

REINSURANCE GROUP OF AMERICA INC
Form 10-Q
November 02, 2016
Table of Contents

UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
Washington, D.C. 20549
FORM 10-Q

(Mark One)

QUARTERLY REPORT PURSUANT TO SECTION 13 OR 15(d)
OF THE SECURITIES EXCHANGE ACT OF 1934
For the quarterly period ended September 30, 2016

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 (IRS employer
of incorporation or organization) 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 No

Indicate by check mark whether the registrant has submitted electronically and posted on its corporate Web site, if any, every Interactive Data File required to be submitted and posted pursuant to Rule 405 of Regulation S-T (§232.405 of this chapter) during the preceding 12 months (or for such shorter period that the registrant was required to submit and post such files).

Yes No

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, or a smaller reporting company. See the definitions of "large accelerated filer," "accelerated filer" and "smaller reporting company" in Rule 12b-2 of the Exchange Act. (Check one):

Large accelerated filer Accelerated filer Non-accelerated filer Smaller reporting company

Indicate by check mark whether the registrant is a shell company (as defined in Rule 12b-2 of the Exchange Act).

Yes No

As of October 31, 2016, 64,207,730 shares of the registrant's common stock were outstanding.

Table of ContentsREINSURANCE GROUP OF AMERICA, INCORPORATED AND SUBSIDIARIES
TABLE OF CONTENTS

Item	Page
PART I – FINANCIAL INFORMATION	
1	<u>Financial Statements</u>
	<u>Condensed Consolidated Balance Sheets (Unaudited)</u>
	<u>September 30, 2016 and December 31, 2015</u>
	<u>3</u>
	<u>Condensed Consolidated Statements of Income (Unaudited)</u>
	<u>Three and nine months ended September 30, 2016 and 2015</u>
	<u>4</u>
	<u>Condensed Consolidated Statements of Comprehensive Income (Unaudited)</u>
	<u>Three and nine months ended September 30, 2016 and 2015</u>
	<u>5</u>
	<u>Condensed Consolidated Statements of Cash Flows (Unaudited)</u>
	<u>Nine months ended September 30, 2016 and 2015</u>
	<u>6</u>
	<u>Notes to Condensed Consolidated Financial Statements (Unaudited):</u>
	<u>7</u>
	<u>1. Business and Basis of Presentation</u>
	<u>7</u>
	<u>2. Earnings Per Share</u>
	<u>7</u>
	<u>3. Equity</u>
	<u>8</u>
	<u>4. Investments</u>
	<u>9</u>
	<u>5. Derivative Instruments</u>
	<u>19</u>
	<u>6. Fair Value of Assets and Liabilities</u>
	<u>27</u>
	<u>7. Segment Information</u>
	<u>43</u>
	<u>8. Commitments, Contingencies and Guarantees</u>
	<u>44</u>
	<u>9. Income Tax</u>
	<u>45</u>
	<u>10. Employee Benefit Plans</u>
	<u>46</u>
	<u>11. Equity Based Compensation</u>
	<u>46</u>
	<u>12. Reinsurance</u>
	<u>46</u>
	<u>13. Financing Activities</u>
	<u>47</u>
	<u>14. New Accounting Standards</u>
	<u>47</u>
2	<u>Management’s Discussion and Analysis of</u>
	<u>Financial Condition and Results of Operations</u>
	<u>50</u>
3	<u>Quantitative and Qualitative Disclosures About Market Risk</u>
	<u>83</u>
4	<u>Controls and Procedures</u>
	<u>84</u>
PART II – OTHER INFORMATION	
1	<u>Legal Proceedings</u>
	<u>85</u>
1A	<u>Risk Factors</u>
	<u>85</u>
2	<u>Unregistered Sales of Equity Securities and Use of Proceeds</u>
	<u>85</u>
6	<u>Exhibits</u>
	<u>85</u>
	<u>Signatures</u>
	<u>86</u>
	<u>Index to Exhibits</u>
	<u>87</u>

Table of Contents

PART I - FINANCIAL INFORMATION

ITEM 1. Financial Statements

REINSURANCE GROUP OF AMERICA, INCORPORATED AND SUBSIDIARIES

CONDENSED CONSOLIDATED BALANCE SHEETS

(Unaudited)

	September 30, 2016	December 31, 2015
	(Dollars in thousands, except share data)	
Assets		
Fixed maturity securities:		
Available-for-sale at fair value (amortized cost of \$30,097,896 and \$28,322,977)	\$ 33,536,419	\$ 29,642,905
Mortgage loans on real estate (net of allowances of \$6,746 and \$6,813)	3,607,700	3,129,951
Policy loans	1,414,963	1,468,796
Funds withheld at interest	5,922,656	5,880,203
Short-term investments	126,702	558,284
Other invested assets	1,777,065	1,298,120
Total investments	46,385,505	41,978,259
Cash and cash equivalents	1,379,693	1,525,275
Accrued investment income	391,837	339,452
Premiums receivable and other reinsurance balances	1,834,362	1,797,504
Reinsurance ceded receivables	694,906	637,859
Deferred policy acquisition costs	3,406,093	3,392,437
Other assets	740,102	712,366
Total assets	\$ 54,832,498	\$ 50,383,152
Liabilities and Stockholders' Equity		
Future policy benefits	\$ 19,634,157	\$ 19,612,251
Interest-sensitive contract liabilities	14,217,831	13,663,873
Other policy claims and benefits	4,304,491	4,094,640
Other reinsurance balances	353,426	296,899
Deferred income taxes	3,071,995	2,218,328
Other liabilities	1,321,017	1,165,071
Short-term debt	299,876	—
Long-term debt	2,788,834	2,297,548
Collateral finance and securitization notes	847,389	899,161
Total liabilities	46,839,016	44,247,771
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 September 30, 2016 and December 31, 2015	791	791
Additional paid-in capital	1,842,390	1,816,142
Retained earnings	5,039,470	4,620,303
Treasury stock, at cost - 14,931,485 and 13,933,232 shares	(1,101,495)	(1,010,139)
Accumulated other comprehensive income	2,212,326	708,284

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Total stockholders' equity	7,993,482	6,135,381
Total liabilities and stockholders' equity	\$ 54,832,498	\$ 50,383,152
See accompanying notes to condensed consolidated financial statements (unaudited).		

