REINSURANCE GROUP OF AMERICA INC
Form 10-Q
August 03, 2018
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UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
Washington, D.C. 20549
FORM 10-Q

(Mark One)

x	QUARTERLY REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934
	For the quarterly period ended June 30, 2018
	OR
..	TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934

Commission File Number 1-11848

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

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

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

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

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

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

As of July 31, 2018, 63,656,444 shares of the registrant's common stock were outstanding.

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PART I - FINANCIAL INFORMATION
ITEM 1. Financial Statements

REINSURANCE GROUP OF AMERICA, INCORPORATED AND SUBSIDIARIES
CONDENSED CONSOLIDATED BALANCE SHEETS
(Unaudited)

	June 30, 2018	December 31, 2017
	(Dollars in thousands, except share data)	
Assets		
Fixed maturity securities available-for-sale, at fair value (amortized cost $35,233,970 and $35,281,412)	$ 36,784,954	$ 38,150,820
Equity securities, at fair value (cost $121,744 and $102,841)	108,070	100,152
Mortgage loans on real estate (net of allowances of $9,706 and $9,384)	4,558,669	4,400,533
Policy loans	1,339,252	1,357,624
Funds withheld at interest	5,981,092	6,083,388
Short-term investments	123,028	93,304
Other invested assets	1,605,562	1,505,332
Total investments	50,500,627	51,691,153
Cash and cash equivalents	1,397,679	1,303,524
Accrued investment income	400,160	392,721
Premiums receivable and other reinsurance balances	2,617,382	2,338,481
Reinsurance ceded receivables	789,429	782,027
Deferred policy acquisition costs	3,205,667	3,239,824
Other assets	855,553	767,088
Total assets	$ 59,766,497	$ 60,514,818
Liabilities and Stockholders’ Equity		
Future policy benefits	$ 22,286,622	$ 22,363,241
Interest-sensitive contract liabilities	16,513,668	16,227,642
Other policy claims and benefits	5,334,210	4,992,074
Other reinsurance balances	412,846	488,739
Deferred income taxes	2,009,514	2,198,309
Other liabilities	1,094,826	1,102,975
Long-term debt	2,788,111	2,788,365
Collateral finance and securitization notes	724,998	783,938
Total liabilities	51,164,795	50,945,283
Commitments and contingent liabilities (See Note 8)		
Stockholders’ Equity:		
Preferred stock - par value $.01 per share, 10,000,000 shares authorized, no shares issued or outstanding	—	—
Common stock - par value $.01 per share, 140,000,000 shares authorized, 79,137,758 shares issued at June 30, 2018 and December 31, 2017	791	791
Additional paid-in capital	1,887,336	1,870,906
Retained earnings	6,952,170	6,736,265
Treasury stock, at cost - 15,465,272 and 14,685,663 shares	(1,243,566)	(1,102,058)
Accumulated other comprehensive income	1,004,971	2,063,631
Total stockholders’ equity	8,601,702	9,569,535

Total liabilities and stockholders' equity	$ 59,766,497	$ 60,514,818

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

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

	Three months ended June 30,		Six months ended June 30,	
	2018	2017	2018	2017
Revenues:	(Dollars in thousands, except per share data)			
Net premiums	$2,594,460	$2,480,451	$5,177,011	$4,846,147
Investment income, net of related expenses	528,061	518,538	1,044,390	1,032,902
Investment related gains (losses), net:				
Other-than-temporary impairments on fixed maturity securities	(3,350)	(3,401)	(3,350)	(20,590)
Other investment related gains (losses), net	(7,222)	59,696	(7,692)	137,408
Total investment related gains (losses), net	(10,572)	56,295	(11,042)	116,818
Other revenues	83,959	73,992	159,256	142,149
Total revenues	3,195,908	3,129,276	6,369,615	6,138,016
Benefits and Expenses:				
Claims and other policy benefits	2,279,593	2,164,363	4,641,694	4,270,508
Interest credited	109,327	115,285	189,776	222,969
Policy acquisition costs and other insurance expenses	320,276	319,832	677,178	699,221
Other operating expenses	194,959	154,356	386,233	312,862
Interest expense	37,025	29,352	74,479	71,754
Collateral finance and securitization expense	7,440	6,773	15,042	13,543
Total benefits and expenses	2,948,620	2,789,961	5,984,402	5,590,857
Income before income taxes	247,288	339,315	385,213	547,159
Provision for income taxes	42,914	107,125	80,609	169,457
Net income	$204,374	$232,190	$304,604	$377,702
Earnings per share:				
Basic earnings per share	$3.19	$3.60	$4.74	$5.86
Diluted earnings per share	$3.13	$3.54	$4.65	$5.76
Dividends declared per share	$0.50	$0.41	$1.00	$0.82

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

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

	Three months ended June 30,		Six months ended June 30,	
	2018	2017	2018	2017
Comprehensive income (loss)	(Dollars in thousands)			
Net income	$204,374	$232,190	$304,604	$377,702
Other comprehensive income (loss), net of tax:				
Foreign currency translation adjustments	(54,677)	43,565	(55,837)	21,352
Net unrealized investment gains (losses)	(368,719)	306,329	(1,002,323)	509,444
Defined benefit pension and postretirement plan adjustments	(29)	849	(500)	1,773
Total other comprehensive income (loss), net of tax	(423,425)	350,743	(1,058,660)	532,569
Total comprehensive income (loss)	$(219,051)	$582,933	$(754,056)	$910,271

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

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

	Six months ended June 30,	
	2018	2017
	(Dollars in thousands)	
Cash Flows from Operating Activities:		
Net income	$304,604	$377,702
Adjustments to reconcile net income to net cash provided by operating activities:		
Change in operating assets and liabilities:		
Accrued investment income	1,834	(34,676)
Premiums receivable and other reinsurance balances	(345,253)	(230,650)
Deferred policy acquisition costs	20,528	35,870
Reinsurance ceded receivable balances	18,245	(127,995)
Future policy benefits, other policy claims and benefits, and other reinsurance balances	598,015	745,799
Deferred income taxes	48,117	142,044
Other assets and other liabilities, net	(98,807)	(63,811)
Amortization of net investment premiums, discounts and other	(25,713)	(47,563)
Depreciation and amortization expense	21,554	13,869
Investment related (gains) losses, net	11,042	(116,818)
Other, net	29,422	(37,797)
Net cash provided by operating activities	583,588	655,974
Cash Flows from Investing Activities:		
Sales of fixed maturity securities available-for-sale	3,836,575	4,288,713
Maturities of fixed maturity securities available-for-sale	328,097	313,530
Sales of equity securities	29,099	166,916
Principal payments and sales of mortgage loans on real estate	213,691	135,450
Principal payments on policy loans	24,793	26,658
Purchases of fixed maturity securities available-for-sale	(3,880,733)	(5,311,818)
Purchases of equity securities	(11,930)	(32,299)
Cash invested in mortgage loans on real estate	(376,470)	(463,063)
Cash invested in policy loans	(6,421)	(5,830)
Cash invested in funds withheld at interest	(42,761)	(6,910)
Purchase of businesses, net of cash acquired of $4,938	(29,315)	—
Purchases of property and equipment	(14,573)	31,686
Change in short-term investments	(9,843)	22,671
Change in other invested assets	(160,824)	(55,379)
Net cash used in investing activities	(100,615)	(889,675)
Cash Flows from Financing Activities:		
Dividends to stockholders	(64,370)	(52,815)
Repayment of collateral finance and securitization notes	(53,102)	(23,761)
Principal payments of long-term debt	(1,331)	(301,278)
Purchases of treasury stock	(165,069)	(10,578)
Exercise of stock options, net	1,252	2,527
Change in cash collateral for derivative positions and other arrangements	17,578	(7,046)
Deposits on universal life and other investment type policies and contracts	225,876	917,675
Withdrawals on universal life and other investment type policies and contracts	(329,899)	(402,528)

Net cash (used in) provided by financing activities	(369,065)	122,196
Effect of exchange rate changes on cash	(19,753)	34,137
Change in cash and cash equivalents	94,155	(77,368)
Cash and cash equivalents, beginning of period	1,303,524	1,200,718
Cash and cash equivalents, end of period	$1,397,679	$1,123,350
Supplemental disclosures of cash flow information:		
Interest paid	$84,670	$90,425
Income taxes paid, net of refunds	$59,397	$26,447
Non-cash transactions:		
Transfer of invested assets	$604,374	$2,243,360
Purchase of businesses:		
Assets acquired, excluding cash acquired	$65,948	$—
Liabilities assumed	(36,633)	—
Net cash paid on purchase	$29,315	$—

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

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

1. Business and Basis of Presentation

Reinsurance Group of America, Incorporated ("RGA") is an insurance holding company that was formed on December 31, 1992. The accompanying unaudited condensed consolidated financial statements of RGA and its subsidiaries (collectively, the "Company") have been prepared in conformity with accounting principles generally accepted in the United States of America ("GAAP") for interim financial information and with the instructions to Form 10-Q and Article 10 of Regulation S-X. Accordingly, these condensed consolidated financial statements do not include all of the information and footnotes required by GAAP for complete financial statements. In the opinion of management, all adjustments, including normal recurring adjustments necessary for a fair presentation have been included. Results for the six months ended June 30, 2018 are not necessarily indicative of the results that may be expected for the year ending December 31, 2018. These unaudited condensed consolidated financial statements include the accounts of RGA and its subsidiaries, and all intercompany accounts and transactions have been eliminated. These condensed consolidated statements should be read in conjunction with the Company's 2017 Annual Report on Form 10-K filed with the Securities and Exchange Commission ("SEC") on February 27, 2018 (the "2017 Annual Report").

2. Earnings Per Share

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

	Three months ended June 30,		Six months ended June 30,	
	2018	2017	2018	2017
Earnings:				
Net income (numerator for basic and diluted calculations)	$204,374	$232,190	$304,604	$377,702
Shares:				
Weighted average outstanding shares (denominator for basic calculation)	64,071	64,449	64,278	64,401
Equivalent shares from outstanding stock options	1,179	1,159	1,277	1,204
Denominator for diluted calculation	65,250	65,608	65,555	65,605
Earnings per share:				
Basic	$3.19	$3.60	$4.74	$5.86
Diluted	$3.13	$3.54	$4.65	$5.76

The calculation of common equivalent shares does not include the impact of options having a strike or conversion price that exceeds the average stock price for the earnings period, as the result would be antidilutive. The calculation of common equivalent shares also excludes the impact of outstanding performance contingent shares, as the conditions necessary for their issuance have not been satisfied as of the end of the reporting period. The following table presents approximate amounts of stock options and performance contingent shares excluded from the calculation of common equivalent shares (in millions):

	Three months ended June 30,		Six months ended June 30,	
	2018	2017	2018	2017
Excluded from common equivalent shares:				
Stock options	0.2	0.2	0.3	0.3
Performance contingent shares	0.2	0.3	0.2	0.3

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3. Equity

Common Stock

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

	Issued	Held In Treasury	Outstanding
Balance, December 31, 2017	79,137,758	14,685,663	64,452,095
Common stock acquired	—	991,477	(991,477)
Stock-based compensation [1]	—	(211,868)	211,868
Balance, June 30, 2018	79,137,758	15,465,272	63,672,486

	Issued	Held In Treasury	Outstanding
Balance, December 31, 2016	79,137,758	14,835,256	64,302,502
Stock-based compensation [1]	—	(189,355)	189,355
Balance, June 30, 2017	79,137,758	14,645,901	64,491,857

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

Common Stock Held in Treasury

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

In January 2017, RGA's board of directors authorized a share repurchase program for up to $400.0 million of RGA's outstanding common stock. The authorization was effective immediately and does not have an expiration date. During the first six months of 2018, RGA repurchased 1.0 million shares of common stock under this program for $150.0 million. During the first six months ended June 30, 2017, no common stock was repurchased by RGA under this program.

Accumulated Other Comprehensive Income (Loss)

The balance of and changes in each component of accumulated other comprehensive income (loss) ("AOCI") for the six months ended June 30, 2018 and 2017 are as follows (dollars in thousands):

	Accumulated Currency Translation Adjustments	Unrealized Appreciation (Depreciation) of Investments[1]	Pension and Postretirement Benefits	Total
Balance, December 31, 2017	$ (86,350)	$ 2,200,661	$ (50,680)	$ 2,063,631
Other comprehensive income (loss) before reclassifications	(44,227)	(1,327,195)	(2,986)	(1,374,408)
Amounts reclassified to (from) AOCI	—	53,646	2,366	56,012
Deferred income tax benefit (expense)	(11,610)	271,226	120	259,736
Balance, June 30, 2018	$ (142,187)	$ 1,198,338	$ (51,180)	$ 1,004,971

	Accumulated Currency Translation Adjustments	Unrealized Appreciation (Depreciation) of Investments[1]	Pension and Postretirement Benefits	Total
Balance, December 31, 2016	$ (172,541)	$ 1,355,033	$ (43,163)	$ 1,139,329
Other comprehensive income (loss) before reclassifications	(13,936)	774,688	(196)	760,556
Amounts reclassified to (from) AOCI	—	(39,360)	2,935	(36,425)
Deferred income tax benefit (expense)	35,288	(225,884)	(966)	(191,562)

Balance, June 30, 2017	$ (151,189)	$ 1,864,477	$ (41,390)	$ 1,671,898

(1) Includes cash flow hedges of $22,656 and $2,619 as of June 30, 2018 and December 31, 2017, respectively, and $1,131 and $(2,496) as of June 30, 2017 and December 31, 2016, respectively. See Note 5 - “Derivative Instruments” for additional information on cash flow hedges.

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The following table presents the amounts of AOCI reclassifications for the three and six months ended June 30, 2018 and 2017 (dollars in thousands):

	Amount Reclassified from AOCI				
	Three months ended June 30,		Six months ended June 30,		
Details about AOCI Components	2018	2017	2018	2017	Affected Line Item in Statements of Income
Net unrealized investment gains (losses):					
Net unrealized gains (losses) on available-for-sale securities	$(24,642)	$40,374	$(39,098)	$28,517	Investment related gains (losses), net
Cash flow hedges - Interest rate	29	—	(342)	—	(1)
Cash flow hedges - Currency/Interest rate	76	132	221	329	(1)
Cash flow hedges - Forward bond purchase commitments	—	51	—	101	(1)
Deferred policy acquisition costs attributed to unrealized gains and losses	(7,835)	4,565	(14,427)	10,413	(2)
Total	(32,372)	45,122	(53,646)	39,360	
Provision for income taxes	6,945	(15,218)	11,623	(12,024)	
Net unrealized gains (losses), net of tax	$(25,427)	$29,904	$(42,023)	$27,336	
Amortization of defined benefit plan items:					
Prior service cost (credit)	$247	$60	$493	$142	(3)
Actuarial gains/(losses)	(1,267)	(1,539)	(2,859)	(3,077)	(3)
Total	(1,020)	(1,479)	(2,366)	(2,935)	
Provision for income taxes	214	517	497	1,027	
Amortization of defined benefit plans, net of tax	$(806)	$(962)	$(1,869)	$(1,908)	
Total reclassifications for the period	$(26,233)	$28,942	$(43,892)	$25,428	

(1) See Note 5 - “Derivative Instruments” for additional information on cash flow hedges.

