provided by highly rated third parties. The long-term interest rate assumption is a key input in the calculation of the economic reserve. A reduction in our long-term interest rate assumption would reduce the portion of the statutory reserve that can be financed through affiliated reinsurers, thus increasing the amount of invested assets we must maintain to support statutory reserves. For additional information, see Item 8. Financial Statements and Supplementary Data, Notes to Consolidated Financial Statements, Note 15, Statutory Insurance Financial Information in our Annual Report on Form 10-K for the year ended December 31, 2018.

Table of Contents

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 reserves and/or a true-up or unlocking of our DAC asset and other actuarial balances	A true-up or unlocking of our DAC asset and other actuarial balances
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	
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 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 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 interest rates would reduce segment pre-tax operating earnings by less than 1% over the next 12 months excluding the impact of any potential unlocking of our DAC asset and other actuarial balances. This estimate reflects the impact of routine management actions in response to a drop in interest rates, such as reducing the interest rates we credit on contractholder account balances; however, it does not reflect the impact of other actions management may consider, such as curtailing sales of certain products. We anticipate the adverse segment pre-tax operating earnings impacts of a decrease in market interest rates will grow over time as assets mature and we are forced to reinvest at lower interest rates.

The selection of a 100 basis point immediate, parallel decrease in 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. This may result in unlocking of 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.

Table of Contents

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, 2019, and the respective guaranteed minimum interest rates (GMIRs). Account values are broken down by GMIR level within the Retirement and Income Solutions and U.S. Insurance Solutions 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%	$ 262.3	$ 312.7	$ 816.2	$ 3,757.3	$ 2,553.7	$ 7,702.2
1.01% - 2.00%	615.5	4,633.0	9.1	649.8		5,907.4
2.01% - 3.00%	5,269.4			0.2		5,269.6
3.01% - 4.00%	201.5					201.5
Subtotal	6,348.7	4,945.7	825.3	4,407.3	2,553.7	19,080.7
U.S. Insurance Solutions						
Up to 1.00%		22.6	2.4			25.0
1.01% - 2.00%	335.8		276.7	343.1	122.0	1,077.6
2.01% - 3.00%	1,846.8	762.6	487.6	104.1		3,201.1
3.01% - 4.00%	1,724.6	56.2	17.4	23.9	3.4	1,825.5
4.01% - 5.00%	52.6	6.1	2.9	1.7		63.3
Subtotal	3,959.8	847.5	787.0	472.8	125.4	6,192.5
Total	$ 10,308.5	$ 5,793.2	$ 1,612.3	$ 4,880.1	$ 2,679.1	$ 25,273.2
Percentage of total	40.8%	22.9%	6.4%	19.3%	10.6%	100.0%

(1) Includes only the account values, net of policy loans, for products with GMIRs and discretionary crediting rates.

In addition to the domestic account values shown in the table above, Principal International had $633.1 million and $510.9 million of account values with GMIRs in Hong Kong and Brazil, respectively, as of March 31, 2019. The Brazil amount includes account values from an equity method subsidiary, adjusted to reflect the proportion of the subsidiary s results reflected in our net income. Our liabilities in Principal International are generally denominated in the functional currency of the location of operation. The pattern of interest rate movements in our international operations will likely differ from the pattern of interest rate movements in the U.S.

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, determine an investment is other than temporarily impaired, 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 $4,098.8 million as of March 31, 2019, compared to $3,893.7 million as of December 31, 2018. 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. For more information on fair value measurements, see Item 8. Financial Statements and Supplementary Data, Notes to Consolidated Financial Statements, Note 14, Fair Value Measurements in our Annual Report on Form 10-K for the year ended December 31, 2018.

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.

Our net estimated potential loss in fair value as of March 31, 2019, increased $205.1 million from December 31, 2018, primarily due to an increase in the balance of fixed maturities, available-for-sale. The increase in the balance of fixed maturities, available-for-sale was primarily driven by an increase in net unrealized gains resulting primarily from a decrease in interest rates and tightening of spreads, and net purchase activity.