3

Table of Contents

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

	Three months ended		Nine months ended	
	September 30,		September 30,	
	2016	2015	2016	2015
(Dollars in thousands, except per share data)				
Revenues:				
Net premiums	\$2,251,758	\$2,089,345	\$6,755,708	\$6,242,240
Investment income, net of related expenses	489,727	389,597	1,414,659	1,267,027
Investment related gains (losses), net:				
Other-than-temporary impairments on fixed maturity securities	—	(23,111)	(34,663)	(29,775)
Other investment related gains (losses), net	86,624	(88,235)	118,665	(90,166)
Total investment related gains (losses), net	86,624	(111,346)	84,002	(119,941)
Other revenues	72,468	71,038	197,844	200,261
Total revenues	2,900,577	2,438,634	8,452,213	7,589,587
Benefits and Expenses:				
Claims and other policy benefits	1,993,064	1,831,819	5,877,330	5,473,453
Interest credited	116,848	34,008	300,602	231,932
Policy acquisition costs and other insurance expenses	300,962	249,702	940,406	827,157
Other operating expenses	152,556	142,270	469,875	395,488
Interest expense	43,063	35,565	96,201	107,043
Collateral finance and securitization expense	6,484	5,133	19,396	16,462
Total benefits and expenses	2,612,977	2,298,497	7,703,810	7,051,535
Income before income taxes	287,600	140,137	748,403	538,052
Provision for income taxes	88,881	56,603	237,109	199,013
Net income	\$198,719	\$83,534	\$511,294	\$339,039
Earnings per share:				
Basic earnings per share	\$3.10	\$1.26	\$7.95	\$5.07
Diluted earnings per share	\$3.07	\$1.25	\$7.87	\$5.01
Dividends declared per share	\$0.41	\$0.37	\$1.15	\$1.03

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

Table of Contents

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

	Three months ended September 30, 2016		Nine months ended September 30, 2016	
	2015	2016	2015	2016
Comprehensive income (loss)	(Dollars in thousands)			
Net income	\$198,719	\$83,534	\$511,294	\$339,039
Other comprehensive income (loss), net of tax:				
Foreign currency translation adjustments	(28,233)	(105,504)	59,442	(201,340)
Net unrealized investment gains	254,658	(139,066)	1,445,776	(552,783)
Defined benefit pension and postretirement plan adjustments	527	1,685	(1,176)	3,473
Total other comprehensive income (loss), net of tax	226,952	(242,885)	1,504,042	(750,650)
Total comprehensive income (loss)	\$425,671	\$(159,351)	\$2,015,336	\$(411,611)
See accompanying notes to condensed consolidated financial statements (unaudited).				

Table of ContentsREINSURANCE GROUP OF AMERICA, INCORPORATED AND SUBSIDIARIES
CONDENSED CONSOLIDATED STATEMENTS OF CASH FLOWS

(Unaudited)

	Nine months ended September 30,	
	2016	2015
	(Dollars in thousands)	
Cash Flows from Operating Activities:		
Net income	\$511,294	\$339,039
Adjustments to reconcile net income to net cash provided by operating activities:		
Change in operating assets and liabilities:		
Accrued investment income	(58,863	) (47,088)
Premiums receivable and other reinsurance balances	(3,619	) (100,804)
Deferred policy acquisition costs	(15,059	) (42,855)
Reinsurance ceded receivable balances	(77,741	) (42,620)
Future policy benefits, other policy claims and benefits, and other reinsurance balances	479,606	594,389
Deferred income taxes	165,988	128,557
Other assets and other liabilities, net	29,343	(14,670)
Amortization of net investment premiums, discounts and other	(55,967	) (61,714)
Investment related (gains) losses, net	(84,002	) 119,941
Excess tax benefits from share-based payment arrangement	—	(2,884)
Other, net	128,892	9,175
Net cash provided by operating activities	1,019,872	878,466
Cash Flows from Investing Activities:		
Sales of fixed maturity securities available-for-sale	3,649,187	3,904,948
Maturities of fixed maturity securities available-for-sale	349,836	342,126
Sales of equity securities	331,978	63,797
Principal payments on mortgage loans on real estate	377,671	223,807
Principal payments on policy loans	59,518	531
Purchases of fixed maturity securities available-for-sale	(5,938,302	) (3,746,290)
Purchases of equity securities	(523,499	) (75,396)
Cash invested in mortgage loans on real estate	(857,445	) (686,878)
Cash invested in policy loans	(5,685	) (6,628)
Cash invested in funds withheld at interest	(31,222	) (63,390)
Purchase of businesses, net of cash acquired of \$19,377	—	(195,151)
Purchases of property and equipment	—	(24,240)
Cash paid under securities repurchase agreements	—	(101,203)
Change in short-term investments	418,625	35,014
Change in other invested assets	(78,068	) 144,011
Net cash used in investing activities	(2,247,406	) (184,942)
Cash Flows from Financing Activities:		
Dividends to stockholders	(74,034	) (69,111)
Repayment of collateral finance and securitization notes	(60,971	) (19,732)
Proceeds from issuance of collateral finance and securitization notes	—	160,060
Proceeds from long-term debt issuance	799,984	—
Debt issuance costs	(9,026	) (1,074)
Principal payments of long-term debt	(1,850) (1,776)
Purchases of treasury stock	(121,896) (333,432)