(2) This AOCI component is included in the computation of the deferred policy acquisition cost. See Note 8 – “Deferred Policy Acquisition Costs” of the 2017 Annual Report for additional details.

(3) This AOCI component is included in the computation of the net periodic pension cost. See Note 10 – “Employee Benefit Plans” for additional details.

Equity Based Compensation

Equity compensation expense was $16.6 million and $11.4 million in the first six months of 2018 and 2017, respectively. In the first quarter of 2018, the Company granted 0.2 million stock appreciation rights at $150.87 weighted average exercise price per share and 0.1 million performance contingent units to employees. Additionally, non-employee directors were granted a total of 7,623 shares of common stock. As of June 30, 2018, 1.5 million share options at a weighted average strike price per share of $65.70 were vested and exercisable, with a remaining weighted average exercise period of 4.4 years. As of June 30, 2018, the total compensation cost of non-vested awards not yet recognized in the condensed consolidated financial statements was $36.9 million. It is estimated that these costs will vest over a weighted average period of 1.4 years.

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4. Investments

Fixed Maturity and Equity Securities Available-for-Sale

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

The following table provides information relating to investments in fixed maturity securities by sector as of June 30, 2018 (dollars in thousands):

June 30, 2018:	Amortized Cost	Unrealized Gains	Unrealized Losses	Estimated Fair Value	% of Total	Other-than-temporary impairments in AOCI
Available-for-sale:						
Corporate	$22,249,964	$663,087	$409,544	$22,503,507	61.2 %	$ —
Canadian government	2,789,699	1,277,020	3,876	4,062,843	11.0	—
RMBS	1,837,316	18,500	34,602	1,821,214	5.0	—
ABS	1,711,099	11,596	13,871	1,708,824	4.6	275
CMBS	1,249,616	8,591	15,698	1,242,509	3.4	—
U.S. government	1,583,622	8,193	66,665	1,525,150	4.1	—
State and political subdivisions	703,047	43,318	9,321	737,044	2.0	—
Other foreign government	3,109,607	112,887	38,631	3,183,863	8.7	—
Total fixed maturity securities	$35,233,970	$2,143,192	$592,208	$36,784,954	100.0%	$ 275

The following table provides information relating to investments in fixed maturity and equity securities by sector as of December 31, 2017 (dollars in thousands):

December 31, 2017:	Amortized Cost	Unrealized Gains	Unrealized Losses	Estimated Fair Value	% of Total	Other-than-temporary impairments in AOCI
Available-for-sale:						
Corporate	$21,966,803	$1,299,594	$55,429	$23,210,968	60.9 %	$ —
Canadian government	2,843,273	1,378,510	1,707	4,220,076	11.1	—
RMBS	1,695,126	36,632	11,878	1,719,880	4.5	—
ABS	1,634,758	18,798	5,194	1,648,362	4.3	275
CMBS	1,285,594	22,627	4,834	1,303,387	3.4	—
U.S. government	1,953,436	12,089	21,933	1,943,592	5.1	—
State and political subdivisions	647,727	59,997	4,296	703,428	1.8	—
Other foreign government	3,254,695	154,507	8,075	3,401,127	8.9	—
Total fixed maturity securities	$35,281,412	$2,982,754	$113,346	$38,150,820	100.0%	$ 275
Non-redeemable preferred stock	$41,553	$479	$2,226	$39,806	39.7 %	
Other equity securities	61,288	479	1,421	60,346	60.3	
Total equity securities	$102,841	$958	$3,647	$100,152	100.0%	

The Company enters into various collateral arrangements with counterparties that require both the pledging and acceptance of fixed maturity securities as collateral. Pledged fixed maturity securities are included in fixed maturity securities, available-for-sale in the condensed consolidated balance sheets. Fixed maturity securities received as collateral are held in separate custodial accounts and are not recorded on the Company’s condensed consolidated balance sheets. Subject to certain constraints, the Company is permitted by contract to sell or repledge collateral it receives; however, as of June 30, 2018 and December 31, 2017, none of the collateral received had been sold or repledged. The Company also holds assets in trust to satisfy collateral requirements under derivative transactions and certain third-party reinsurance treaties. The following table includes fixed maturity securities pledged and received as collateral and assets in trust held to satisfy collateral requirements under derivative transactions and certain third-party reinsurance treaties as of June 30, 2018 and December 31, 2017 (dollars in thousands):

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	June 30, 2018		December 31, 2017	
	Amortized Cost	Estimated Fair Value	Amortized Cost	Estimated Fair Value
Fixed maturity securities pledged as collateral	$63,640	$ 66,118	$72,542	$ 75,622
Fixed maturity securities received as collateral	n/a	626,081	n/a	590,417
Assets in trust held to satisfy collateral requirements	16,061,218	16,571,173	15,584,296	16,715,281

The Company monitors its concentrations of financial instruments on an ongoing basis and mitigates credit risk by maintaining a diversified investment portfolio which limits exposure to any one issuer. The Company's exposure to concentrations of credit risk from single issuers greater than 10% of the Company's stockholders' equity included securities of the U.S. government and its agencies as well as the securities disclosed below as of June 30, 2018 and December 31, 2017 (dollars in thousands).

	June 30, 2018		December 31, 2017	
	Amortized Cost	Estimated Fair Value	Amortized Cost	Estimated Fair Value
Fixed maturity securities guaranteed or issued by:				
Canadian province of Quebec	$1,101,825	$1,850,642	$1,119,337	$1,917,996
Canadian province of Ontario	929,913	1,239,102	939,837	1,282,944

The amortized cost and estimated fair value of fixed maturity securities classified as available-for-sale at June 30, 2018 are shown by contractual maturity in the table below (dollars in thousands). Actual maturities can differ from contractual maturities because borrowers may have the right to call or prepay obligations with or without call or prepayment penalties. Asset and mortgage-backed securities are shown separately in the table below, as they are not due at a single maturity date.

	Amortized Cost	Estimated Fair Value
Available-for-sale:		
Due in one year or less	$978,683	$986,160
Due after one year through five years	7,550,595	7,649,023
Due after five years through ten years	9,208,763	9,323,786
Due after ten years	12,697,898	14,053,438
Asset and mortgage-backed securities	4,798,031	4,772,547
Total	$35,233,970	$36,784,954

Corporate Fixed Maturity Securities

The tables below show the major industry types of the Company's corporate fixed maturity holdings as of June 30, 2018 and December 31, 2017 (dollars in thousands):

June 30, 2018:	Amortized Cost	Estimated Fair Value	% of Total	
Finance	$ 8,097,947	$8,129,125	36.2	%
Industrial	11,705,150	11,847,762	52.6	
Utility	2,446,867	2,526,620	11.2	
Total	$ 22,249,964	$22,503,507	100.0	%

December 31, 2017:	Amortized Cost	Estimated Fair Value	% of Total	
Finance	$ 7,977,885	$8,362,774	36.1	%
Industrial	11,535,166	12,199,333	52.5	
Utility	2,453,752	2,648,861	11.4	

Total	$ 21,966,803	$23,210,968	100.0 %

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Other-Than-Temporary Impairments - Fixed Maturity Securities

As discussed in Note 2 – “Summary of Significant Accounting Policies” of the 2017 Annual Report, a portion of certain other-than-temporary impairment (“OTTI”) losses on fixed maturity securities is recognized in AOCI. For these securities, the net amount recognized in the condensed consolidated statements of income (“credit loss impairments”) represents the difference between the amortized cost of the security and the net present value of its projected future cash flows discounted at the effective interest rate implicit in the debt security prior to impairment. Any remaining difference between the fair value and amortized cost is recognized in AOCI. The following table sets forth the amount of pre-tax credit loss impairments on fixed maturity securities held by the Company as of the dates indicated, for which a portion of the OTTI loss was recognized in AOCI, and the corresponding changes in such amounts (dollars in thousands):

	Three months ended June 30,		Six months ended June 30,	
	2018	2017	2018	2017
Balance, beginning of period	$3,677	$3,677	$3,677	$6,013
Credit loss OTTI previously recognized on securities impaired to fair value during the period	—	—	—	(2,336)
Balance, end of period	$3,677	$3,677	$3,677	$3,677

Unrealized Losses for Fixed Maturity and Equity Securities Available-for-Sale

The following table presents the total gross unrealized losses for the 2,580 fixed maturity securities as of June 30, 2018, where the estimated fair value had declined and remained below amortized cost by the indicated amount (dollars in thousands):

	June 30, 2018		
	Gross Unrealized Losses	% of Total	
Less than 20%	$571,151	96.4	%
20% or more for less than six months	21,045	3.6	
20% or more for six months or greater	12	—	
Total	$592,208	100.0	%

The following table presents the total gross unrealized losses for the 1,116 fixed maturity and equity securities at December 31, 2017 where the estimated fair value had declined and remained below amortized cost by the indicated amount (dollars in thousands):

	December 31, 2017		
	Gross Unrealized Losses	% of Total	
Less than 20%	$113,466	97.0	%
20% or more for less than six months	689	0.6	
20% or more for six months or greater	2,838	2.4	
Total	$116,993	100.0	%

The Company’s determination of whether a decline in value is other-than-temporary includes analysis of the underlying credit and the extent and duration of a decline in value. The Company’s credit analysis of an investment includes determining whether the issuer is current on its contractual payments, evaluating whether it is probable that the Company will be able to collect all amounts due according to the contractual terms of the security and analyzing the overall ability of the Company to recover the amortized cost of the investment.

The following table presents the estimated fair values and gross unrealized losses, including other-than-temporary impairment losses reported in AOCI, for 2,580 fixed maturity securities that have estimated fair values below amortized cost as of June 30, 2018 (dollars in thousands). These investments are presented by class and grade of security, as well as the length of time the related fair value has remained below amortized cost.

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June 30, 2018:	Less than 12 months Estimated Fair Value	Less than 12 months Gross Unrealized Losses	12 months or greater Estimated Fair Value	12 months or greater Gross Unrealized Losses	Total Estimated Fair Value	Total Gross Unrealized Losses
Investment grade securities:						
Corporate	$9,135,620	$299,909	$818,555	$51,938	$9,954,175	$351,847
Canadian government	46,392	668	110,326	3,058	156,718	3,726
RMBS	1,101,941	25,546	241,914	9,032	1,343,855	34,578
ABS	807,714	10,637	139,676	3,187	947,390	13,824
CMBS	612,214	11,097	104,426	4,601	716,640	15,698
U.S. government	584,758	20,707	747,679	45,958	1,332,437	66,665
State and political subdivisions	168,817	5,064	66,122	4,257	234,939	9,321
Other foreign government	919,229	25,758	199,578	5,407	1,118,807	31,165
Total investment grade securities	13,376,685	399,386	2,428,276	127,438	15,804,961	526,824
Below investment grade securities:						
Corporate	735,338	47,846	56,042	9,851	791,380	57,697
Canadian government	1,864	150	—	—	1,864	150
RMBS	—	—	1,194	24	1,194	24
ABS	—	—	1,148	47	1,148	47
Other foreign government	146,374	7,111	7,643	355	154,017	7,466
Total below investment grade securities	883,576	55,107	66,027	10,277	949,603	65,384
Total fixed maturity securities	$14,260,261	$454,493	$2,494,303	$137,715	$16,754,564	$592,208

The following table presents the estimated fair values and gross unrealized losses, including other-than-temporary impairment losses reported in AOCI, for 1,116 fixed maturity and equity securities that have estimated fair values below amortized cost as of December 31, 2017 (dollars in thousands):

December 31, 2017:	Less than 12 months Estimated Fair Value	Less than 12 months Gross Unrealized Losses	12 months or greater Estimated Fair Value	12 months or greater Gross Unrealized Losses	Total Estimated Fair Value	Total Gross Unrealized Losses
Investment grade securities:						
Corporate	$1,886,212	$ 17,099	$1,009,750	$ 28,080	$2,895,962	$45,179
Canadian government	18,688	91	111,560	1,596	130,248	1,687
RMBS	566,699	5,852	224,439	6,004	791,138	11,856
ABS	434,274	2,707	168,524	2,434	602,798	5,141
CMBS	220,401	1,914	103,269	2,920	323,670	4,834
U.S. government	800,298	6,177	767,197	15,756	1,567,495	21,933
State and political subdivisions	43,510	242	68,666	4,054	112,176	4,296
Other foreign government	369,717	2,707	191,265	4,704	560,982	7,411
Total investment grade securities	4,339,799	36,789	2,644,670	65,548	6,984,469	102,337
Below investment grade securities:						
Corporate	194,879	3,317	75,731	6,933	270,610	10,250
Canadian government	1,995	20	—	—	1,995	20
RMBS	—	—	1,369	22	1,369	22
ABS	—	—	1,489	53	1,489	53
Other foreign government	28,600	113	15,134	551	43,734	664
Total below investment grade securities	225,474	3,450	93,723	7,559	319,197	11,009
Total fixed maturity securities	$4,565,273	$ 40,239	$2,738,393	$ 73,107	$7,303,666	$113,346

Non-redeemable preferred stock	$82	$ 1	$26,471	$ 2,225	$26,553	$ 2,226
Other equity securities	5,820	1,023	47,251	398	53,071	1,421
Total equity securities	$5,902	$ 1,024	$73,722	$ 2,623	$79,624	$ 3,647

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The Company has no intention to sell, nor does it expect to be required to sell, the securities outlined in the table above, as of the dates indicated. However, unforeseen facts and circumstances may cause the Company to sell fixed maturity securities in the ordinary course of managing its portfolio to meet certain diversification, credit quality and liquidity guidelines.

Unrealized losses on below investment grade securities as of June 30, 2018 are primarily related to publicly traded and privately placed corporate securities. Changes in unrealized losses are primarily being driven by changes in interest rates.

Investment Income, Net of Related Expenses

Major categories of investment income, net of related expenses, consist of the following (dollars in thousands):

	Three months ended June 30,		Six months ended June 30,	
	2018	2017	2018	2017
Fixed maturity securities available-for-sale	$373,624	$355,735	$742,827	$680,235
Equity securities	709	995	2,391	2,354
Mortgage loans on real estate	50,460	44,442	100,659	88,789
Policy loans	14,775	15,194	29,555	30,466
Funds withheld at interest	86,417	97,367	161,862	224,945
Short-term investments and cash and cash equivalents	2,964	1,779	6,209	3,289
Other invested assets	20,785	22,071	44,613	40,539
Investment income	549,734	537,583	1,088,116	1,070,617
Investment expense	(21,673)	(19,045)	(43,726)	(37,715)
Investment income, net of related expenses	$528,061	$518,538	$1,044,390	$1,032,902

Investment Related Gains (Losses), Net

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

	Three months ended June 30,		Six months ended June 30,	
	2018	2017	2018	2017
Fixed maturity securities available for sale:				
Other-than-temporary impairment losses	$(3,350)	$(3,401)	$(3,350)	$(20,590)
Gain on investment activity	21,140	54,197	32,106	72,090
Loss on investment activity	(35,934)	(10,288)	(56,314)	(18,975)
Equity securities:				
Gain on investment activity	469	23	497	23
Loss on investment activity	—	(183)	(950)	(4,059)
Change in unrealized gains (losses) recognized in earnings	(6,966)	—	(11,103)	—
Other impairment losses and change in mortgage loan provision	(1,357)	(6,675)	(1,669)	(6,774)
Derivatives and other, net	15,426	22,622	29,741	95,103
Total investment related gains (losses), net	$(10,572)	$56,295	$(11,042)	$116,818

The fixed maturity impairments for the three and six months ended June 30, 2018 and 2017 were largely related to high-yield corporate securities. The other impairment losses and change in mortgage loan provision for the three and six months ended June 30, 2018 includes impairments on real estate joint ventures. The other impairment losses and change in mortgage loan provision for the three and six months ended June 30, 2017 includes impairments on limited partnerships. The fluctuations in investment related gains (losses) for derivatives and other for the three and six months ended June 30, 2018, compared to the same periods in 2017, are primarily due to changes in the fair value of embedded derivatives and interest rate swaps.