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, full service accumulation, investment only, and newer fixed deferred annuities, we use investment strategy and hedges to tightly align the cash flow run off of these asset and liability cash flows. Immunization and embedded value analysis are also utilized in the management of interest rate risk.

- *Retirement Business Dynamic Cash Flows* Dynamic liability cash flows, such as older fixed deferred annuities, are sensitive to policyholder behavior and the current interest rate environment. The risk and return metrics from deterministic and stochastic interest rate scenarios are used to manage the interest rate risk for these liabilities.

- *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 11, Employee and Agent Benefits in our Annual Report on Form 10-K for the year ended December 31, 2018.

Use of Derivatives to Manage Interest Rate Risk. We use various derivative financial instruments to manage our exposure to fluctuations in interest rates, including interest rate swaps, interest rate options, swaptions and futures. We use interest rate swaps and futures contracts to hedge changes in interest rates subsequent to the issuance of an insurance liability, such as a guaranteed investment contract, but prior to the purchase of a supporting asset, or during periods of holding assets in anticipation of near term liability sales. We use interest rate swaps 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 interest rate options to manage prepayment risks in our assets and minimum guaranteed interest rates and lapse risks in our liabilities. We purchase 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, 2019, 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, 2018. 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 segment, 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 $326.8 million, or 10%, reduction in the total equity excluding noncontrolling interests of our international operations as of March 31, 2019, as compared to an estimated $313.9 million, or 10%, reduction as of December 31, 2018. 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 $12.9 million, or 12%, reduction in segment pre-tax operating earnings of our international operations for the three months ended March 31, 2019, as compared to an estimated $10.9 million, or 13%, reduction for the three months ended March 31, 2018.

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. The notional amount of our currency swap agreements associated with foreign-denominated liabilities was $128.3 million and $155.2 million as of March 31, 2019 and December 31, 2018, respectively. The notional amount of our currency swap agreements associated with foreign-denominated fixed maturities was $542.5 million as of both March 31, 2019 and December 31, 2018. The notional amount of our currency forwards hedging foreign-denominated equity securities was $50.4 million and $50.5 million as of March 31, 2019 and December 31, 2018, 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 $192.7 million and $200.9 million as of March 31, 2019 and December 31, 2018, respectively. Our Principal International operations also utilized currency forwards with a notional amount of $755.7 million and $738.6 million as of March 31, 2019 and December 31, 2018, respectively.

We sometimes use derivatives to hedge currency risk associated with expected cash flows from our foreign operations. We held currency forwards with a notional amount of $68.7 million and $74.5 million as March 31, 2019 and December 31, 2018, respectively. We also utilized currency options with a notional amount of $604.3 million and $525.2 million as of March 31, 2019 and December 31, 2018, respectively.

Table of Contents

Equity Risk

Equity risk is the risk we will incur economic losses due to adverse fluctuations in common stock prices. As of March 31, 2019 and December 31, 2018, the fair value of our equity securities was $1,864.1 million and $1,843.7 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 $186.4 million as of March 31, 2019, as compared to a decline in fair value of our equity securities of $184.4 million as of December 31, 2018.

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. The risk of decreased asset-based and asset management fees could also impact our estimates of total gross profits used as a basis for amortizing DAC and other actuarial balances. For further discussion, see Item 7. Management s Discussion and Analysis of Financial Condition and Results of Operations Critical Accounting Policies and Estimates Deferred Acquisition Costs and Other Actuarial Balances in our Annual Report on Form 10-K for the year ended December 31, 2018.

We also have equity risk associated with (1) fixed deferred annuity and 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 guaranteed minimum death benefit (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, 2018.

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 4% to 6%. This estimate excludes the impact of any potential unlocking of our DAC asset and other actuarial balances. 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.

Use of Derivatives to Manage Equity Risk. We economically hedge the fixed deferred annuity and 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 and interest rate swaps with notional amounts of $531.0 million, $1,004.6 million, and $3,627.8 million, respectively, as of March 31, 2019, and notional amounts of $751.7 million, $1,004.6 million, and $3,492.8 million, respectively, as of December 31, 2018. The fair value of both the GMWB embedded derivative 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

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.