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Excess tax benefits from share-based payment arrangement	—	2,884
Exercise of stock options, net	11,752	12,551
Change in cash collateral for derivative positions and other arrangements	24,749	60,202
Deposits on universal life and other investment type policies and contracts	874,708	204,456
Withdrawals on universal life and other investment type policies and contracts	(386,900)	(556,821)
Net cash provided by (used in) financing activities	1,056,516	(541,793)
Effect of exchange rate changes on cash	25,436	(49,708)
Change in cash and cash equivalents	(145,582)	102,023
Cash and cash equivalents, beginning of period	1,525,275	1,645,669
Cash and cash equivalents, end of period	\$1,379,693	\$1,747,692
Supplemental disclosures of cash flow information:		
Interest paid	\$114,043	\$103,481
Income taxes paid, net of refunds	\$47,312	\$13,494
Non-cash transactions:		
Transfer of invested assets	\$3,621	\$342,082
Accrual for capitalized assets	\$—	\$804
Purchase of businesses:		
Assets acquired, excluding cash acquired	\$—	\$3,685,708
Liabilities assumed	—	(3,490,557)
Net cash paid on purchase	\$—	\$195,151
See accompanying notes to condensed consolidated financial statements (unaudited).		

Table of Contents

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 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 accounting principles generally accepted in the United States of America 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 nine months ended September 30, 2016 are not necessarily indicative of the results that may be expected for the year ending December 31, 2016. 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 2015 Annual Report on Form 10-K filed with the Securities and Exchange Commission (“SEC”) on February 29, 2016 (the “2015 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 September 30,		Nine months ended September 30,	
	2016	2015	2016	2015
Earnings:				
Net income (numerator for basic and diluted calculations)	\$ 198,719	\$ 83,534	\$ 511,294	\$ 339,039
Shares:				
Weighted average outstanding shares (denominator for basic calculation)	64,146	66,205	64,281	66,895
Equivalent shares from outstanding stock options	669	677	663	749
Denominator for diluted calculation	64,815	66,882	64,944	67,644
Earnings per share:				
Basic	\$ 3.10	\$ 1.26	\$ 7.95	\$ 5.07
Diluted	\$ 3.07	\$ 1.25	\$ 7.87	\$ 5.01

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. For the three months ended September 30, 2016, no stock options and approximately 0.7 million performance contingent shares were excluded from the calculation. For the three months ended September 30, 2015, no stock options and approximately 0.7 million performance contingent shares were excluded from the calculation. Year-to-date amounts for equivalent shares from outstanding stock options and performance contingent shares are the weighted average of the individual quarterly amounts.

Table of Contents

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, 2015	79,137,758	13,933,232	65,204,526
Common stock acquired	—	1,356,892	(1,356,892)
Stock-based compensation ⁽¹⁾	—	(358,639)	358,639
Balance, September 30, 2016	79,137,758	14,931,485	64,206,273
	Issued	Held In Treasury	Outstanding
Balance, December 31, 2014	79,137,758	10,364,797	68,772,961
Common stock acquired	—	3,573,797	(3,573,797)
Stock-based compensation ⁽¹⁾	—	(550,237)	550,237
Balance, September 30, 2015	79,137,758	13,388,357	65,749,401

(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.

On January 21, 2016, 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. In connection with this new authorization, the board of directors terminated the stock repurchase authority granted in 2015. During the first nine months of 2016, RGA repurchased 1.4 million shares of common stock under this program for \$116.5 million.

Accumulated Other Comprehensive Income (Loss)

The balance of and changes in each component of accumulated other comprehensive income (loss) ("AOCI") for the nine months ended September 30, 2016 and 2015 are as follows (dollars in thousands):

	AOCI, Net of Income Tax			
	Accumulated	Unrealized		
	Currency	Appreciation	Pension and	Total
	Translation	(Depreciation)	Postretirement	
	Adjustments	of Investments ⁽¹⁾	Benefits	
Balance, December 31, 2015	\$(181,151)	\$ 935,697	\$ (46,262)	\$ 708,284
Other comprehensive income (loss) before reclassifications	68,271	2,191,823	(6,079)	2,254,015
Amounts reclassified to (from) AOCI	—	(109,145)	4,253	(104,892)
Deferred income tax benefit (expense)	(8,829)	(636,902)	650	(645,081)
Balance, September 30, 2016	\$(121,709)	\$ 2,381,473	\$ (47,438)	\$ 2,212,326
	AOCI, Net of Income Tax			
	Accumulated	Unrealized		
	Currency	Appreciation	Pension and	Total
	Translation	(Depreciation)	Postretirement	
	Adjustments	of Investments ⁽¹⁾	Benefits	
Balance, December 31, 2014	\$81,847	\$ 1,624,773	\$ (49,491)	\$ 1,657,129
	(176,562)	(843,541)	1,254	(1,018,849)

Other comprehensive income (loss) before reclassifications

Amounts reclassified to (from) AOCI	—	34,790	4,002	38,792
Deferred income tax benefit (expense)	(24,778	) 255,968	(1,783	) 229,407
Balance, September 30, 2015	\$(119,493)	\$ 1,071,990	\$ (46,018	) \$906,479

Includes cash flow hedges of \$(40,597) and \$(29,397) as of September 30, 2016 and December 31, 2015, (1) respectively, and \$(37,167) and \$(31,591) as of September 30, 2015 and December 31, 2014, respectively. See Note 5 - "Derivative Instruments" for additional information on cash flow hedges.