During the three months ended June 30, 2018 and 2017, the Company sold fixed maturity securities with fair values of $1,174.4 million and $696.4 million at losses of $35.9 million and $10.3 million, respectively. During the six months ended June 30, 2018 and 2017, the Company sold fixed maturity securities with fair values of $2,438.0 million and $1,125.0 million at losses of $56.3 million and $19.0 million, respectively. The Company did not sell any equity securities at losses during the three months ended June 30, 2018. During the three months ended June 30, 2017, the Company sold equity securities with fair values of $14.1 million at losses of $0.2 million. During the six months ended June 30, 2018 and 2017, the Company sold equity securities with fair values of $28.4 million and $161.7 million at losses of $1.0 million and $4.1 million, respectively. The Company generally does not buy and sell securities on a short-term basis.

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Securities Borrowing, Lending and Other

The following table includes the amount of borrowed securities, securities lent and securities collateral received as part of the securities lending program and repurchased/reverse repurchased securities pledged and received as of June 30, 2018 and December 31, 2017 (dollars in thousands).

	June 30, 2018		December 31, 2017	
	Amortized Cost	Estimated Fair Value	Amortized Cost	Estimated Fair Value
Borrowed securities	$350,350	$365,730	$358,875	$377,820
Securities lending:				
Securities loaned	101,995	102,208	117,246	121,551
Securities received	n/a	112,000	n/a	128,000
Repurchase program/reverse repurchase program:				
Securities pledged	385,391	394,698	413,819	428,344
Securities received	n/a	397,712	n/a	417,550

The Company also held cash collateral for securities lending and the repurchase program/reverse repurchase programs of $29.6 million and $31.2 million at June 30, 2018 and December 31, 2017, respectively. No cash or securities have been pledged by the Company for its securities borrowing program as of June 30, 2018 and December 31, 2017.

The following tables present information on the Company’s securities lending and repurchase transactions as of June 30, 2018 and December 31, 2017 (dollars in thousands). Collateral associated with certain borrowed securities is not included within the table, as the collateral pledged to each counterparty is the right to reinsurance treaty cash flows.

	June 30, 2018				
	Remaining Contractual Maturity of the Agreements				
	Overnight and Continuous	Up to 30 Days	30-90 Days	Greater than 90 Days	Total
Securities lending transactions:					
Corporate	$—	$ —	$ —	$102,208	$102,208
Total	—	—	—	102,208	102,208
Repurchase transactions:					
Corporate	—	—	—	151,519	151,519
U.S. government	—	—	—	219,154	219,154
Foreign government	—	—	—	22,894	22,894
Other	1,131	—	—	—	1,131
Total	1,131	—	—	393,567	394,698
Total transactions	$1,131	$ —	$ —	$495,775	$496,906

Gross amount of recognized liabilities for securities lending and repurchase transactions in preceding table	$539,332
Amounts related to agreements not included in offsetting disclosure	$42,426

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	December 31, 2017				
	Remaining Contractual Maturity of the Agreements				
	Overnight and Continuous	Up to 30 Days	30-90 Days	Greater than 90 Days	Total
Securities lending transactions:					
Corporate	$—	$ —	$—	$121,551	$121,551
Total	$—	$ —	$—	$121,551	$121,551
Repurchase transactions:					
Corporate	$—	$ —	$312	$184,334	$184,646
U.S. government	—	—	—	220,765	220,765
Foreign government	—	—	—	21,802	21,802
Other	1,131	—	—	—	1,131
Total	1,131	—	312	426,901	428,344
Total borrowings	$1,131	$ —	$312	$548,452	$549,895

Gross amount of recognized liabilities for securities lending and repurchase transactions in preceding table	$576,786
Amounts related to agreements not included in offsetting disclosure	$26,891

The Company has elected to offset amounts recognized as receivables and payables resulting from the repurchase/reverse repurchase programs. After the effect of offsetting, the net amount presented on the condensed consolidated balance sheets was a liability of $0.4 million and $1.1 million of June 30, 2018 and December 31, 2017, respectively. As of June 30, 2018 and December 31, 2017, the Company recognized payables resulting from cash received as collateral associated with a repurchase agreement as discussed above. Amounts owed to and due from the counterparties may be settled in cash or offset, in accordance with the agreements.

Mortgage Loans on Real Estate

Mortgage loans represented approximately 9.0% and 8.5% of the Company's total investments as of June 30, 2018 and December 31, 2017. As of June 30, 2018, mortgage loans were geographically dispersed throughout the U.S. with the largest concentrations in California (19.4%), Texas (9.6%) and Washington (7.8%) and include loans secured by properties in Canada (2.6%). The recorded investment in mortgage loans on real estate presented below is gross of unamortized deferred loan origination fees and expenses, and valuation allowances.

The distribution of mortgage loans by property type is as follows as of June 30, 2018 and December 31, 2017 (dollars in thousands):

	June 30, 2018		December 31, 2017	
Property type:	Carrying Value	% of Total	Carrying Value	% of Total
Office building	$1,546,148	33.9 %	$1,487,392	33.6 %
Retail	1,296,157	28.3	1,270,676	28.8
Industrial	962,049	21.0	938,612	21.3
Apartment	530,599	11.6	510,052	11.6
Other commercial	237,610	5.2	206,439	4.7
Recorded investment	4,572,563	100.0%	4,413,171	100.0%
Unamortized balance of loan origination fees and expenses	(4,188)		(3,254)	
Valuation allowances	(9,706)		(9,384)	
Total mortgage loans on real estate	$4,558,669		$4,400,533	

The maturities of the mortgage loans as of June 30, 2018 and December 31, 2017 are as follows (dollars in thousands):

	June 30, 2018		December 31, 2017	
	Recorded Investment	% of Total	Recorded Investment	% of Total
Due within five years	$1,153,623	25.2 %	$1,091,066	24.8 %
Due after five years through ten years	2,623,105	57.4	2,516,872	57.0
Due after ten years	795,835	17.4	805,233	18.2
Total	$4,572,563	100.0%	$4,413,171	100.0%

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The following tables set forth certain key credit quality indicators of the Company's recorded investment in mortgage loans as of June 30, 2018 and December 31, 2017 (dollars in thousands):

	Recorded Investment Debt Service Ratios					
	>1.20x	1.00x - 1.20x	<1.00x	Construction loans	Total	% of Total
June 30, 2018:						
Loan-to-Value Ratio						
0% - 59.99%	$2,125,328	$102,254	$19,439	$ 17,602	$2,264,623	49.5 %
60% - 69.99%	1,552,568	117,751	49,221	—	1,719,540	37.6
70% - 79.99%	315,274	25,121	101,213	—	441,608	9.7
Greater than 80%	101,870	12,933	31,989	—	146,792	3.2
Total	$4,095,040	$258,059	$201,862	$ 17,602	$4,572,563	100.0%

	Recorded Investment Debt Service Ratios					
	>1.20x	1.00x - 1.20x	<1.00x	Construction loans	Total	% of Total
December 31, 2017:						
Loan-to-Value Ratio						
0% - 59.99%	$2,148,428	$53,979	$3,801	$ —	$2,206,208	50.0 %
60% - 69.99%	1,517,029	47,128	43,921	—	1,608,078	36.4
70% - 79.99%	396,446	19,461	15,367	—	431,274	9.8
Greater than 80%	120,850	30,713	6,362	9,686	167,611	3.8
Total	$4,182,753	$151,281	$69,451	$ 9,686	$4,413,171	100.0%

The age analysis of the Company's past due recorded investments in mortgage loans as of June 30, 2018 and December 31, 2017 (dollars in thousands):

	June 30, 2018	December 31, 2017
31-60 days past due	$12,027	$17,100
61-90 days past due	—	2,056
Total past due	12,027	19,156
Current	4,560,536	4,394,015
Total	$4,572,563	$4,413,171

The following table presents the recorded investment in mortgage loans, by method of measuring impairment, and the related valuation allowances as of June 30, 2018 and December 31, 2017 (dollars in thousands):

	June 30, 2018	December 31, 2017
Mortgage loans:		
Individually measured for impairment	$30,653	$5,858
Collectively measured for impairment	4,541,910	4,407,313
Recorded investment	$4,572,563	$4,413,171
Valuation allowances:		
Individually measured for impairment	$—	$—
Collectively measured for impairment	9,706	9,384
Total valuation allowances	$9,706	$9,384

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Information regarding the Company's loan valuation allowances for mortgage loans for the three and six months ended June 30, 2018 and 2017 is as follows (dollars in thousands):

	Three months ended June 30,		Six months ended June 30,	
	2018	2017	2018	2017
Balance, beginning of period	$8,864	$7,786	$9,384	$7,685
Provision (release)	845	366	329	467
Translation adjustment	(3)	4	(7)	4
Balance, end of period	$9,706	$8,156	$9,706	$8,156

Information regarding the portion of the Company's mortgage loans that were impaired as of June 30, 2018 and December 31, 2017 is as follows (dollars in thousands):

	Unpaid Principal Balance	Recorded Investment	Related Allowance	Carrying Value
June 30, 2018:				
Impaired mortgage loans with no valuation allowance recorded	$30,690	$ 30,653	$—	$30,653
Impaired mortgage loans with valuation allowance recorded	—	—	—	—
Total impaired mortgage loans	$30,690	$ 30,653	$—	$30,653
December 31, 2017:				
Impaired mortgage loans with no valuation allowance recorded	$6,427	$ 5,858	$—	$5,858
Impaired mortgage loans with valuation allowance recorded	—	—	—	—
Total impaired mortgage loans	$6,427	$ 5,858	$—	$5,858

The Company's average investment in impaired mortgage loans and the related interest income are reflected in the table below for the periods indicated (dollars in thousands):

	Three months ended June 30,			
	2018		2017	
	Average Recorded Investment(1)	Interest Income	Average Recorded Investment(1)	Interest Income
Impaired mortgage loans with no valuation allowance recorded	$27,038	$ 247	$2,088	$33
Impaired mortgage loans with valuation allowance recorded	—	—	—	—
Total impaired mortgage loans	$27,038	$ 247	$2,088	$33

	Six months ended June 30,			
	2018		2017	
	Average Recorded Investment(1)	Interest Income	Average Recorded Investment(1)	Interest Income
Impaired mortgage loans with no valuation allowance recorded	$19,978	$ 304	$2,131	$67
Impaired mortgage loans with valuation allowance recorded	—	—	—	—
Total impaired mortgage loans	$19,978	$ 304	$2,131	$67

(1) Average recorded investment represents the average loan balances as of the beginning of period and all subsequent quarterly end of period balances.

The Company did not acquire any impaired mortgage loans during the six months ended June 30, 2018 and 2017. The Company had no mortgage loans that were on a nonaccrual status at June 30, 2018 and December 31, 2017.

Policy Loans

Policy loans comprised approximately 2.7% and 2.6% of the Company’s total investments as of June 30, 2018 and December 31, 2017, respectively, the majority of which are associated with one client. These policy loans present no credit risk because the amount of the loan cannot exceed the obligation due to the ceding company upon the death of the insured or surrender of the underlying policy. The provisions of the treaties in force and the underlying policies determine the policy loan interest rates. The Company earns a spread between the interest rate earned on policy loans and the interest rate credited to corresponding liabilities.

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Funds Withheld at Interest

Funds withheld at interest comprised approximately 11.8% of the Company's total investments as of both June 30, 2018 and December 31, 2017. Of the $6.0 billion funds withheld at interest balance, net of embedded derivatives, as of June 30, 2018, $4.0 billion of the balance is associated with one client. For reinsurance agreements written on a modified coinsurance basis and certain agreements written on a coinsurance funds withheld basis, assets equal to the net statutory reserves are withheld and legally owned and managed by the ceding company and are reflected as funds withheld at interest on the Company's condensed consolidated balance sheets. In the event of a ceding company's insolvency, the Company would need to assert a claim on the assets supporting its reserve liabilities. However, the risk of loss to the Company is mitigated by its ability to offset amounts it owes the ceding company for claims or allowances against amounts owed to the Company from the ceding company.

Other Invested Assets

Other invested assets include limited partnership interests, joint ventures (other than operating joint ventures), equity release mortgages, derivative contracts and fair value option ("FVO") contractholder-directed unit-linked investments. Other invested assets also include Federal Home Loan Bank of Des Moines ("FHLB") common stock which is included in other in the table below. Other invested assets represented approximately 3.2% and 2.9% of the Company's total investments as of June 30, 2018 and December 31, 2017, respectively. Carrying values of these assets as of June 30, 2018 and December 31, 2017 are as follows (dollars in thousands):

	June 30, 2018	December 31, 2017
Limited partnership interests and real estate joint ventures	$857,599	$781,124
Equity release mortgages	311,723	219,940
Derivatives	137,315	137,613
FVO contractholder-directed unit-linked investments	212,202	218,541
Other	86,723	148,114
Total other invested assets	$1,605,562	$1,505,332

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5. Derivative Instruments

Derivatives, except for embedded derivatives and longevity and mortality swaps, are carried on the Company's condensed consolidated balance sheets in other invested assets or other liabilities, at fair value. Longevity and mortality swaps are included on the condensed consolidated balance sheets in other assets or other liabilities, at fair value. Embedded derivative assets and liabilities on modified coinsurance or funds withheld arrangements are included on the condensed consolidated balance sheets with the host contract in funds withheld at interest, at fair value. Embedded derivative liabilities on indexed annuity and variable annuity products are included on the condensed consolidated balance sheets with the host contract in interest-sensitive contract liabilities, at fair value. The following table presents the notional amounts and gross fair value of derivative instruments prior to taking into account the netting effects of master netting agreements as of June 30, 2018 and December 31, 2017 (dollars in thousands):

	June 30, 2018			December 31, 2017		
	Notional	Carrying Value/Fair Value		Notional	Carrying Value/Fair Value	
	Amount	Assets	Liabilities	Amount	Assets	Liabilities
Derivatives not designated as hedging instruments:						
Interest rate swaps	$1,084,555	$43,439	$2,514	$996,204	$59,809	$2,372
Financial futures	348,874	—	—	412,438	—	—
Foreign currency forwards	4,512	—	8	6,030	—	28
Consumer price index swaps	328,190	1,126	199	221,932	—	2,160
Credit default swaps	928,300	6,725	122	961,200	8,319	1,651
Equity options	639,801	25,950	—	632,251	23,271	—
Longevity swaps	934,720	43,971	—	960,400	40,659	—
Mortality swaps	25,000	—	782	—	—	1,683
Synthetic guaranteed investment contracts	10,634,677	—	—	10,052,576	—	—
Embedded derivatives in:						
Modified coinsurance or funds withheld arrangements	—	144,610	—	—	122,194	—
Indexed annuity products	—	—	806,436	—	—	861,758
Variable annuity products	—	—	122,361	—	—	152,470
Total non-hedging derivatives	14,928,629	265,821	932,422	14,243,031	254,252	1,022,122
Derivatives designated as hedging instruments:						
Interest rate swaps	435,000	204	19,699	435,000	—	20,389
Foreign currency swaps	580,036	58,294	2,598	672,921	65,207	8,496
Foreign currency forwards	718,177	18,428	—	553,175	1,265	7,720
Total hedging derivatives	1,733,213	76,926	22,297	1,661,096	66,472	36,605
Total derivatives	$16,661,842	$342,747	$954,719	$15,904,127	$320,724	$1,058,727

Netting Arrangements

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

The Company has elected to include all derivatives, except embedded derivatives, in the tables below, irrespective of whether they are subject to an enforceable master netting arrangement or a similar agreement. See Note 4 – "Investments" for information regarding the Company's securities borrowing, lending, repurchase and repurchase/reverse repurchase programs. See "Embedded Derivatives" below for information regarding the Company's bifurcated embedded derivatives.