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, 2019, and have concluded our disclosure controls and procedures are effective.

Table of Contents

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 Consolidated Financial Statements, Note 8, Contingencies, Guarantees, Indemnifications and Leases 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, 2018. 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. While 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, 2018, we are adding risk factors set out below related to our acquisition (the Acquisition) of the Business of Wells Fargo Bank, N.A, (the Seller) as discussed in Part I, Item 1. Financial Statements, Notes to Unaudited Consolidated Financial Statements, Note 16, Subsequent Event and Part I, Item 2. Management s Discussion and Analysis of Financial Condition and Results of Operations under the caption Recent Event.

We may not complete the Acquisition within the timeframe we anticipate, or at all, which could have a negative effect on our business or our results of operations.

On April 9, 2019, we signed a purchase agreement (the Purchase Agreement) with the Seller under which we have agreed to acquire the Business. The closing of the transactions contemplated by the Purchase Agreement (the Closing) is subject to a number of conditions, including, but not limited to, (i) the expiration or termination of any required waiting periods under the Hart-Scott-Rodino Antitrust Improvements Act of 1976, (ii) the absence of any order or injunction prohibiting the Closing (or a pending proceeding brought by a governmental entity seeking to enjoin the Closing) and (iii) subject to certain exceptions, the accuracy of the representations and warranties of, and compliance with covenants by, each of PFS and the Seller. These closing conditions may not be satisfied or may take longer to receive than we expect. The Acquisition is subject to other risks and uncertainties, such as the possibility that either PFS or the Seller could exercise their respective termination rights. Failure to complete the Acquisition would, and any delay in completing the Acquisition could, prevent us from realizing the benefits that we expect from the Acquisition.

We may not realize the expected benefits of the Acquisition because of integration difficulties, delays in the transfer of purchased assets and other challenges.

The success of the Acquisition will depend, in part, on our ability to successfully integrate and operate the Business in conjunction with our existing businesses. The integration process may be complex, costly and time-consuming. The potential difficulties of integrating the operations of the Business include, among others:

- implementing our business plan for the combined business;
- unanticipated issues in integrating logistics, information, communications and other systems;
- retaining and integrating key employees of the Seller;
- retaining and growing the Business customers;
- timely receipt of approval from the Office of the Comptroller of the Currency in order for Principal Bank, our wholly-owned subsidiary, to receive certain assets and liabilities of the Business;
- changes in applicable laws and regulations or conditions imposed by regulators;
- operating risks inherent in the Business and our existing businesses and

- realizing revenue and expense synergies.

We may not accomplish the integration of the Business smoothly, successfully or within the anticipated costs or timeframe we anticipate. In particular, it is expected that the transfer to us of many of the purchased assets, including contracts with customers and vendors of the Business, will not be effectuated until sometime after the Closing (and, if the requisite consents of contractual counterparties of the Business or other third parties are not received, may not be effectuated at all). Furthermore, the Business will be reliant upon the Seller to continue to provide services to the Business for a transitional period following the Closing. Any difficulties or delays encountered in combining operations could prevent us from realizing the full benefits anticipated to result from the Acquisition and could adversely affect our business, results of operations and financial condition. In addition, the Business may not meet our expectations, causing our financial results to differ from our own or the investment community s expectations. It is possible that the Business may be adversely affected by regulatory, political, economic, business or competitive factors before or after the Closing, which could prevent us from realizing the anticipated benefits of the Acquisition. The Acquisition may also divert our management s attention from our current operations to the integration effort, which could have a negative effect on our business, results of operations and financial condition.

The obligations and liabilities of the Seller, some of which may be unanticipated or unknown, may be greater than we have anticipated, which may diminish the value of the Business to us.