Table of Contents

The following table presents the amounts of AOCI reclassifications for the three and nine months ended September 30, 2016 and 2015 (dollars in thousands):

Details about AOCI Components	Amount Reclassified from AOCI				Affected Line Item in Statements of Income
	Three months ended September 30,		Nine months ended September 30,		
	2016	2015	2016	2015	
Net unrealized investment gains (losses):					
Net unrealized gains (losses) on available-for-sale securities	\$72,351	\$(31,506)	\$84,250	\$(26,598)	Investment related gains (losses), net
Cash flow hedges - Interest rate swaps	200	(60)	454	231	(1)
Cash flow hedges - Forward bond purchase commitments	137	127	(120)	1,094	(1)
Deferred policy acquisition costs attributed to unrealized gains and losses	12,090	(9,543)	24,561	(9,517)	(2)
Total	84,778	(40,982)	109,145	(34,790)	
Provision for income taxes	(27,680)	13,948	(32,676)	13,410	
Net unrealized gains (losses), net of tax	\$57,098	\$(27,034)	\$76,469	\$(21,380)	
Amortization of defined benefit plan items:					
Prior service cost	\$391	\$(82)	\$238	\$(245)	(3)
Actuarial gains (losses)	(1,177)	(1,955)	(4,491)	(3,757)	(3)
Total	(786)	(2,037)	(4,253)	(4,002)	
Provision for income taxes	276	713	1,489	1,401	
Amortization of defined benefit plans, net of tax	\$(510)	\$(1,324)	\$(2,764)	\$(2,601)	

Total reclassifications for the period \$56,588 \$(28,358) \$73,705 \$(23,981)

(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 2015 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.

4. Investments

Fixed Maturity and Equity Securities Available-for-Sale

The following tables provide information relating to investments in fixed maturity and equity securities by sector as of September 30, 2016 and December 31, 2015 (dollars in thousands):

September 30, 2016:	Amortized Cost	Unrealized Gains	Unrealized Losses	Estimated Fair Value	% of Total	Other-than-temporary impairments in AOCI
Available-for-sale:						
Corporate securities	\$18,762,648	\$1,498,816	\$96,616	\$20,164,848	60.2 %	\$ —
Canadian and Canadian provincial governments	2,598,625	1,541,754	—	4,140,379	12.3	—
Residential mortgage-backed securities	1,247,677	67,854	3,839	1,311,692	3.9	(300)
Asset-backed securities	1,388,263	13,706	19,395	1,382,574	4.1	275
Commercial mortgage-backed securities	1,402,249	73,402	618	1,475,033	4.4	(1,609)

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U.S. government and agencies	1,479,295	80,402	161	1,559,536	4.7	—
State and political subdivisions	549,669	72,598	4,418	617,849	1.8	—
Other foreign government, supranational and foreign government-sponsored enterprises	2,669,470	220,274	5,236	2,884,508	8.6	—
Total fixed maturity securities	\$30,097,896	\$3,568,806	\$ 130,283	\$33,536,419	100.0%	\$ (1,634)
Non-redeemable preferred stock	\$56,944	\$2,512	\$6,604	\$52,852	12.6 %	
Other equity securities	360,839	7,013	456	367,396	87.4	
Total equity securities	\$417,783	\$9,525	\$ 7,060	\$420,248	100.0%	

9

Table of Contents

December 31, 2015:	Amortized Cost	Unrealized Gains	Unrealized Losses	Estimated Fair Value	% of Total	Other-than- temporary impairments in AOCI
Available-for-sale:						
Corporate securities	\$ 17,575,507	\$ 599,718	\$ 467,069	\$ 17,708,156	59.7 %	\$ —
Canadian and Canadian provincial governments	2,469,009	1,110,282	2,532	3,576,759	12.1	—
Residential mortgage-backed securities	1,277,998	45,152	11,673	1,311,477	4.4	(300)
Asset-backed securities	1,219,000	12,052	18,376	1,212,676	4.1	354
Commercial mortgage-backed securities	1,456,848	37,407	11,168	1,483,087	5.0	(1,609)
U.S. government and agencies	1,423,791	15,586	57,718	1,381,659	4.7	—
State and political subdivisions	480,067	40,014	9,067	511,014	1.7	—
Other foreign government, supranational and foreign government-sponsored enterprises	2,420,757	78,964	41,644	2,458,077	8.3	—
Total fixed maturity securities	\$ 28,322,977	\$ 1,939,175	\$ 619,247	\$ 29,642,905	100.0 %	\$ (1,555)
Non-redeemable preferred stock	\$ 85,645	\$ 7,837	\$ 5,962	\$ 87,520	69.5 %	
Other equity securities	40,584	—	2,242	38,342	30.5	
Total equity securities	\$ 126,229	\$ 7,837	\$ 8,204	\$ 125,862	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 September 30, 2016 and December 31, 2015, none of the collateral received had been sold or repledged. The Company also holds assets in trust to satisfy collateral requirements under 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 certain third-party reinsurance treaties as of September 30, 2016 and December 31, 2015 (dollars in thousands):

	September 30, 2016		December 31, 2015	
	Amortized Cost	Estimated Fair Value	Amortized Cost	Estimated Fair Value
Fixed maturity securities pledged as collateral	\$ 191,791	\$ 201,124	\$ 169,678	\$ 176,782
Fixed maturity securities received as collateral	n/a	320,838	n/a	242,914
Assets in trust held to satisfy collateral requirements	12,258,854	3,525,565	10,535,729	10,928,393

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 September 30, 2016 and December 31, 2015 (dollars in thousands).

	September 30, 2016		December 31, 2015	
	Amortized Cost	Estimated Fair Value	Amortized Cost	Estimated Fair Value
Fixed maturity securities guaranteed or issued by:				
Canadian province of Ontario	\$ 843,239	\$ 1,254,701	\$ 864,444	\$ 1,199,080
Canadian province of Quebec	1,021,325	1,877,335	943,484	1,525,903

The amortized cost and estimated fair value of fixed maturity securities classified as available-for-sale at September 30, 2016 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.