The following table provides information relating to the Company’s derivative instruments as of June 30, 2018 and December 31, 2017 (dollars in thousands):

	Gross Amounts Recognized	Gross Amounts Offset in the Balance Sheet	Net Amounts Presented in the Balance Sheet	Gross Amounts Not Offset in the Balance Sheet: Financial Instruments	Gross Amounts Not Offset in the Balance Sheet: Cash Collateral Pledged/ Received [1]	Net Amount
June 30, 2018:						
Derivative assets	$ 198,137	$ (16,851)	$ 181,286	$—	$ (194,067)	$ (12,781)
Derivative liabilities	25,922	(16,851)	9,071	(57,302)	(9,030)	(57,261)
December 31, 2017:						
Derivative assets	$ 198,530	$ (20,258)	$ 178,272	$ (862)	$ (185,900)	$ (8,490)
Derivative liabilities	44,499	(20,258)	24,241	(58,156)	(22,221)	(56,136)

(1) Includes initial margin posted to a central clearing partner.

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Accounting for Derivative Instruments and Hedging Activities

The Company does not enter into derivative instruments for speculative purposes. As discussed below under "Non-qualifying Derivatives and Derivatives for Purposes Other Than Hedging," the Company uses various derivative instruments for risk management purposes that either do not qualify or have not been qualified for hedge accounting treatment. As of June 30, 2018 and December 31, 2017, the Company held interest rate swaps that were designated and qualified as cash flow hedges of interest rate risk, for variable rate liabilities and foreign currency assets, foreign currency swaps and foreign currency forwards that were designated and qualified as hedges of a portion of its net investment in its foreign operations, foreign currency swaps that were designated and qualified as fair value hedges of foreign currency risk, and derivative instruments that were not designated as hedging instruments. See Note 2 – "Summary of Significant Accounting Policies" of the Company's 2017 Annual Report for a detailed discussion of the accounting treatment for derivative instruments, including embedded derivatives. Derivative instruments are carried at fair value and generally require an insignificant amount of cash at inception of the contracts.

Fair Value Hedges

The Company designates and reports certain foreign currency swaps to hedge the foreign currency fair value exposure of foreign currency denominated assets as fair value hedges when they meet the requirements of the general accounting principles for Derivatives and Hedging. The gain or loss on the hedged item attributable to a change in foreign currency and the offsetting gain or loss on the related foreign currency swaps as of June 30, 2018 and 2017, were (dollars in thousands):

Type of Fair Value Hedge	Hedged Item	Gains (Losses) Recognized for Derivatives (1)	Gains (Losses) Recognized for Hedged Items (1)
For the three months ended June 30, 2018:			
Foreign currency swaps	Foreign-denominated fixed maturity securities	$ (1,134)	$ 4,942
For the three months ended June 30, 2017:			
Foreign currency swaps	Foreign-denominated fixed maturity securities	$ 905	$ (905)
For the six months ended June 30, 2018:			
Foreign currency swaps	Foreign-denominated fixed maturity securities	$ (3,025)	$ 6,833
For the six months ended June 30, 2017:			
Foreign currency swaps	Foreign-denominated fixed maturity securities	$ 7,441	$ (7,441)

(1) The net amount represents the ineffective portion of the fair value hedges

Cash Flow Hedges

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

The following table presents the components of AOCI, before income tax, and the condensed consolidated income statement classification where the gain or loss is recognized related to cash flow hedges for the three and six months ended June 30, 2018 and 2017 (dollars in thousands):

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	Three months ended June 30,	
	2018	2017
Balance beginning of period	$20,662	$7,690
Gains (losses) deferred in other comprehensive income (loss) on the effective portion of cash flow hedges	2,099	(6,417)
Amounts reclassified to investment related (gains) losses, net	—	41
Amounts reclassified to investment income	(76)	(183)
Amounts reclassified to interest expense	(29)	—
Balance end of period	$22,656	$1,131

	Six months ended June 30,	
	2018	2017
Balance beginning of period	$2,619	$(2,496)
Gains (losses) deferred in other comprehensive income (loss) on the effective portion of cash flow hedges	19,916	4,016
Amounts reclassified to investment related (gains) losses, net	—	41
Amounts reclassified to investment income	(221)	(430)
Amounts reclassified to interest expense	342	—
Balance end of period	$22,656	$1,131

As of June 30, 2018, the before-tax deferred net gains (losses) on derivative instruments recorded in AOCI that are expected to be reclassified to earnings during the next twelve months are approximately $0.4 million and $1.5 million in investment income and interest expense, respectively.

The following table presents the effective portion of derivatives in cash flow hedging relationships on the condensed consolidated statements of income and the condensed consolidated statements of comprehensive income for the three and six months ended June 30, 2018 and 2017 (dollars in thousands):

	Effective Portion			
Derivative Type	Gain (Loss) Deferred in OCI	Gain (Loss) Reclassified into Income from OCI		
		Investment Related Gains (Losses)	Investment Income	Interest Expense
For the three months ended June 30, 2018:				
Interest rate	$4,742	$—	$ —	$ 29
Currency/Interest rate	(2,643)	—	76	—
Total	$2,099	$—	$ 76	$ 29
For the three months ended June 30, 2017:				
Interest rate	$(7,643)	$—	$ —	$ —
Currency/Interest rate	1,226	—	132	—
Forward bond purchase commitments	—	(41)	51	—
Total	$(6,417)	$(41)	$ 183	$ —
For the six months ended June 30, 2018:				
Interest rate	$19,727	$—	$ —	$ (342)

Currency/Interest rate	189	—	221	—
Total	$19,916	$—	$ 221	$ (342)
For the six months ended June 30, 2017:				
Interest rate	$(5,427)	$—	$ —	$ —
Currency/Interest rate	9,443	—	329	—
Forward bond purchase commitments	—	(41)	101	—
Total	$4,016	$(41)	$ 430	$ —

For the three and six months ended June 30, 2018 and 2017, the ineffective portion of derivatives reported as cash flow hedges was not material to the Company's results of operations. Also, there were no material amounts reclassified into earnings relating to instances in which the Company discontinued cash flow hedge accounting because the forecasted transaction did not occur by the anticipated date or within the additional time period permitted by the authoritative guidance for the accounting for derivatives and hedging.

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Hedges of Net Investments in Foreign Operations

The Company uses foreign currency swaps and foreign currency forwards to hedge a portion of its net investment in certain foreign operations against adverse movements in exchange rates. The following table illustrates the Company's net investments in foreign operations ("NIFO") hedges for the three and six months ended June 30, 2018 and 2017 (dollars in thousands):

	Derivative Gains (Losses) Deferred in AOCI			
	For the three months ended June 30,		For the six months ended June 30,	
Type of NIFO Hedge [1] [2]	2018	2017	2018	2017
Foreign currency swaps	$ 8,197	$ (17,919)	$ 17,002	$ (25,525)
Foreign currency forwards	11,063	4,158	23,299	4,158
Total	$ 19,260	$ (13,761)	$ 40,301	$ (21,367)

(1) There were no sales or substantial liquidations of net investments in foreign operations that would have required the reclassification of gains or losses from accumulated other comprehensive income (loss) into investment income during the periods presented.

(2) There was no ineffectiveness recognized for the Company's hedges of net investments in foreign operations.

The cumulative foreign currency translation gain recorded in AOCI related to these hedges was $154.0 million and $113.7 million at June 30, 2018 and December 31, 2017, respectively. If a hedged foreign operation was sold or substantially liquidated, the amounts in AOCI would be reclassified to the condensed consolidated statements of income. A pro rata portion would be reclassified upon partial sale of a hedged foreign operation.

Non-qualifying Derivatives and Derivatives for Purposes Other Than Hedging

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

A summary of the effect of non-hedging derivatives, including embedded derivatives, on the Company's condensed consolidated statements of income for the three and six months ended June 30, 2018 and 2017 is as follows (dollars in thousands):

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Type of Non-hedging Derivative	Income Statement Location of Gain (Loss)	Gain (Loss) for the three months ended June 30, 2018	2017
Interest rate swaps	Investment related gains (losses), net	$ (8,600)	$ 14,289
Financial futures	Investment related gains (losses), net	(897)	(6,442)
Foreign currency forwards	Investment related gains (losses), net	(262)	(351)
CPI swaps	Investment related gains (losses), net	1,041	(4)
Credit default swaps	Investment related gains (losses), net	1,084	3,879
Equity options	Investment related gains (losses), net	(8,007)	(9,273)
Longevity swaps	Other revenues	2,289	1,981
Mortality swaps	Other revenues	(799)	(395)
Subtotal		(14,151)	3,684
Embedded derivatives in:			
Modified coinsurance or funds withheld arrangements	Investment related gains (losses), net	8,805	15,108
Indexed annuity products	Interest credited	6,519	(5,955)
Variable annuity products	Investment related gains (losses), net	15,324	360
Total non-hedging derivatives		$ 16,497	$ 13,197

Type of Non-hedging Derivative	Income Statement Location of Gain (Loss)	Gain (Loss) for the six months ended June 30, 2018	2017
Interest rate swaps	Investment related gains (losses), net	$ (35,171)	$ 11,677
Financial futures	Investment related gains (losses), net	(768)	(19,217)
Foreign currency forwards	Investment related gains (losses), net	61	553
CPI swaps	Investment related gains (losses), net	3,227	(9)
Credit default swaps	Investment related gains (losses), net	682	11,237
Equity options	Investment related gains (losses), net	(5,414)	(26,462)
Longevity swaps	Other revenues	4,557	3,847
Mortality swaps	Other revenues	(799)	(790)
Subtotal		(33,625)	(19,164)
Embedded derivatives in:			
		22,416	83,810

Modified coinsurance or funds withheld arrangements	Investment related gains (losses), net		
Indexed annuity products	Interest credited	31,870	(22,357)
Variable annuity products	Investment related gains (losses), net	30,109	22,723
Total non-hedging derivatives		$ 50,770	$ 65,012

Types of Derivatives Used by the Company

Interest Rate Swaps

Interest rate swaps are used by the Company primarily to reduce market risks from changes in interest rates, to alter interest rate exposure arising from mismatches between assets and liabilities (duration mismatches) and to manage the risk of cash flows of liabilities that are variable based on a benchmark rate. With an interest rate swap, the Company agrees with another party to exchange, at specified intervals, the difference between two rates, which can be either fixed-rate or floating-rate interest amounts, tied to an agreed-upon notional principal amount. These transactions are executed pursuant to master agreements that provide for a single net payment or individual gross payments at each due date. The Company utilizes interest rate swaps in cash flow and non-qualifying hedging relationships.

Financial Futures

Exchange-traded futures are used primarily to economically hedge liabilities embedded in certain variable annuity products. With exchange-traded futures transactions, the Company agrees to purchase or sell a specified number of contracts, the value of which is determined by the relevant indices, and to post variation margin on a daily basis in an amount equal to the difference between the daily estimated fair values of those contracts. The Company enters into exchange-traded futures with regulated futures commission merchants that are members of the exchange.

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Equity Options

Equity index options are used by the Company primarily to hedge minimum guarantees embedded in certain variable annuity products. To hedge against adverse changes in equity indices volatility, the Company buys put options. The contracts are net settled in cash based on differentials in the indices at the time of exercise and the strike price.

Consumer Price Index Swaps

Consumer price index ("CPI") swaps are used by the Company primarily to economically hedge liabilities embedded in certain insurance products where value is directly affected by changes in a designated benchmark consumer price index. With a CPI swap transaction, the Company agrees with another party to exchange the actual amount of inflation realized over a specified period of time for a fixed amount of inflation determined at inception. These transactions are executed pursuant to master agreements that provide for a single net payment or individual gross payments to be made by the counterparty at each due date. Most of these swaps will require a single payment to be made by one counterparty at the maturity date of the swap.

Foreign Currency Swaps

Foreign currency swaps are used by the Company to reduce the risk from fluctuations in foreign currency exchange rates associated with its assets and liabilities denominated in foreign currencies. With a foreign currency swap transaction, the Company agrees with another party to exchange, at specified intervals, the difference between one currency and another at a forward exchange rate calculated by reference to an agreed upon principal amount. The principal amount of each currency is exchanged at the termination of the currency swap by each party. The Company uses foreign currency swaps in hedges of net investments in foreign operations and non-qualifying hedge relationships.

Foreign Currency Forwards

Foreign currency forwards are used by the Company to reduce the risk from fluctuations in foreign currency exchange rates associated with its assets and liabilities denominated in foreign currencies. With a foreign currency forward transaction, the Company agrees with another party to deliver a specified amount of an identified currency at a specified future date. The price is agreed upon at the time of the contract and payment for such a contract is made in a different currency at the specified future date. The Company uses foreign currency forwards in hedges of net investments in foreign operations and non-qualifying hedge relationships.

Forward Bond Purchase Commitments

Forward bond purchase commitments have been used by the Company to hedge against the variability in the anticipated cash flows required to purchase securities. With forward bond purchase commitments, the forward price is agreed upon at the time of the contract and payment for such contract is made at the future specified settlement date of the securities.

Credit Default Swaps

The Company sells protection under single name credit default swaps and credit default swap index tranches to diversify its credit risk exposure in certain portfolios and, in combination with purchasing securities, to replicate characteristics of similar investments based on the credit quality and term of the credit default swap. Credit default triggers for indexed reference entities and single name reference entities are defined in the contracts. The Company's maximum exposure to credit loss equals the notional value for credit default swaps. In the event of default of a referencing entity, the Company is typically required to pay the protection holder the full notional value less a recovery amount determined at auction.