In connection with the Acquisition, we will assume certain liabilities of the Seller and its affiliates, including, among others: specified current liabilities; liabilities arising under the terms (or from the performance) of specified transferred contracts; liabilities arising out of the employment or termination of employment of employees of the Business and liabilities relating to certain purchased assets. The assumed liabilities may be greater than we have anticipated. The obligations and liabilities of the Seller could have a material adverse effect on the value of the Business to us or on our business, financial condition or results of operations. We have only limited indemnification rights from the Seller under the Purchase Agreement with respect to obligations or liabilities of the Seller, whether known or unknown.

The Business may present risks that could have a negative effect on our business, results of operations, or financial condition.

As a result of the Acquisition, we will for the first time provide trust and custody services for non-retirement plan assets of corporations, foundations, municipalities and other institutions. In addition, as a result of the Acquisition, we will expand the size of the trust and custody services we currently provide to defined contribution 401(k), defined benefit, employee stock ownership and non-qualified plans. The entry into and expansion of these business lines may present risks and uncertainties that could have a negative effect on our business, results of operations, or financial condition. If we do not obtain all desired regulatory approvals, our ability to pursue the Business may be impaired. Moreover, even on an ongoing basis, our bank regulators will closely watch our capability to successfully manage this expansion, and they may compel remediation activities and potentially impose fines if they find our compliance to be insufficient.

Trust and custody services primarily are a fee-based business, and fees for such trust and custody services may be based on the market value of assets under management, administration or custody; the volume of transactions processed and fees for other services rendered. Disruptions, uncertainty or volatility in the capital markets; weak economic conditions and/or declines in the financial markets may decrease our fee-based revenue, which may negatively impact our results of operations. The market for trust and custody business is highly competitive. In the event that competitors charge lower fees for substantially similar trust and custody services, we may face pressure to lower our prices in order to attract and retain customers, and any reductions in the fees we charge for these services may adversely affect our revenue, and, accordingly, negatively impact our results of operations.

The Business involves the risk that clients or others may sue us, claiming that we or third parties for whom they say we are responsible have failed to perform under a contract or otherwise failed to carry out a duty perceived to be owed to them, including perceived fiduciary or contractual duties. This risk may be heightened during periods when credit, equity or other financial markets are deteriorating in value or are particularly volatile, or when clients or investors are experiencing losses. Actions brought against us may result in lawsuits, enforcement actions, injunctions, settlements, damages, fines or penalties, which could have a negative effect on our financial condition or results of operations or require changes to our business. These risks could result in increased regulatory supervision and affect our ability to attract and retain customers.

Table of Contents

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, 2019 January 31, 2019	**1,468,212**	**$**	**47.10**	**1,467,368**	**$**	**355.9**
February 1, 2019 February 28, 2019	**1,671,267**	**$**	**50.39**	**1,224,506**	**$**	**295.3**
March 1, 2019 March 31, 2019	**4,050**	**$**	**52.99**		**$**	**295.3**
Total	**3,143,529**			**2,691,874**		

(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 May 2018, our Board of Directors authorized a share repurchase program of up to $300.0 million of our outstanding common stock, which was completed in December 2018. In November 2018, our Board of Directors authorized a share repurchase program of up to $500.0 million of our outstanding common stock. In the first quarter of 2019, we suspended purchases of the remaining amount available under the November 2018 authorization.

Table of Contents

Item 6. Exhibits

Exhibit Number	Description
2.1	Purchase Agreement, dated as of April 9, 2019, by and between Wells Fargo Bank, N.A., Principal Financial Services, Inc. and (for certain limited purposes) Wells Fargo & Company
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	The following materials from Principal Financial Group, Inc. s Quarterly Report on Form 10-Q for the period ended March 31, 2019 formatted in XBRL (Extensible Business Reporting Language): (i) the Consolidated Statements of Financial Position, (ii) the Consolidated Statements of Operations, (iii) the Consolidated Statements of Comprehensive Income, (iv) the Consolidated Statements of Stockholders Equity, (v) the Consolidated Statements of Cash Flows and (vi) the Notes to Unaudited Consolidated Financial Statements.

Table of Contents

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 2, 2019	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