Table of Contents

	Amortized Cost	Estimated Fair Value
Available-for-sale:		
Due in one year or less	\$728,318	\$733,750
Due after one year through five years	6,519,471	6,847,608
Due after five years through ten years	8,991,047	9,689,531
Due after ten years	9,820,871	12,096,231
Asset and mortgage-backed securities	4,038,189	4,169,299
Total	\$30,097,896	\$33,536,419

Corporate Fixed Maturity Securities

The tables below show the major industry types of the Company's corporate fixed maturity holdings as of September 30, 2016 and December 31, 2015 (dollars in thousands):

September 30, 2016:	Amortized Cost	Estimated Fair Value	% of Total	
Finance	\$ 6,530,758	\$6,916,195	34.4	%
Industrial	10,241,489	11,028,232	54.6	
Utility	1,990,401	2,220,421	11.0	
Total	\$ 18,762,648	\$20,164,848	100.0	%

December 31, 2015:	Amortized Cost	Estimated Fair Value	% of Total	
Finance	\$ 5,408,791	\$5,555,044	31.4	%
Industrial	10,211,426	10,129,917	57.2	
Utility	1,955,290	2,023,195	11.4	
Total	\$ 17,575,507	\$17,708,156	100.0	%

Other-Than-Temporary Impairments - Fixed Maturity and Equity Securities

As discussed in Note 2 – “Summary of Significant Accounting Policies” of the 2015 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 September 30, 2016		Nine months ended September 30, 2015	
Balance, beginning of period	\$6,974	\$7,284	\$7,284	\$7,284
Credit loss OTTI previously recognized on securities which matured, paid down, prepaid or were sold during the period	—	—	(310)	—
Balance, end of period	\$6,974	\$7,284	\$6,974	\$7,284

Table of Contents

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

The following table presents the total gross unrealized losses for the 755 and 2,080 fixed maturity and equity securities as of September 30, 2016 and December 31, 2015, respectively, where the estimated fair value had declined and remained below amortized cost by the indicated amount (dollars in thousands):

	September 30, 2016			December 31, 2015		
	Gross			Gross		
	Unrealized	% of Total		Unrealized	% of Total	
	Losses			Losses		
Less than 20%	\$88,034	64.1	%	\$463,109	73.8	%
20% or more for less than six months	12,551	9.1		142,495	22.7	
20% or more for six months or greater	36,758	26.8		21,847	3.5	
Total	\$137,343	100.0	%	\$627,451	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. In the Company's impairment review process, the duration and severity of an unrealized loss position for equity securities are given greater weight and consideration given the lack of contractual cash flows or deferability features.

The following tables present the estimated fair values and gross unrealized losses, including other-than-temporary impairment losses reported in AOCI, for 755 and 2,080 fixed maturity and equity securities that have estimated fair values below amortized cost as of September 30, 2016 and December 31, 2015, respectively (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.

	Less than 12 months		12 months or greater		Total	
	Gross		Gross		Gross	
	Estimated	Unrealized	Estimated	Unrealized	Estimated	Unrealized
	Fair Value	Losses	Fair Value	Losses	Fair Value	Losses
September 30, 2016:						
Investment grade securities:						
Corporate securities	\$775,973	\$11,522	\$567,398	\$29,794	\$1,343,371	\$41,316
Residential mortgage-backed securities	85,970	593	107,240	3,236	193,210	3,829
Asset-backed securities	341,260	4,816	314,518	11,488	655,778	16,304
Commercial mortgage-backed securities	51,965	193	22,415	425	74,380	618
U.S. government and agencies	86,499	161	—	—	86,499	161
State and political subdivisions	53,229	841	13,141	3,577	66,370	4,418
Other foreign government, supranational and foreign government-sponsored enterprises	131,702	1,077	51,862	2,340	183,564	3,417
Total investment grade securities	1,526,598	19,203	1,076,574	50,860	2,603,172	70,063
Below investment grade securities:						
Corporate securities	314,962	9,132	168,865	46,168	483,827	55,300
Residential mortgage-backed securities	—	—	369	10	369	10
Asset-backed securities	5,858	731	14,707	2,360	20,565	3,091
Other foreign government, supranational and foreign government-sponsored enterprises	6,194	22	42,501	1,797	48,695	1,819
Total below investment grade securities	327,014	9,885	226,442	50,335	553,456	60,220
Total fixed maturity securities	\$1,853,612	\$29,088	\$1,303,016	\$101,195	\$3,156,628	\$130,283

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Non-redeemable preferred stock	\$3,413	\$ 96	\$23,786	\$ 6,508	\$27,199	\$ 6,604
Other equity securities	96,635	210	6,806	246	103,441	456
Total equity securities	\$100,048	\$ 306	\$30,592	\$ 6,754	\$130,640	\$ 7,060

12

Table of Contents

December 31, 2015:	Less than 12 months		12 months or greater		Total	
	Estimated Fair Value	Gross Unrealized Losses	Estimated Fair Value	Gross Unrealized Losses	Estimated Fair Value	Gross Unrealized Losses
Investment grade securities:						
Corporate securities	\$6,388,148	\$323,961	\$294,755	\$40,861	\$6,682,903	\$364,822
Canadian and Canadian provincial governments	122,746	2,532	—	—	122,746	2,532
Residential mortgage-backed securities	452,297	7,036	82,314	4,057	534,611	11,093
Asset-backed securities	581,701	9,825	199,298	7,100	780,999	16,925
Commercial mortgage-backed securities	514,877	9,806	31,177	997	546,054	10,803
U.S. government and agencies	1,010,387	57,718	—	—	1,010,387	57,718
State and political subdivisions	157,837	5,349	13,016	3,718	170,853	9,067
Other foreign government, supranational and foreign government-sponsored enterprises	702,962	18,279	38,379	4,206	741,341	22,485
Total investment grade securities	9,930,955	434,506	658,939	60,939	10,589,894	495,445
Below investment grade securities:						
Corporate securities	554,688	71,171	114,427	31,076	669,115	102,247
Residential mortgage-backed securities	22,646	282	7,679	298	30,325	580
Asset-backed securities	6,772	201	9,335	1,250	16,107	1,451
Commercial mortgage-backed securities	3,253	248	767	117	4,020	365
Other foreign government, supranational and foreign government-sponsored enterprises	60,668	7,356	31,693	11,803	92,361	19,159
Total below investment grade securities	648,027	79,258	163,901	44,544	811,928	123,802
Total fixed maturity securities	\$10,578,982	\$513,764	\$822,840	\$105,483	\$11,401,822	\$619,247
Non-redeemable preferred stock	\$12,331	\$2,175	\$12,191	\$3,787	\$24,522	\$5,962
Other equity securities	38,327	2,242	—	—	38,327	2,242
Total equity securities	\$50,658	\$4,417	\$12,191	\$3,787	\$62,849	\$8,204