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The following table presents the estimated fair value, maximum amount of future payments and weighted average years to maturity of credit default swaps sold by the Company at June 30, 2018 and December 31, 2017 (dollars in thousands):

	June 30, 2018			December 31, 2017		
Rating Agency Designation of Referenced Credit Obligations[1]	Estimated Fair Value of Credit Default Swaps	Maximum Amount of Future Payments under Credit Default Swaps[2]	Weighted Average Years to Maturity[3]	Estimated Fair Value of Credit Default Swaps	Maximum Amount of Future Payments under Credit Default Swaps[2]	Weighted Average Years to Maturity[3]
AAA/AA+/AA/AA-/A+/A/A-						
Single name credit default swaps	$2,574	$ 152,000	2.7	$3,128	$ 162,000	2.9
Subtotal	2,574	152,000	2.7	3,128	162,000	2.9
BBB+/BBB/BBB-						
Single name credit default swaps	4,092	338,700	2.6	4,469	361,700	2.9
Credit default swaps referencing indices	(59)	422,600	3.5	(55)	422,600	4.0
Subtotal	4,033	761,300	3.1	4,414	784,300	3.5
BB+/BB/BB-						
Single name credit default swaps	(4)	15,000	1.2	30	5,000	1.5
Subtotal	(4)	15,000	1.2	30	5,000	1.5
Total	$6,603	$ 928,300	3.0	$7,572	$ 951,300	3.4

(1) The rating agency designations are based on ratings from Standard and Poor's ("S&P").
(2) Assumes the value of the referenced credit obligations is zero.
(3) The weighted average years to maturity of the credit default swaps is calculated based on weighted average notional amounts.

The Company also purchases credit default swaps to reduce its risk against a drop in bond prices due to credit concerns of certain bond issuers. If a credit event, as defined by the contract, occurs, the Company is able to put the bond back to the counterparty at par.

Longevity Swaps

The Company enters into longevity swaps in the form of out-of-the-money options, which provide protection against changes in mortality improvement to retirement plans and insurers of such plans. With a longevity swap transaction, the Company agrees with another party to exchange a proportion of a notional value. The proportion is determined by the difference between a predefined benefit, and the realized benefit plus the future expected benefit, calculated by reference to a population index for a fixed premium.

Mortality Swaps

Mortality swaps are used by the Company to hedge risk from changes in mortality experience associated with its reinsurance of life insurance risk. The Company agrees with another party to exchange, at specified intervals, a proportion of a notional value determined by the difference between a predefined expected and realized claim amount on a designated index of reinsured lives, for a fixed percentage (premium) each term.

Synthetic Guaranteed Investment Contracts

The Company sells fee-based synthetic guaranteed investment contracts to retirement plans which include investment-only, stable value contracts. The assets are owned by the trustees of such plans, who invest the assets under the terms of investment guidelines to which the Company agrees. The contracts contain a guarantee of a minimum rate of return on participant balances supported by the underlying assets, and a guarantee of liquidity to meet certain participant-initiated plan cash flow requirements. These contracts are reported as derivatives and recorded at fair value.

Embedded Derivatives

The Company has certain embedded derivatives which are required to be separated from their host contracts and reported as derivatives. Host contracts include reinsurance treaties structured on a modified coinsurance (“modco”) or funds withheld basis. Additionally, the Company reinsures equity-indexed annuity and variable annuity contracts with benefits that are considered embedded derivatives, including guaranteed minimum withdrawal benefits, guaranteed minimum accumulation benefits, and guaranteed minimum income benefits. The changes in fair values of embedded derivatives on equity-indexed annuities described below relate to changes in the fair value associated with capital market and other related assumptions. The Company’s utilization of a credit valuation adjustment (“CVA”) did not have a material effect on the change in fair value of its embedded derivatives for the three and six months ended June 30, 2018 and 2017.

The related gains (losses) and the effect on net income after amortization of deferred acquisition costs (“DAC”) and income taxes for the three and six months ended June 30, 2018 and 2017 are reflected in the following table (dollars in thousands):

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	Three months ended June 30,		Six months ended June 30,	
	2018	2017	2018	2017
Embedded derivatives in modco or funds withheld arrangements included in investment related gains	$8,805	$15,108	$22,416	$83,810
After the associated amortization of DAC and taxes, the related amounts included in net income	5,987	2,941	12,836	28,785
Embedded derivatives in variable annuity contracts included in investment related gains	15,324	360	30,109	22,723
After the associated amortization of DAC and taxes, the related amounts included in net income	12,472	3,023	23,598	31,859
Amounts related to embedded derivatives in equity-indexed annuities included in benefits and expenses	6,519	(5,955)	31,870	(22,357)
After the associated amortization of DAC and taxes, the related amounts included in net income	3,966	(6,925)	10,503	(28,322)

Credit Risk

The Company manages its credit risk related to over-the-counter ("OTC") derivatives by entering into transactions with creditworthy counterparties, maintaining collateral arrangements and through the use of master netting agreements that provide for a single net payment to be made by one counterparty to another at each due date and upon termination.

The credit exposure of the Company's OTC derivative transactions is represented by the contracts with a positive fair value (market value) at the reporting date. To reduce credit exposures, the Company seeks to (i) enter into OTC derivative transactions pursuant to master netting agreements that provide for a netting of payments and receipts with a single counterparty, and (ii) enter into agreements that allow the use of credit support annexes, which are bilateral rating-sensitive agreements that require collateral postings at established threshold levels. Certain of the Company's OTC derivatives are cleared derivatives, which are bilateral transactions between the Company and a counterparty where the transactions are cleared through a clearinghouse, such that each derivative counterparty is only exposed to the default of the clearinghouse. These cleared transactions require initial and daily variation margin collateral postings and include certain interest rate swaps and credit default swaps entered into on or after June 10, 2013, related to guidelines implemented under the Dodd-Frank Wall Street Reform and Consumer Protection Act. In 2017, the Company followed the Chicago Mercantile Exchange amended rulebook to legally characterize variation margin payments as settlements of the derivative's mark-to-market exposure and not collateral. Also, the Company enters into exchange-traded futures through regulated exchanges and these transactions are settled on a daily basis, thereby reducing credit risk exposure in the event of non-performance by counterparties to such financial instruments.

The Company enters into various collateral arrangements, which require both the posting and accepting of collateral in connection with its derivative instruments. Collateral agreements contain attachment thresholds that may vary depending on the posting party's ratings. Additionally, a decline in the Company's or the counterparty's credit ratings to specified levels could result in potential settlement of the derivative positions under the Company's agreements with its counterparties. The Company also has exchange-traded futures, which require the maintenance of a margin account. As exchange-traded futures are affected through regulated exchanges, and positions are marked to market on a daily basis, the Company has minimal exposure to credit-related losses in the event of nonperformance by counterparties.

The Company's credit exposure related to derivative contracts is generally limited to the fair value at the reporting date plus or minus any collateral posted or held by the Company. The Company's credit exposure to mortality swaps is minimal, as they are fully collateralized by a counterparty. Information regarding the Company's credit exposure related to its over-the-counter derivative contracts, centrally cleared derivative contracts and margin account for exchange-traded futures, excluding mortality swaps, at June 30, 2018 and December 31, 2017 are reflected in the following table (dollars in thousands):

	June 30, 2018	December 31, 2017
Estimated fair value of derivatives in net asset position	$172,997	$155,714
Cash provided as collateral[1]	9,030	22,221
Securities pledged to counterparties as collateral[2]	57,302	58,156
Cash pledged from counterparties as collateral[3]	(194,067)	(185,900)
Securities pledged from counterparties as collateral[4]	—	(862)
Initial margin for cleared derivatives[2]	(57,302)	(58,156)
Net amount after application of master netting agreements and collateral	$(12,040)	$(8,827)
Margin account related to exchange-traded futures[5]	$8,331	$6,538

(1) Consists of receivable from counterparty, included in other assets.
(2) Included in available-for-sale securities, primarily consists of U.S. Treasury and government agency securities.
(3) Included in cash and cash equivalents, with obligation to return cash collateral recorded in other liabilities.
(4) Consists of U.S. Treasury and government securities.
(5) Included in other assets.

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6. Fair Value of Assets and Liabilities

Fair Value Measurement

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

Level 1 - Unadjusted quoted prices in active markets for identical assets or liabilities. The Company's Level 1 assets and liabilities are traded in active exchange markets.

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

Level 3 - Unobservable inputs that are supported by little or no market activity and that are significant to the fair value of the related assets or liabilities. Prices are determined using valuation methodologies such as discounted cash flow models and other similar techniques that require management's judgment or estimation in developing inputs that are consistent with those other market participants would use when pricing similar assets and liabilities. Additionally, the Company's embedded derivatives, all of which are associated with reinsurance treaties and longevity and mortality swaps, are classified in Level 3 since their values include significant unobservable inputs.

For a discussion of the Company's valuation methodologies for assets and liabilities measured at fair value and the fair value hierarchy, see Note 6 in the Notes to Consolidated Financial Statements included in the Company's 2017 Annual Report.

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Assets and Liabilities by Hierarchy Level

Assets and liabilities measured at fair value on a recurring basis as of June 30, 2018 and December 31, 2017 are summarized below (dollars in thousands):

June 30, 2018:		Fair Value Measurements Using:		
	Total	Level 1	Level 2	Level 3
Assets:				
Fixed maturity securities – available-for-sale:				
Corporate	$22,503,507	$—	$21,136,353	$1,367,154
Canadian government	4,062,843	—	3,490,145	572,698
RMBS	1,821,214	—	1,766,375	54,839
ABS	1,708,824	—	1,638,138	70,686
CMBS	1,242,509	—	1,240,642	1,867
U.S. government	1,525,150	1,405,485	98,930	20,735
State and political subdivisions	737,044	—	720,539	16,505
Other foreign government	3,183,863	—	3,178,819	5,044
Total fixed maturity securities – available-for-sale	36,784,954	1,405,485	33,269,941	2,109,528
Equity securities	108,070	65,133	—	42,937
Funds withheld at interest – embedded derivatives	144,610	—	—	144,610
Cash equivalents	424,601	409,242	15,359	—
Short-term investments	82,521	991	78,313	3,217
Other invested assets:				
Derivatives:				
Interest rate swaps	36,170	—	36,170	—
Foreign currency forwards	18,428	—	18,428	—
CPI swaps	(42)	—	(42)	—
Credit default swaps	5,927	—	5,927	—
Equity options	21,136	—	21,136	—
Foreign currency swaps	55,696	—	55,696	—
FVO contractholder-directed unit-linked investments	212,202	211,141	1,061	—
Total other invested assets	349,517	211,141	138,376	—
Other assets - longevity swaps	43,971	—	—	43,971
Total	$37,938,244	$2,091,992	$33,501,989	$2,344,263
Liabilities:				
Interest sensitive contract liabilities – embedded derivatives	$928,797	$—	$—	$928,797
Other liabilities:				
Derivatives:				
Interest rate swaps	14,740	—	14,740	—
Foreign currency forwards	8	—	8	—
CPI swaps	(969)	—	(969)	—
Credit default swaps	(676)	—	(676)	—
Equity options	(4,814)	—	(4,814)	—
Mortality swaps	782	—	—	782
Total	$937,868	$—	$8,289	$929,579

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December 31, 2017:		Fair Value Measurements Using:		
	Total	Level 1	Level 2	Level 3
Assets:				
Fixed maturity securities – available-for-sale:				
Corporate	$23,210,968	$—	$21,873,696	$1,337,272
Canadian government	4,220,076	—	3,626,134	593,942
RMBS	1,719,880	—	1,611,998	107,882
ABS	1,648,362	—	1,524,888	123,474
CMBS	1,303,387	—	1,300,153	3,234
U.S. government	1,943,592	1,818,006	103,075	22,511
State and political subdivisions	703,428	—	662,225	41,203
Other foreign government	3,401,127	—	3,396,035	5,092
Total fixed maturity securities – available-for-sale	38,150,820	1,818,006	34,098,204	2,234,610
Equity securities:				
Non-redeemable preferred stock	39,806	39,806	—	—
Other equity securities	60,346	60,346	—	—
Funds withheld at interest – embedded derivatives	122,194	—	—	122,194
Cash equivalents	356,788	354,071	2,717	—
Short-term investments	50,746	—	47,650	3,096
Other invested assets:				
Derivatives:				
Interest rate swaps	51,359	—	51,359	—
Foreign currency forwards	730	—	730	—
CPI swaps	(221)	—	(221)	—
Credit default swaps	5,908	—	5,908	—
Equity options	16,932	—	16,932	—
Foreign currency swaps	62,905	—	62,905	—
FVO contractholder-directed unit-linked investments	218,541	217,618	923	—
Total other invested assets	356,154	217,618	138,536	—
Other assets - longevity swaps	40,659	—	—	40,659
Total	$39,177,513	$2,489,847	$34,287,107	$2,400,559
Liabilities:				
Interest sensitive contract liabilities – embedded derivatives	$1,014,228	$—	$—	$1,014,228
Other liabilities:				
Derivatives:				
Interest rate swaps	14,311	—	14,311	—
Foreign currency forwards	7,213	—	7,213	—
CPI swaps	1,939	—	1,939	—
Credit default swaps	(760)	—	(760)	—
Equity options	(6,339)	—	(6,339)	—
Foreign currency swaps	6,194	—	6,194	—
Mortality swaps	1,683	—	—	1,683
Total	$1,038,469	$—	$22,558	$1,015,911

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Transfers between Levels 1 and 2

Transfers between Levels 1 and 2 are made to reflect changes in observability of inputs and market activity. There were no transfers between Level 1 and Level 2 for the six months ended June 30, 2018. The Company recognizes transfers of assets and liabilities into and out of levels within the fair value hierarchy at the beginning of the quarter in which the actual event or change in circumstances that caused the transfer occurs. The following tables present the transfers between Level 1 and Level 2 during the three and six months ended June 30, 2017 (dollars in thousands):

	2017	
	Transfers from Level 1 to Level 2	Transfers from Level 2 to Level 1
Three months ended June 30:		
Fixed maturity securities - available-for-sale:		
Corporate securities	$ —	$ 49,999
Six months ended June 30:		
Fixed maturity securities - available-for-sale:		
Corporate securities	$ —	$ 88,674

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Quantitative Information Regarding Internally - Priced Level 3 Assets and Liabilities
The following table presents quantitative information about significant unobservable inputs used in Level 3 fair value measurements that are developed internally by the Company as of June 30, 2018 and December 31, 2017 (dollars in thousands):

	Estimated Fair Value		Valuation Technique	Unobservable Inputs	Range (Weighted Average)	
	June 30, 2018	December 31, 2017			June 30, 2018	December 31, 2017
Assets:						
Corporate	$571,750	$173,579	Market comparable securities	Liquidity premium	0-2% (1%)	0-2% (1%)
				EBITDA Multiple	5.9x-7.5x (6.9x)	—
U.S. government	20,735	22,511	Market comparable securities	Liquidity premium	0-1% (1%)	0-1% (1%)
State and political subdivisions	4,361	4,616	Market comparable securities	Liquidity premium	1 %	1 %
Other foreign government	5,044	—	Market comparable securities	Liquidity premium	1 %	—
Equity securities	23,856	—	Market comparable securities	Liquidity premium	1 %	—
				EBITDA Multiple	6.9x-13.1x (7.9x)	—
Funds withheld at interest-embedded derivatives	144,610	122,194	Total return swap	Mortality	0-100% (2%)	0-100% (2%)
				Lapse	0-35% (9%)	0-35% (9%)
				Withdrawal	0-5% (3%)	0-5% (3%)
				CVA	0-5% (1%)	0-5% (1%)
				Crediting rate	2-4% (2%)	2-4% (2%)
Longevity swaps	43,971	40,659	Discounted cash flow	Mortality	0-100% (2%)	0-100% (2%)
				Mortality improvement	(10%)-10% (3%)	(10%)-10% (3%)
Liabilities:						
Interest sensitive contract liabilities-embedded derivatives-indexed annuities	806,436	861,758	Discounted cash flow	Mortality	0-100% (2%)	0-100% (2%)
				Lapse	0-35% (9%)	0-35% (9%)
				Withdrawal	0-5% (3%)	0-5% (3%)

				Option budget projection	2-4% (2%)	2-4% (2%)
Interest sensitive contract liabilities- embedded derivatives- variable annuities	122,361	152,470	Discounted cash flow	Mortality	0-100% (1%)	0-100% (1%)
				Lapse	0-25% (5%)	0-25% (5%)
				Withdrawal	0-7% (4%)	0-7% (3%)
				CVA	0-5% (1%)	0-5% (1%)
				Long-term volatility	0-27% (14%)	0-27% (8%)
Mortality swaps	782	1,683	Discounted cash flow	Mortality	0-100% (1%)	0-100% (1%)

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Changes in Level 3 Assets and Liabilities

Assets and liabilities transferred into Level 3 are due to a lack of observable market transactions and price information. Assets and liabilities are transferred out of Level 3 when circumstances change such that significant inputs can be corroborated with market observable data. This may be due to a significant increase in market activity for the asset or liability, a specific event, one or more significant input(s) becoming observable. Transfers out of Level 3 were primarily the result of the Company obtaining observable pricing information or a third party pricing quotation that appropriately reflects the fair value of those assets and liabilities. In addition, certain transfers out of Level 3 were also due to ratings upgrades on mortgage-backed securities that had previously had below investment-grade ratings. The Company also transferred equity securities with a fair value of approximately $38.9 million into Level 3 as a result of the adoption of the new accounting guidance for the recognition and measurement of equity securities.