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 and equity 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 September 30, 2016 are primarily related to high-yield corporate securities. Unrealized losses decreased across most security types as treasury rates decreased during the first nine months of 2016.

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		Nine months ended	
	September 30, 2016	2015	September 30, 2016	2015
Fixed maturity securities available-for-sale	\$325,089	\$298,376	\$961,096	\$871,936
Mortgage loans on real estate	39,802	36,547	121,494	108,440
Policy loans	15,391	16,475	47,897	46,763
Funds withheld at interest	104,609	40,382	273,482	239,967

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Short-term investments	952	576	2,912	2,085
Other invested assets	21,938	13,696	61,249	48,141
Investment income	507,781	406,052	1,468,130	1,317,332
Investment expense	(18,054)	(16,455)	(53,471)	(50,305)
Investment income, net of related expenses	\$489,727	\$389,597	\$1,414,659	\$1,267,027

13

Table of Contents

Investment Related Gains (Losses), Net

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

	Three months ended September 30,		Nine months ended September 30,	
	2016	2015	2016	2015
Fixed maturity and equity securities available for sale:				
Other-than-temporary impairment losses on fixed maturity securities recognized in earnings	\$—	\$(23,111)	\$(34,663)	\$(29,775)
Gain on investment activity	46,346	13,792	127,153	53,002
Loss on investment activity	(9,054)	(22,186)	(43,397)	(50,257)
Other impairment losses and change in mortgage loan provision	(262)	(636)	(2,111)	(4,661)
Derivatives and other, net	49,594	(79,205)	37,020	(88,250)
Total investment related gains (losses), net	\$86,624	\$(111,346)	\$84,002	\$(119,941)

The fixed maturity impairments for the nine months ended September 30, 2016 were largely related to high-yield energy and emerging market corporate securities. The fixed maturity impairments for the three and nine months ended September 30, 2015 were largely related to high-yield energy and emerging market corporate securities. The fluctuations in investment related gains (losses) for derivatives and other for the three and nine months ended September 30, 2016, compared to the same periods in 2015, are primarily due to changes in the fair value of embedded derivatives and interest rate swaps.

During the three months ended September 30, 2016 and 2015, the Company sold fixed maturity and equity securities with fair values of \$317.3 million and \$404.1 million at losses of \$9.1 million and \$22.2 million, respectively. During the nine months ended September 30, 2016 and 2015, the Company sold fixed maturity and equity securities with fair values of \$903.1 million and \$1,255.0 million at losses of \$43.4 million and \$50.3 million, respectively. The Company generally does not buy and sell securities on a short-term basis.

Securities Borrowing, Lending and Other

The Company participates in securities borrowing programs whereby securities, which are not reflected on the Company's condensed consolidated balance sheets, are borrowed from third parties. The borrowed securities are used to provide collateral under affiliated reinsurance transactions. The Company is required to maintain a minimum of 100% of the fair value, or par value, under certain programs, of the borrowed securities as collateral. The collateral consists of rights to reinsurance treaty cash flows. If cash flows from the reinsurance treaties are insufficient to maintain the minimum collateral requirement, the Company may substitute cash or securities to meet the requirement. No cash or securities have been pledged by the Company for this purpose.

The Company also participates in a securities lending program whereby securities, reflected as investments on the Company's condensed consolidated balance sheets, are loaned to a third party. The Company receives securities as collateral, in an amount equal to a minimum of 105% of the fair value of the securities lent. The securities received are not reflected on the Company's condensed consolidated balance sheets.

The Company also participates in a repurchase/reverse repurchase program in which securities, reflected as investments on the Company's condensed consolidated balance sheets, are pledged to a third party. In return, the Company receives securities from the third party with an estimated fair value equal to a minimum of 100% of the securities pledged. The securities received are not reflected on the Company's condensed consolidated balance sheets.

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 September 30, 2016 and December 31, 2015 (dollars in thousands).

	September 30, 2016		December 31, 2015	
	Amortized Cost	Estimated Fair Value	Amortized Cost	Estimated Fair Value
Borrowed securities	\$267,360	\$288,310	\$259,540	\$266,297

Securities lending:				
Securities loaned	60,375	62,104	—	—
Securities received	n/a	65,000	n/a	—
Repurchase program/reverse repurchase program:				
Securities pledged	442,510	475,820	443,435	465,889
Securities received	n/a	514,052	n/a	481,197

14

Table of Contents

The following table presents information on the Company's securities lending and repurchase transactions as of September 30, 2016 and December 31, 2015 (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.