For further information on the Company's valuation processes, see Note 6 in the Notes to Consolidated Financial Statements included in the Company's 2017 Annual Report.

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

For the three months ended June 30, 2018:	Fixed maturity securities - available-for-sale			
	Corporate	Canadian government	RMBS	ABS
Fair value, beginning of period	$1,299,264	$572,747	$120,614	$130,706
Total gains/losses (realized/unrealized)				
Included in earnings, net:				
Investment income, net of related expenses	(305)	3,468	(43)	76
Investment related gains (losses), net	(3,141)	—	312	1,282
Included in other comprehensive income	2,178	(3,517)	(671)	(1,544)
Purchases(1)	155,498	—	24,412	—
Sales(1)	(11,089)	—	(4,961)	—
Settlements(1)	(68,328)	—	(1,572)	(19,544)
Transfers into Level 3	—	—	3,031	4,968
Transfers out of Level 3	(6,923)	—	(86,283)	(45,258)
Fair value, end of period	$1,367,154	$572,698	$54,839	$70,686
Unrealized gains and losses recorded in earnings for the period relating to those Level 3 assets and liabilities that were still held at the end of the period				
Included in earnings, net:				
Investment income, net of related expenses	$(304)	$3,468	$(13)	$68
Investment related gains (losses), net	(3,141)	—	—	—

For the three months ended June 30, 2018 (continued):	Fixed maturity securities available-for-sale			
	CMBS	U.S. government	State and political subdivisions	Other foreign government
Fair value, beginning of period	$1,884	$21,053	$41,876	$5,004
Total gains/losses (realized/unrealized)				
Included in earnings, net:				
Investment income, net of related expenses	—	(107)	(10)	—
Included in other comprehensive income	(16)	(173)	(110)	40
Purchases(1)	—	118	—	—
Settlements(1)	(2)	(156)	(86)	—

Transfers out of Level 3	1	—	(25,165)	—
Fair value, end of period	$1,867	$ 20,735	$ 16,505	$ 5,044
Unrealized gains and losses recorded in earnings for the period relating to those Level 3 assets and liabilities that were still held at the end of the period				
Included in earnings, net:				
Investment income, net of related expenses	$—	$ (108)	$ (11)	$ —

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For the three months ended June 30, 2018 (continued):	Equity securities	Funds withheld at interest-embedded derivatives	Short-term Investments	Other assets - longevity swaps	Interest sensitive contract liabilities embedded derivatives	Other liabilities - mortality swaps
Fair value, beginning of period	$36,152	$135,805	$3,217	$44,011	$(964,794)	$(1,683)
Total gains/losses (realized/unrealized)						
Included in earnings, net:						
Investment income, net of related expenses	—	—	—	—	—	—
Investment related gains (losses), net	(4,922)	8,805	—	—	15,324	—
Claims & other policy benefits	—	—	—	—	—	—
Interest credited	—	—	—	—	6,519	—
Policy acquisition costs and other insurance expenses	—	—	—	—	—	—
Included in other comprehensive income	—	—	(21)	(2,329)	—	—
Other revenues	—	—	—	2,289	—	(799)
Purchases(1)	12,248	—	335	—	(4,205)	—
Sales(1)	(541)	—	—	—	—	—
Settlements(1)	—	—	(314)	—	18,359	1,700
Transfers into Level 3	—	—	—	—	—	—
Transfers out of Level 3	—	—	—	—	—	—
Fair value, end of period	$42,937	$144,610	$3,217	$43,971	$(928,797)	$(782)
Unrealized gains and losses recorded in earnings for the period relating to those Level 3 assets and liabilities that were still held at the end of the period						
Included in earnings, net:						
Investment related gains (losses), net	$(5,000)	$8,805	$—	$—	$13,474	$—
Other revenues	—	—	—	2,289	—	(799)
Interest credited	—	—	—	—	(11,839)	—

For the six months ended June 30, 2018:	Fixed maturity securities - available-for-sale			
	Corporate	Canadian government	RMBS	ABS
Fair value, beginning of period	$1,337,272	$593,942	$107,882	$123,474
Total gains/losses (realized/unrealized)				
Included in earnings, net:				
Investment income, net of related expenses	(666)	6,912	(135)	182
Investment related gains (losses), net	(3,141)	—	312	1,284
Included in other comprehensive income	(30,674)	(28,156)	(1,781)	(691)
Purchases(1)	255,668	—	45,328	11,000
Sales(1)	(17,269)	—	(4,961)	—
Settlements(1)	(143,474)	—	(4,535)	(22,283)
Transfers into Level 3	7,166	—	3,031	4,968
Transfers out of Level 3	(37,728)	—	(90,302)	(47,248)
Fair value, end of period	$1,367,154	$572,698	$54,839	$70,686
Unrealized gains and losses recorded in earnings for the period relating to those Level 3 assets and liabilities that were still held at				

the end of the period				
Included in earnings, net:				
Investment income, net of related expenses	$(665)	$6,912	$(105)	$174
Investment related gains (losses), net	(3,141)	—	—	—

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For the six months ended June 30, 2018 (continued):	Fixed maturity securities available-for-sale			
	CMBS	U.S. government	State and political subdivisions	Other foreign government
Fair value, beginning of period	$3,234	$ 22,511	$ 41,203	$ 5,092
Total gains/losses (realized/unrealized)				
Included in earnings, net:				
Investment income, net of related expenses	—	(217)	(2)	—
Included in other comprehensive income	(63)	(513)	590	(48)
Purchases(1)	—	214	—	—
Settlements(1)	(3)	(1,260)	(121)	—
Transfers out of Level 3	(1,301)	—	(25,165)	—
Fair value, end of period	$1,867	$ 20,735	$ 16,505	$ 5,044
Unrealized gains and losses recorded in earnings for the period relating to those Level 3 assets and liabilities that were still held at the end of the period				
Included in earnings, net:				
Investment income, net of related expenses	$—	$ (218)	$ (3)	$ —

For the six months ended June 30, 2018 (continued):	Equity securities	Funds withheld at interest-embedded derivatives	Short-term Investments	Other assets - longevity swaps	Interest sensitive contract liabilities embedded derivatives	Other liabilities - mortality swaps
Fair value, beginning of period	$—	$ 122,194	$ 3,096	$ 40,659	$ (1,014,228)	$ (1,683)
Total gains/losses (realized/unrealized)						
Included in earnings, net:						
Investment related gains (losses), net	(7,599)	22,416	—	—	30,109	—
Interest credited	—	—	—	—	31,870	—
Included in other comprehensive income	—	—	(46)	(1,245)	—	—
Other revenues	—	—	—	4,557	—	(799)
Purchases(1)	12,248	—	481	—	(12,713)	—
Sales(1)	(569)	—	—	—	—	—
Settlements(1)	(48)	—	(314)	—	36,165	1,700
Transfers into Level 3	38,905	—	—	—	—	—
Fair value, end of period	$42,937	$ 144,610	$ 3,217	$ 43,971	$ (928,797)	$ (782)
Unrealized gains and losses recorded in earnings for the period relating to those Level 3 assets and liabilities that were still held at the end of the period						
Included in earnings, net:						
Investment related gains (losses), net	$ (7,705)	$ 22,416	$ —	$—	$ 26,375	$—
Other revenues	—	—	—	4,557	—	(799)
Interest credited	—	—	—	—	(4,295)	—

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For the three months ended June 30, 2017:	Fixed maturity securities - available-for-sale			
	Corporate	Canadian government	RMBS	ABS
Fair value, beginning of period	$1,263,925	$ 483,560	$143,430	$208,436
Total gains/losses (realized/unrealized)				
Included in earnings, net:				
Investment income, net of related expenses	(396)	3,201	(29)	511
Investment related gains (losses), net	8,427	—	115	—
Included in other comprehensive income	(4,548)	46,509	1,962	1,136
Purchases(1)	104,087	—	29,318	34,366
Sales(1)	(23,174)	—	(4,467)	—
Settlements(1)	(74,531)	—	(4,655)	(27,569)
Transfers into Level 3	17,264	—	5,423	3,500
Transfers out of Level 3	—	—	(22,412)	(18,791)
Fair value, end of period	$1,291,054	$ 533,270	$148,685	$201,589
Unrealized gains and losses recorded in earnings for the period relating to those Level 3 assets and liabilities that were still held at the end of the period				
Included in earnings, net:				
Investment income, net of related expenses	$(396)	$ 3,201	$(37)	$239
Investment related gains (losses), net	(1,495)	—	—	—

For the three months ended June 30, 2017 (continued):	Fixed maturity securities available-for-sale			
	CMBS	U.S. government	State and political subdivisions	Other foreign government
Fair value, beginning of period	$1,923	$ 23,474	$ 33,858	$ 12,344
Total gains/losses (realized/unrealized)				
Included in earnings, net:				
Investment income, net of related expenses	—	(115)	(6)	—
Included in other comprehensive income	21	211	823	(12)
Purchases(1)	—	132	—	—
Settlements(1)	(1)	(135)	(241)	(338)
Fair value, end of period	$1,943	$ 23,567	$ 34,434	$ 11,994
Unrealized gains and losses recorded in earnings for the period relating to those Level 3 assets and liabilities that were still held at the end of the period				
Included in earnings, net:				
Investment income, net of related expenses	$—	$ (115)	$ (6)	$ —

For the three months ended June 30, 2017 (continued):	Short-term Investments	Funds withheld at interest-embedded derivatives	Other assets - longevity swaps	Interest sensitive contract liabilities embedded derivatives	Other liabilities - mortality swaps
Fair value, beginning of period	$ 3,276	$ 46,173	$ 29,170	$(972,930)	$(2,857)
Total gains/losses (realized/unrealized)					
Included in earnings, net:					

Investment related gains (losses), net	—	15,108	—	360	—
Interest credited	—	—	—	(5,955)	—
Included in other comprehensive income	(29)	—	2,198	—	—
Other revenues	—	—	1,981	—	(395)
Purchases[1]	324	—	—	(19,533)	—
Settlements[1]	(23)	—	—	23,427	1,700
Fair value, end of period	$ 3,548	$ 61,281	$ 33,349	$ (974,631)	$ (1,552)
Unrealized gains and losses recorded in earnings for the period relating to those Level 3 assets and liabilities that were still held at the end of the period					
Included in earnings, net:					
Investment related gains (losses), net	$ —	$ 15,108	$ —	$ (1,794)	$ —
Other revenues	—	—	1,981	—	(395)
Interest credited	—	—	—	(29,382)	—

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For the six months ended June 30, 2017:	Fixed maturity securities - available-for-sale			
	Corporate	Canadian government	RMBS	ABS
Fair value, beginning of period	$1,272,253	$ 475,965	$160,291	$219,280
Total gains/losses (realized/unrealized)				
Included in earnings, net:				
Investment income, net of related expenses	(819)	6,271	(274)	1,529
Investment related gains (losses), net	7,196	—	480	—
Included in other comprehensive income	400	51,034	2,612	6,903
Purchases[(1)]	150,001	—	45,817	45,215
Sales[(1)]	(23,174)	—	(15,071)	—
Settlements[(1)]	(146,001)	—	(11,439)	(45,723)
Transfers into Level 3	31,198	—	5,500	38,758
Transfers out of Level 3	—	—	(39,231)	(64,373)
Fair value, end of period	$1,291,054	$ 533,270	$148,685	$201,589
Unrealized gains and losses recorded in earnings for the period relating to those Level 3 assets and liabilities that were still held at the end of the period				
Included in earnings, net:				
Investment income, net of related expenses	$(819)	$ 6,271	$(128)	$400
Investment related gains (losses), net	(2,788)	—	(346)	—

For the six months ended June 30, 2017 (continued):	Fixed maturity securities available-for-sale			
	CMBS	U.S. government	State and political subdivisions	Other foreign government
Fair value, beginning of period	$21,145	$ 24,488	$ 41,666	$ 12,869
Total gains/losses (realized/unrealized)				
Included in earnings, net:				
Investment income, net of related expenses	709	(232)	(94)	—
Investment related gains (losses), net	(595)	—	—	—
Included in other comprehensive income	(62)	263	(20)	(203)
Purchases[(1)]	—	236	—	—
Sales[(1)]	(3,720)	—	—	—
Settlements[(1)]	(5,402)	(1,188)	(274)	(672)
Transfers out of Level 3	(10,132)	—	(6,844)	—
Fair value, end of period	$1,943	$ 23,567	$ 34,434	$ 11,994
Unrealized gains and losses recorded in earnings for the period relating to those Level 3 assets and liabilities that were still held at the end of the period				
Included in earnings, net:				
Investment income, net of related expenses	$—	$ (232)	$ (94)	$ —

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For the six months ended June 30, 2017 (continued):	Short-term Investments	Funds withheld at interest-embedded derivatives	Other assets - longevity swaps	Interest sensitive contract liabilities embedded derivatives	Other liabilities - mortality swaps
Fair value, beginning of period	$ 3,346	$ (22,529)	$ 26,958	$ (990,308)	$ (2,462)
Total gains/losses (realized/unrealized)					
Included in earnings, net:					
Investment related gains (losses), net	—	83,810	—	22,723	—
Interest credited	—	—	—	(22,357)	—
Included in other comprehensive income	4	—	2,545	—	—
Other revenues	—	—	3,846	—	(790)
Purchases[1]	356	—	—	(25,927)	—
Settlements[1]	(158)	—	—	41,238	1,700
Fair value, end of period	$ 3,548	$ 61,281	$ 33,349	$ (974,631)	$ (1,552)
Unrealized gains and losses recorded in earnings for the period relating to those Level 3 assets and liabilities that were still held at the end of the period					
Included in earnings, net:					
Investment related gains (losses), net	$ —	$ 83,810	$ —	$ 18,505	$ —
Other revenues	—	—	3,846	—	(790)
Interest credited	—	—	—	(63,596)	—

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

Nonrecurring Fair Value Measurements

During the six months ended June 30, 2018, the Company did not have any adjustments to its assets or liabilities measured at fair value on a nonrecurring basis that are still held at the reporting date. The following table presents information for assets measured at estimated fair value on a nonrecurring basis during the 2017 periods presented and still held at the reporting date (for example, when there is evidence of impairment). The estimated fair values for these assets were determined using significant unobservable inputs (Level 3).

	Carrying Value After Measurement	Net Investment Gains (Losses)	
(dollars in thousands)	At June 30, 2017	Three months ended June 30, 2017	Six months ended June 30, 2017
Limited partnership interests[1]	$ 3,690	$ (6,308)	$ (6,308)

(1) The impaired limited partnership interests presented above were accounted for using the cost method. Impairments on these cost method investments were recognized at estimated fair value determined using the net asset values of the Company’s ownership interest as provided in the financial statements of the investees. The market for these investments has limited activity and price transparency.

Fair Value of Financial Instruments

The Company is required by general accounting principles for Fair Value Measurements and Disclosures to disclose the fair value of certain financial instruments including those that are not carried at fair value. The following table presents the carrying amounts and estimated fair values of the Company’s financial instruments, which were not measured at fair value on a recurring basis, as of June 30, 2018 and December 31, 2017 (dollars in thousands). For additional information regarding the methods and significant assumptions used by the Company to estimate these fair values, see Note 6 in the Notes to Consolidated Financial Statements included in the Company’s 2017 Annual Report. This table excludes any payables or receivables for collateral under repurchase agreements and other transactions. The estimated fair value of the excluded amount approximates carrying value as they equal the amount of cash collateral received/paid.

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June 30, 2018:	Carrying Value (1)	Estimated Fair Value	Fair Value Measurement Using: Level 1	Level 2	Level 3	NAV
Assets:						
Mortgage loans on real estate	$ 4,558,669	$ 4,461,317	$ —	$ —	$ 4,461,317	$ —
Policy loans	1,339,252	1,339,252	—	1,339,252	—	—
Funds withheld at interest	5,836,373	6,057,217	—	—	6,057,217	—
Cash and cash equivalents	973,078	973,078	973,078	—	—	—
Short-term investments	40,507	40,507	40,507	—	—	—
Other invested assets	757,264	775,322	5,565	71,797	323,142	374,818
Accrued investment income	400,160	400,160	—	400,160	—	—
Liabilities:						
Interest-sensitive contract liabilities	$ 13,072,239	$ 12,972,203	$ —	$ —	$ 12,972,203	$ —
Long-term debt	2,788,111	2,868,837	—	—	2,868,837	—
Collateral finance and securitization notes	724,998	666,356	—	—	666,356	—

December 31, 2017:	Carrying Value (1)	Estimated Fair Value	Fair Value Measurement Using: Level 1	Level 2	Level 3	NAV
Assets:						
Mortgage loans on real estate	$ 4,400,533	$ 4,477,654	$ —	$ —	$ 4,477,654	$ —
Policy loans	1,357,624	1,357,624	—	1,357,624	—	—
Funds withheld at interest	5,955,092	6,275,623	—	—	6,275,623	—
Cash and cash equivalents	946,736	946,736	946,736	—	—	—
Short-term investments	42,558	42,558	42,558	—	—	—
Other invested assets	651,792	679,377	28,640	67,678	247,934	335,125
Accrued investment income	392,721	392,721	—	392,721	—	—
Liabilities:						
Interest-sensitive contract liabilities	$ 12,683,872	$ 12,917,243	$ —	$ —	$ 12,917,243	$ —
Long-term debt	2,788,365	2,959,912	—	—	2,959,912	—
Collateral finance and securitization notes	783,938	722,145	—	—	722,145	—

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

7. Segment Information

The accounting policies of the segments are the same as those described in the Summary of Significant Accounting Policies in Note 2 of the consolidated financial statements accompanying the 2017 Annual Report. The Company measures segment performance primarily based on profit or loss from operations before income taxes. There are no intersegment reinsurance transactions and the Company does not have any material long-lived assets.

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

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

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Revenues:	Three months ended June 30, 2018	Three months ended June 30, 2017	Six months ended June 30, 2018	Six months ended June 30, 2017
U.S. and Latin America:				
Traditional	$1,564,147	$1,522,698	$3,053,841	$3,011,201
Financial Solutions	229,948	271,976	443,300	570,822
Total	1,794,095	1,794,674	3,497,141	3,582,023
Canada:				
Traditional	312,199	269,273	614,518	533,548
Financial Solutions	12,089	12,003	24,866	23,810
Total	324,288	281,276	639,384	557,358
Europe, Middle East and Africa:				
Traditional	372,538	345,920	766,320	664,006
Financial Solutions	100,675	73,405	188,818	153,394
Total	473,213	419,325	955,138	817,400
Asia Pacific:				
Traditional	570,520	561,529	1,185,059	1,066,759
Financial Solutions	17,992	17,984	37,838	38,436
Total	588,512	579,513	1,222,897	1,105,195
Corporate and Other	15,800	54,488	55,055	76,040
Total	$3,195,908	$3,129,276	$6,369,615	$6,138,016

Income (loss) before income taxes:	Three months ended June 30, 2018	Three months ended June 30, 2017	Six months ended June 30, 2018	Six months ended June 30, 2017
U.S. and Latin America:				
Traditional	$71,978	$90,594	$74,870	$120,554
Financial Solutions	82,388	106,985	149,809	210,571
Total	154,366	197,579	224,679	331,125
Canada:				
Traditional	21,805	32,836	45,512	52,164
Financial Solutions	3,544	4,425	6,735	8,017
Total	25,349	37,261	52,247	60,181
Europe, Middle East and Africa:				
Traditional	6,468	11,354	21,889	25,330
Financial Solutions	65,369	28,905	104,533	60,823
Total	71,837	40,259	126,422	86,153
Asia Pacific:				
Traditional	58,862	53,322	81,749	95,010
Financial Solutions	4,138	5,377	8,159	11,249
Total	63,000	58,699	89,908	106,259
Corporate and Other	(67,264)	5,517	(108,043)	(36,559)
Total	$247,288	$339,315	$385,213	$547,159

Assets:	June 30, 2018	December 31, 2017
U.S. and Latin America:		
Traditional	$19,038,145	$18,603,423
Financial Solutions	16,043,393	15,959,206
Total	35,081,538	34,562,629

Canada:		
Traditional	4,203,344	4,161,452
Financial Solutions	141,581	126,372
Total	4,344,925	4,287,824
Europe, Middle East and Africa:		
Traditional	3,335,264	3,099,495
Financial Solutions	4,829,194	5,274,993
Total	8,164,458	8,374,488
Asia Pacific:		
Traditional	5,159,546	4,915,442
Financial Solutions	1,156,371	1,198,585
Total	6,315,917	6,114,027
Corporate and Other	5,859,659	7,175,850
Total	$59,766,497	$60,514,818

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8. Commitments, Contingencies and Guarantees

Commitments

Funding of Investments

The Company's commitments to fund investments as of June 30, 2018 and December 31, 2017 are presented in the following table (dollars in thousands):

	June 30, 2018	December 31, 2017
Limited partnership interests and joint ventures	$490,601	$ 485,197
Commercial mortgage loans	113,992	40,815
Bank loans and private placements	98,652	60,472
Equity release mortgages	157,069	153,937

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

Contingencies

Litigation

The Company is subject to litigation in the normal course of its business. The Company currently has no material litigation. A legal reserve is established when the Company is notified of an arbitration demand or litigation or is notified that an arbitration demand or litigation is imminent, it is probable that the Company will incur a loss as a result and the amount of the probable loss is reasonably capable of being estimated.

Other Contingencies

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

Guarantees

Statutory Reserve Support

RGA, through wholly-owned subsidiaries, has committed to provide statutory reserve support to third parties, in exchange for a fee, by funding loans if certain defined events occur. Such statutory reserves are required under the U.S. Valuation of Life Policies Model Regulation (commonly referred to as Regulation XXX for term life insurance policies and Regulation A-XXX for universal life secondary guarantees). The third parties have recourse to RGA should the subsidiary fail to provide the required funding, however, as of June 30, 2018, the Company does not believe that it will be required to provide any funding under these commitments as the occurrence of the defined events is considered remote. The following table presents the maximum potential obligation for these commitments as of June 30, 2018 (dollars in millions):

Commitment Period:	Maximum Potential Obligation
2023	$ 500.0
2033	450.0
2034	2,000.0
2035	1,314.2
2036	1,932.0
2037	6,750.0
2038	800.0

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Other Guarantees

RGA has issued guarantees to third parties on behalf of its subsidiaries for the payment of amounts due under certain securities borrowing and repurchase arrangements, financing arrangements and office lease obligations, whereby, if a subsidiary fails to meet an obligation, RGA or one of its other subsidiaries will make a payment to fulfill the obligation. Additionally, in limited circumstances, treaty guarantees are granted to ceding companies in order to provide them additional security, particularly in cases where RGA's subsidiary is relatively new, unrated, or not of a significant size, relative to the ceding company. Liabilities supported by the treaty guarantees, before consideration for any legally offsetting amounts due from the guaranteed party are reflected on the Company's condensed consolidated balance sheets in future policy benefits. Potential guaranteed amounts of future payments will vary depending on production levels and underwriting results. Guarantees related to securities borrowing and repurchase arrangements provide additional security to third parties should a subsidiary fail to provide securities when due. RGA's guarantees issued as of June 30, 2018 and December 31, 2017 are reflected in the following table (dollars in thousands):

	June 30, 2018	December 31, 2017
Treaty guarantees	$913,902	$ 1,047,449
Treaty guarantees, net of assets in trust	802,073	926,393
Securities borrowing and repurchase arrangements	289,210	294,325
Financing arrangements	74,864	86,183
Lease obligations	1,137	1,662

9. Income Tax

The Company's effective tax rates differed from the applicable U.S. federal income tax statutory rates of 21% and 35% as a result of the following for the three and six months ended June 30, 2018 and 2017, respectively (dollars in thousands):

	Three months ended June 30,		Six months ended June 30,	
	2018	2017	2018	2017
Tax provision at U.S. statutory rate	$51,931	$118,760	$80,895	$191,506
Increase (decrease) in income taxes resulting from:				
U.S. Tax Reform provisional adjustments	(4,314)	—	(3,539)	—
Foreign tax rate differing from U.S. tax rate	(330)	(4,261)	1,103	(10,413)
Differences in tax bases in foreign jurisdictions	(1,132)	(13,375)	(6,892)	(16,759)
Deferred tax valuation allowance	3,079	13,031	10,501	14,213
Amounts related to tax audit contingencies	(2,036)	(1,783)	(1,201)	(1,172)
Corporate rate changes	145	44	417	(1,193)
Subpart F	(348)	1,140	310	1,326
Foreign tax credits	113	(1,938)	(459)	(2,064)
Global intangible low-taxed income, net of credit	(119)	—	4,291	—
Equity compensation excess benefit	(3,135)	(2,609)	(4,250)	(4,464)
Return to provision adjustments	(503)	(633)	(139)	(403)
Other, net	(437)	(1,251)	(428)	(1,120)
Total provision for income taxes	$42,914	$107,125	$80,609	$169,457
Effective tax rate	17.4 %	31.6 %	20.9 %	31.0 %

On December 22, 2017, the Tax Cuts and Jobs Act of 2017 ("U.S. Tax Reform") was signed into law. U.S. Tax Reform makes broad and complex changes to the U.S. tax code, including but not limited to, (1) reducing the U.S. federal corporate tax rate from 35% to 21%; (2) requiring companies to pay a one-time transition tax on certain unrepatriated earnings of foreign subsidiaries; (3) generally eliminating U.S. federal income taxes on dividends from foreign subsidiaries; (4) eliminating the corporate alternative minimum tax ("AMT") and changing how existing AMT credits can be realized; (5) creating the base erosion anti-abuse tax ("BEAT"), a new minimum tax; (6) establishing a new provision designed to tax global intangible low-taxed income ("GILTI"), which allows for the possibility of using foreign tax credits and a deduction of up to 50 percent to offset the income tax liability (subject to some limitations); and (7) changing rules related to uses and limitations of net operating loss carryforwards created in tax years beginning after December 31, 2017.

Companies subject to GILTI have the option to account for the GILTI tax as a period cost if and when incurred, or to recognize deferred taxes for temporary differences including outside basis differences expected to reverse as GILTI. The Company has not yet made a policy election to account for GILTI, but included an estimate of the current GILTI impact in the tax provision.

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As of June 30, 2018, the Company has not yet completed its accounting for the tax effects of the enactment of U.S. Tax Reform. The Company continues to gather additional information to account for the effects of U.S. Tax Reform such as information to more precisely compute the pretax deferred tax items upon which the change in rate was applied and refine the necessary valuation allowance. The Company also continues to monitor the issuance of new guidance in the form of Treasury Regulations which could impact the provisional balances recorded as of December 31, 2017.

The Company continues to evaluate the effects of the BEAT and is currently restructuring existing business flows to reduce the risk that the Company will be subject to the BEAT for 2018. The Company has estimated that the annual deductible payments to foreign affiliates as a percentage of annual estimated total deductions to be below the threshold for application of the BEAT; therefore, the Company has not established an additional BEAT liability as of June 30, 2018.

The effective tax rates for the second quarter and first six months of 2018 were lower than the U.S. Statutory rate of 21.0% primarily as a result of U.S. Tax Reform related adjustments, the effective settlement of an uncertain tax position, benefits from differences in bases in foreign jurisdictions and excess tax benefits related to equity compensation. These benefits were partially offset by valuation allowances established on losses in foreign jurisdictions. The effective tax rates for the second quarter and first six months of 2017 were lower than the U.S. Statutory rate of 35% primarily as a result of tax benefits from income in non-U.S. jurisdictions, mostly related to RGA Life Reinsurance Company of Canada and the United Kingdom Branch of RGA International Reinsurance Company dac, with statutory rates of 26.6% and 19.3%, respectively. Further, tax benefits derived from differences in tax bases in foreign jurisdictions and benefits related to the filing of an amended tax return also lowered the effective tax rate. These benefits were partially offset with a valuation allowance established related to the amended return filing.

10. Employee Benefit Plans

The components of net periodic benefit costs, included in other operating expenses on the condensed consolidated statements of income, for the three and six months ended June 30, 2018 and 2017 were as follows (dollars in thousands):

	Pension Benefits Three months ended June 30,		Other Benefits Three months ended June 30,	
	2018	2017	2018	2017
Service cost	$3,570	$2,819	$636	$721
Interest cost	1,357	1,431	529	565
Expected return on plan assets	(2,213)	(1,823)	—	—
Amortization of prior service cost (credit)	82	95	(329)	(155)
Amortization of prior actuarial losses	769	1,082	498	457
Settlements	—	256	—	—
Net periodic benefit cost	$3,565	$3,860	$1,334	$1,588

	Pension Benefits Six months ended June 30,		Other Benefits Six months ended June 30,	
	2018	2017	2018	2017
Service cost	$6,224	$5,399	$1,272	$1,442
Interest cost	2,687	2,629	1,059	1,130
Expected return on plan assets	(3,767)	(3,108)	—	—
Amortization of prior service cost (credit)	165	169	(658)	(311)
Amortization of prior actuarial losses	1,863	2,163	996	914
Settlements	—	513	—	—
Net periodic benefit cost	$7,172	$7,765	$2,669	$3,175

The Company made $5.0 million in pension contributions during the first six months of 2018 and expects to make total pension contributions between $8.0 million and $10.0 million in 2018.