	September 30, 2016				
	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 securities	\$—	\$—	\$—	\$62,104	\$62,104
Total	—	—	—	62,104	62,104
Repurchase transactions:					
Corporate securities	—	3,906	5,239	133,551	142,696
Residential mortgage-backed securities	—	—	—	98,884	98,884
U.S. government and agencies	—	—	30,011	181,754	211,765
Foreign government	—	—	—	15,941	15,941
Other	6,534	—	—	—	6,534
Total	6,534	3,906	35,250	430,130	475,820
Total transactions	\$6,534	\$3,906	\$35,250	\$492,234	\$537,924

Gross amount of recognized liabilities for securities lending and repurchase transactions in preceding table \$579,052
Amounts related to agreements not included in offsetting disclosure \$41,128

	December 31, 2015				
	Remaining Contractual Maturity of the Agreements				
	Overnight and Continuous	Up to 30 Days	30-90 Days	Greater than 90 Days	Total
Repurchase transactions:					
Corporate securities	\$—	\$2,951	\$—	\$147,324	\$150,275
Residential mortgage-backed securities	—	—	—	97,639	97,639
U.S. government and agencies	—	—	—	199,431	199,431
Foreign government	—	—	—	3,358	3,358
Other	15,186	—	—	—	15,186
Total transactions	\$15,186	\$2,951	\$—	\$147,324	\$165,461

Gross amount of recognized liabilities for repurchase agreement in preceding table \$481,197
Amounts related to agreements not included in offsetting disclosure \$15,308

The Company has elected to offset amounts recognized as receivables and payables resulting from the repurchase/reverse repurchase program. After the effect of offsetting, the net amount presented on the condensed consolidated balance sheet as of September 30, 2016 was a liability of \$3.3 million. Amounts owed to and due from the counterparties may be settled in cash or offset, in accordance with the agreements.

Table of Contents

Mortgage Loans on Real Estate

Mortgage loans represented approximately 7.8% and 7.5% of the Company's total investments as of September 30, 2016 and December 31, 2015. The Company makes mortgage loans on income producing properties that are geographically diversified, with the largest concentration being in the state of California, which represented 23.4% and 22.3% of mortgage loans on real estate as of September 30, 2016 and December 31, 2015, respectively.

Loan-to-value ratios at the time of loan approval are 75% or less. The distribution of mortgage loans by property type, gross of valuation allowances, is as follows as of September 30, 2016 and December 31, 2015 (dollars in thousands):

Property type:	September 30, 2016		December 31, 2015	
	Recorded Investment	% of Total	Recorded Investment	% of Total
Office building	\$1,173,087	32.4 %	\$980,858	31.3 %
Retail	1,116,602	30.9	1,026,018	32.7
Industrial	703,407	19.5	527,485	16.8
Apartment	436,290	12.1	420,014	13.4
Other commercial	185,060	5.1	182,389	5.8
Total	\$3,614,446	100.0%	\$3,136,764	100.0%

The maturities of the mortgage loans, gross of valuation allowances, as of September 30, 2016 and December 31, 2015 are as follows (dollars in thousands):

	September 30, 2016		December 31, 2015	
	Recorded Investment	% of Total	Recorded Investment	% of Total
Due within five years	\$793,736	22.0 %	\$873,280	27.8 %
Due after five years through ten years	1,952,001	54.0	1,561,535	49.8
Due after ten years	868,709	24.0	701,949	22.4
Total	\$3,614,446	100.0%	\$3,136,764	100.0%

Information regarding the Company's credit quality indicators, as determined by the Company's internal evaluation methodology for its recorded investment in mortgage loans, gross of valuation allowances, as of September 30, 2016 and December 31, 2015 is as follows (dollars in thousands):

Internal credit quality grade:	September 30, 2016		December 31, 2015	
	Recorded Investment	% of Total	Recorded Investment	% of Total
High investment grade	\$2,097,202	58.0 %	\$1,621,601	51.7 %
Investment grade	1,430,439	39.6	1,397,996	44.6
Average	44,097	1.2	87,196	2.8
Watch list	35,794	1.0	13,550	0.4
In or near default	6,914	0.2	16,421	0.5
Total	\$3,614,446	100.0%	\$3,136,764	100.0%

None of the payments due to the Company on its recorded investment in mortgage loans were delinquent as of September 30, 2016 and December 31, 2015.

Table of Contents

The following table presents the recorded investment in mortgage loans, by method of measuring impairment, and the related valuation allowances as of September 30, 2016 and December 31, 2015 (dollars in thousands):

	September 30, 2016	December 31, 2015
Mortgage loans:		
Individually measured for impairment	\$6,913	\$16,421
Collectively measured for impairment	3,607,533	3,120,343
Mortgage loans, gross of valuation allowances	3,614,446	3,136,764
Valuation allowances:		
Individually measured for impairment	—	588
Collectively measured for impairment	6,746	6,225
Total valuation allowances	6,746	6,813
Mortgage loans, net of valuation allowances	\$3,607,700	\$3,129,951

Information regarding the Company's loan valuation allowances for mortgage loans for the three and nine months ended September 30, 2016 and 2015 is as follows (dollars in thousands):

	Three months ended September 30, 2016		Nine months ended September 30, 2015	
Balance, beginning of period	\$6,499	\$5,942	\$6,813	\$6,471
Provision (release)	247	(290)	(67)	(819)
Balance, end of period	\$6,746	\$5,652	\$6,746	\$5,652

Information regarding the portion of the Company's mortgage loans that were impaired as of September 30, 2016 and December 31, 2015 is as follows (dollars in thousands):

	Unpaid Principal Balance	Recorded Investment	Related Allowance	Carrying Value
September 30, 2016:				
Impaired mortgage loans with no valuation allowance recorded	\$7,416	\$6,913	\$—	\$6,913
Impaired mortgage loans with valuation allowance recorded	—	—	—	—
Total impaired mortgage loans	\$7,416	\$6,913	\$—	\$6,913
December 31, 2015:				
Impaired mortgage loans with no valuation allowance recorded	\$4,033	\$4,033	\$—	\$4,033
Impaired mortgage loans with valuation allowance recorded	12,898	12,388	588	11,800
Total impaired mortgage loans	\$16,931	\$16,421	\$588	\$15,833