11. Reinsurance

Retrocession reinsurance treaties do not relieve the Company from its obligations to direct writing companies. Failure of retrocessionaires to honor their obligations could result in losses to the Company. Consequently, allowances would be established for amounts deemed uncollectible. At June 30, 2018 and December 31, 2017, no allowances were deemed necessary. The Company regularly evaluates the financial condition of the insurance companies from which it assumes and to which it cedes reinsurance.

Retrocessions are arranged through the Company's retrocession pools for amounts in excess of the Company's retention limit. As of June 30, 2018 and December 31, 2017, all rated retrocession pool participants followed by the A.M. Best Company were rated "A- (excellent)" or better, except for one pool member that was rated "B++". The Company verifies retrocession pool participants' ratings on a quarterly basis. For a majority of the retrocessionaires that were not rated, security in the form of letters of credit or

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trust assets has been posted. In addition, the Company performs annual financial reviews of its retrocessionaires to evaluate financial stability and performance. In addition to its third party retrocessionaires, various RGA reinsurance subsidiaries retrocede amounts in excess of their retention to affiliated subsidiaries.

The following table presents information for the Company’s reinsurance ceded receivable assets, including the respective amount and A.M. Best rating for each reinsurer representing in excess of five percent of the total as of June 30, 2018 or December 31, 2017 (dollars in thousands):

		June 30, 2018		December 31, 2017	
Reinsurer	A.M. Best Rating	Amount	% of Total	Amount	% of Total
Reinsurer A	A+	$312,405	39.6	$301,478	38.6 %
Reinsurer B	A+	198,782	25.2	203,898	26.1
Reinsurer C	A	67,699	8.6	67,723	8.7
Reinsurer D	A+	41,807	5.3	40,528	5.2
Reinsurer E	A++	38,935	4.9	40,592	5.2
Other reinsurers		129,801	16.4	127,808	16.2
Total		$789,429	100.0%	$782,027	100.0%

Included in the total reinsurance ceded receivables balance were $271.2 million and $243.8 million of claims recoverable, of which $3.1 million and $1.9 million were in excess of 90 days past due, as of June 30, 2018 and December 31, 2017, respectively.

12. New Accounting Standards

Changes to the general accounting principles are established by the Financial Accounting Standards Board (“FASB”) in the form of accounting standards updates to the FASB Accounting Standards Codification™. Accounting standards updates not listed below were assessed and determined to be either not applicable or are expected to have minimal impact on the Company’s condensed consolidated financial statements.

Description	Date of Adoption	Effect on the financial statements or other significant matters
Standards adopted:		
Reporting Comprehensive Income		
This updated guidance requires reclassification from accumulated other comprehensive income to retained earnings for the stranded tax effects resulting from the newly enacted U.S. federal corporate income tax rate. The amount of the reclassification would be the difference between the historical U.S. federal corporate income tax rate and the newly enacted 21 percent tax rate.	December 31, 2017	The Company adopted the new guidance by reclassifying certain income tax effects of items within accumulated other comprehensive income to retained earnings as a result of the Tax Cuts and Jobs Act of 2017. The impact of adopting this standard was an increase in accumulated other comprehensive income and a reduction in retained earnings of approximately $156.4 million.
Stock Compensation	January 1, 2017	
This updated guidance requires excess tax benefits and deficiencies from share-based payment awards be recorded in income tax expense in the income statement. Previously, excess tax benefits and deficiencies were recognized in shareholders’ equity or deferred taxes on the balance sheet depending on the tax		Upon adoption, the Company recognized excess tax benefits of approximately $17.7 million in deferred tax assets that were previously not recognized in a cumulative-effect adjustment increasing retained earnings by $17.7 million. The Company also recorded excess tax benefits of approximately $10.5 million in the provision for income taxes for the year ended December 31, 2017. The number of weighted average diluted shares outstanding were also adjusted to exclude excess tax benefits

situation of the Company. In addition, the updated guidance also changes the accounting for forfeitures and statutory tax withholding requirements, as well as the classification in the statement of cash flows.		from the assumed proceeds in the diluted shares calculation resulting in an immaterial increase in the number of dilutive shares outstanding. The Company also elected to continue estimating forfeitures for purposes of recognizing share-based compensation. Other aspects of the adoption of the updated guidance did not have a material impact to the Company’s consolidated financial statements.
Financial Instruments - Recognition and Measurement This guidance requires equity investments that are not accounted for under the equity method of accounting to be measured at fair value with changes recognized in net income and also updates certain presentation and disclosure requirements.	January 1, 2018	This guidance required a cumulative-effect adjustment for certain items upon adoption. The adoption of the new guidance was not material to the Company's consolidated financial statements.

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Standards not yet adopted:		
Leases		
This new standard, based on the principle that entities should recognize assets and liabilities arising from leases, does not significantly change the lessees' recognition, measurement and presentation of expenses and cash flows from the previous accounting standard. Leases are classified as finance or operating. The new standard's primary change is the requirement for entities to recognize a lease liability for payments and a right of use asset representing the right to use the leased asset during the term of operating lease arrangements. Lessees are permitted to make an accounting policy election to not recognize the asset and liability for leases with a term of twelve months or less. Lessors' accounting is largely unchanged from the previous accounting standard. In addition, the new standard expands the disclosure requirements of lease arrangements. Early adoption is permitted.	January 1, 2019	This new standard will be adopted by applying a modified retrospective transition approach, which includes a number of practical expedients. The Company is currently evaluating the impact of this amendment on its consolidated financial statements; however, it does not expect the adoption of the new standard to have a material impact on its results of operations or balance sheet as a result of the recognition of right-to-use assets and lease liabilities related to operating leases. Contractual obligations related to operating leases totaled approximately $38.2 million as of December 31, 2017.
Derivatives and Hedging		
This updated guidance improves the financial reporting of hedging relationships to better portray the economic results of an entity's risk management activities in its financial statements and make certain targeted improvements to simplify the application of the hedge accounting in current GAAP related to the assessment of hedge effectiveness. Early adoption is permitted.	January 1, 2019	This new guidance will be adopted by applying a modified retrospective approach to existing hedging relationships as of the date of adoption. The Company is currently evaluating the impact of this updated guidance on its consolidated financial statements.
Financial Instruments - Credit Losses		
This guidance adds to U.S. GAAP an impairment model, known as current expected credit loss ("CECL") model that is based on expected losses rather than incurred losses. For traditional and other receivables, held-to-maturity debt securities, loans and other instruments entities will be required to use the new forward-looking "expected loss" model that generally will result in earlier recognition of allowance for losses. For available-for-sale debt securities with unrealized losses, entities will measure credit losses similar to what they do today, except the losses will be recognized as allowances rather than reduction to the amortized cost of the securities. Early adoption is permitted.	January 1, 2020	This guidance will be adopted through a cumulative-effect adjustment to retained earnings as of the beginning of the first reporting period in which the guidance is effective (that is, a modified-retrospective approach). The Company is currently evaluating the impact of this amendment on its consolidated financial statements.

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

Cautionary Note Regarding Forward-Looking Statements

This report contains forward-looking statements within the meaning of the Private Securities Litigation Reform Act of 1995 including, among others, statements relating to projections of the strategies, earnings, revenues, income or loss, ratios, future financial performance, and growth potential of the Company. The words "intend," "expect," "project," "estimate," "predict," "anticipate," "should," "believe," and other similar expressions also are intended to identify forward-looking statements. Forward-looking statements are inherently subject to risks and uncertainties, some of which cannot be predicted or quantified. Future events and actual results, performance, and achievements could differ materially from those set forth in, contemplated by, or underlying the forward-looking statements.

Numerous important factors could cause actual results and events to differ materially from those expressed or implied by forward-looking statements including, without limitation, (1) adverse capital and credit market conditions and their impact on the Company's liquidity, access to capital and cost of capital, (2) the impairment of other financial institutions and its effect on the Company's business, (3) requirements to post collateral or make payments due to declines in market value of assets subject to the Company's collateral arrangements, (4) the fact that the determination of allowances and impairments taken on the Company's investments is highly subjective, (5) adverse changes in mortality, morbidity, lapsation or claims experience, (6) changes in the Company's financial strength and credit ratings and the effect of such changes on the Company's future results of operations and financial condition, (7) inadequate risk analysis and underwriting, (8) general economic conditions or a prolonged economic downturn affecting the demand for insurance and reinsurance in the Company's current and planned markets, (9) the availability and cost of collateral necessary for regulatory reserves and capital, (10) market or economic conditions that adversely affect the value of the Company's investment securities or result in the impairment of all or a portion of the value of certain of the Company's investment securities, that in turn could affect regulatory capital, (11) market or economic conditions that adversely affect the Company's ability to make timely sales of investment securities, (12) risks inherent in the Company's risk management and investment strategy, including changes in investment portfolio yields due to interest rate or credit quality changes, (13) fluctuations in U.S. or foreign currency exchange rates, interest rates, or securities and real estate markets, (14) adverse litigation or arbitration results, (15) the adequacy of reserves, resources and accurate information relating to settlements, awards and terminated and discontinued lines of business, (16) the stability of and actions by governments and economies in the markets in which the Company operates, including ongoing uncertainties regarding the amount of U.S. sovereign debt and the credit ratings thereof, (17) competitive factors and competitors' responses to the Company's initiatives, (18) the success of the Company's clients, (19) successful execution of the Company's entry into new markets, (20) successful development and introduction of new products and distribution opportunities, (21) the Company's ability to successfully integrate acquired blocks of business and entities, (22) action by regulators who have authority over the Company's reinsurance operations in the jurisdictions in which it operates, (23) the Company's dependence on third parties, including those insurance companies and reinsurers to which the Company cedes some reinsurance, third-party investment managers and others, (24) the threat of natural disasters, catastrophes, terrorist attacks, epidemics or pandemics anywhere in the world where the Company or its clients do business, (25) interruption or failure of the Company's telecommunication, information technology or other operational systems, or the Company's failure to maintain adequate security to protect the confidentiality or privacy of personal or sensitive data stored on such systems, (26) changes in laws, regulations, and accounting standards applicable to the Company, its subsidiaries, or its business, (27) the benefits or burdens associated with the Tax Cuts and Jobs Act of 2017 may be different than expected, (28) the effect of the Company's status as an insurance holding company and regulatory restrictions on its ability to pay principal of and interest on its debt obligations, and (29) other risks and uncertainties described in this document and in the Company's other filings with the SEC.

Forward-looking statements should be evaluated together with the many risks and uncertainties that affect the Company's business, including those mentioned in this document and described in the periodic reports the Company files with the SEC. These forward-looking statements speak only as of the date on which they are made. The

Company does not undertake any obligations to update these forward-looking statements, even though the Company's situation may change in the future. For a discussion of these risks and uncertainties that could cause actual results to differ materially from those contained in the forward-looking statements, you are advised to see Item 1A – "Risk Factors" in the 2017 Annual Report.

Overview

The Company is among the leading global providers of life reinsurance and financial solutions, with $3.3 trillion of life reinsurance in force. Traditional reinsurance includes individual and group life and health, disability, and critical illness reinsurance. Financial solutions includes longevity reinsurance, asset-intensive reinsurance, and financial reinsurance. The Company derives revenues primarily from renewal premiums from existing reinsurance treaties, new business premiums from existing or new reinsurance treaties, fee income from financial solutions business and income earned on invested assets.

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

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

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

Segment Presentation

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

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

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

Consolidated Results of Operations

	Three months ended June 30,		Six months ended June 30,	
	2018	2017	2018	2017
Revenues:	(Dollars in thousands, except per share data)			
Net premiums	$2,594,460	$2,480,451	$5,177,011	$4,846,147
Investment income, net of related expenses	528,061	518,538	1,044,390	1,032,902
Investment related gains (losses), net	(10,572)	56,295	(11,042)	116,818
Other revenues	83,959	73,992	159,256	142,149
Total revenues	3,195,908	3,129,276	6,369,615	6,138,016
Benefits and Expenses:				
Claims and other policy benefits	2,279,593	2,164,363	4,641,694	4,270,508
Interest credited	109,327	115,285	189,776	222,969
Policy acquisition costs and other insurance expenses	320,276	319,832	677,178	699,221
Other operating expenses	194,959	154,356	386,233	312,862
Interest expense	37,025	29,352	74,479	71,754
Collateral finance and securitization expense	7,440	6,773	15,042	13,543
Total benefits and expenses	2,948,620	2,789,961	5,984,402	5,590,857

Income before income taxes	247,288	339,315	385,213	547,159
Provision for income taxes	42,914	107,125	80,609	169,457
Net income	$204,374	$232,190	$304,604	$377,702
Earnings per share:				
Basic earnings per share	$3.19	$3.60	$4.74	$5.86
Diluted earnings per share	$3.13	$3.54	$4.65	$5.76
Dividends declared per share	$0.50	$0.41	$1.00	$0.82

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Consolidated income before income taxes decreased $92.0 million, or 27.1%, and $161.9 million, or 29.6%, for the three and six months ended June 30, 2018, respectively, as compared to the same periods in 2017. The decrease in income for the second quarter of 2018 was primarily due to unfavorable claims experience in the U.S. group and individual mortality businesses and an increase in operating expenses related to the Company's strategic initiatives. In addition, the decrease in income for the first six months of 2018 reflects an unfavorable change in investment related gains (losses) largely due to changes in the fair value of embedded derivatives on modco or funds withheld treaties within the U.S. segment primarily related to changes in interest rates and credit spreads. The effect of the change in fair value of these embedded derivatives on income is discussed below. Foreign currency fluctuations relative to the prior year resulted in an increase in income before income taxes by approximately $6.0 million and $14.8 million for the second quarter and first six months of 2018, as compared to the same periods in 2017.

The Company recognizes in consolidated income, any changes in the fair value of embedded derivatives on modco or funds withheld treaties, equity-indexed annuity treaties ("EIAs") and variable annuities with guaranteed minimum benefit riders. The Company utilizes freestanding derivatives to minimize the income statement volatility due to changes in the fair value of embedded derivatives associated with guaranteed minimum benefit riders. The following table presents the effect of embedded derivatives and related freestanding derivatives on income before income taxes for the periods indicated (dollars in thousands):

	Three months ended June 30,		Six months ended June 30,	
	2018	2017	2018	2017
Modco/Funds withheld:				
Unrealized gains (losses)	$8,805	$15,108	$22,416	$83,810
Deferred acquisition costs/retrocession	405	(10,585)	(2,668)	(39,526)
Net effect	9,210	4,523	19,748	44,284
EIAs:				
Unrealized gains (losses)	(565)	7,340	27,998	35,298
Deferred acquisition costs/retrocession	(418)	(4,699)	(15,711	