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 September 30, 2016		September 30, 2015	
	Average Recorded Investment	Interest Income	Average Recorded Investment	Interest Income
Impaired mortgage loans with no valuation allowance recorded	\$6,953	\$107	\$6,364	\$71
Impaired mortgage loans with valuation allowance recorded	—	—	12,495	194
Total impaired mortgage loans	\$6,953	\$107	\$18,859	\$265

	Nine months ended September 30,			
	2016		2015	
	Average Recorded Investment ⁽¹⁾	Interest Income	Average Recorded Investment ⁽¹⁾	Interest Income
Impaired mortgage loans with no valuation allowance recorded	\$4,687	\$ 324	\$6,533	\$ 212
Impaired mortgage loans with valuation allowance recorded	5,459	—	11,392	578
Total impaired mortgage loans	\$10,146	\$ 324	\$17,925	\$ 790

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

Table of Contents

The Company did not acquire any impaired mortgage loans during the nine months ended September 30, 2016 and 2015. The Company had no mortgage loans that were on a nonaccrual status at September 30, 2016 and December 31, 2015.

Policy Loans

Policy loans comprised approximately 3.1% and 3.5% of the Company's total investments as of September 30, 2016 and December 31, 2015, 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.

Funds Withheld at Interest

Funds withheld at interest comprised approximately 12.8% and 14.0% of the Company's total investments as of September 30, 2016 and December 31, 2015, respectively. Of the \$5.9 billion funds withheld at interest balance, net of embedded derivatives, as of September 30, 2016, \$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 equity securities, limited partnership interests, joint ventures (other than operating joint ventures), 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, real estate held-for-investment, equity release mortgages and structured loans, all of which are included in other in the table below. The fair value option was elected for contractholder-directed investments supporting unit-linked variable annuity type liabilities which do not qualify for presentation and reporting as separate accounts. Other invested assets represented approximately 3.8% and 3.1% of the Company's total investments as of September 30, 2016 and December 31, 2015, respectively. Carrying values of these assets as of September 30, 2016 and December 31, 2015 are as follows (dollars in thousands):

	September 30, 2016	December 31, 2015
Equity securities	\$420,248	\$125,862
Limited partnership interests and real estate joint ventures	671,577	567,697
Derivatives	310,168	256,178
FVO contractholder-directed unit-linked investments	200,208	197,547
Other	174,864	150,836
Total other invested assets	\$1,777,065	\$1,298,120

Table of Contents

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 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 September 30, 2016 and December 31, 2015 (dollars in thousands):

	September 30, 2016			December 31, 2015		
	Notional	Carrying Value	Value/Fair	Notional	Carrying Value	Value/Fair
	Amount	Assets	Liabilities	Amount	Assets	Liabilities
Derivatives not designated as hedging instruments:						
Interest rate swaps	\$1,062,745	\$175,123	\$821	\$1,123,057	\$85,075	\$4,196
Financial futures	552,384	—	—	420,665	—	—
Foreign currency forwards	30,000	173	2,733	45,000	44	6,768
Consumer price index swaps	30,043	13	460	28,561	—	292
Credit default swaps	909,000	10,605	3,430	897,000	8,230	11,053
Equity options	610,792	48,162	—	453,435	46,653	—
Longevity swaps	898,800	27,029	—	868,960	15,003	7
Mortality swaps	50,000	—	2,068	50,000	—	2,619
Synthetic guaranteed investment contracts	8,726,370	—	—	7,098,825	—	—
Embedded derivatives in:						
Modified coinsurance or funds withheld arrangements	—	—	42,903	—	—	76,698
Indexed annuity products	—	—	854,564	—	—	878,114
Variable annuity products	—	—	275,560	—	—	192,470
Total non-hedging derivatives	12,870,134	261,105	1,182,539	10,985,503	155,005	1,172,217
Derivatives designated as hedging instruments:						
Interest rate swaps	435,000	—	41,306	120,000	—	29,986
Foreign currency swaps	937,284	102,667	1,205	823,486	146,265	—
Total hedging derivatives	1,372,284	102,667	42,511	943,486	146,265	29,986
Total derivatives	\$14,242,418	\$363,772	\$1,225,050	\$11,928,989	\$301,270	\$1,202,203

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 September 30, 2016 and December 31, 2015 (dollars in thousands):

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	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	Cash Collateral Pledged/ Received	Net Amount
September 30, 2016:						
Derivative assets	\$ 363,772	\$ (26,575)	\$ 337,197	\$(48,024)	\$ (305,658)	\$ (16,485)
Derivative liabilities	52,023	(26,575)	25,448	(74,680)	(20,078)	(69,310)
December 31, 2015:						
Derivative assets	\$ 301,270	\$ (30,096)	\$ 271,174	\$(20,888)	\$ (245,038)	\$ 5,248
Derivative liabilities	54,921	(30,096)	24,825	(47,149)	(12,540)	(34,864)

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

Table of Contents

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, including derivatives used to economically hedge changes in the fair value of liabilities associated with the reinsurance of variable annuities with guaranteed living benefits. As of September 30, 2016 and December 31, 2015, 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 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 2015 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 September 30, 2016, were (dollars in thousands):

Type of Fair Value Hedge	Hedged Item	Gains (Losses) Recognized for Derivatives	Gains (Losses) Recognized for Hedged Items	Ineffectiveness Recognized in Investment Related Gains (Losses), net
For the three months ended September 30, 2016:				
Foreign currency swaps	Foreign-denominated fixed maturity securities	\$ 3,205	\$ (3,205)	\$ —
For the nine months ended September 30, 2016:				
Foreign currency swaps	Foreign-denominated fixed maturity securities	\$ 5,317	\$ (5,317)	\$ —

A regression analysis was used, both at inception of the hedge and on an ongoing basis, to determine whether each derivative used in a hedged transaction is highly effective in offsetting changes in the hedged item. For the foreign currency swaps, the change in fair value related to changes in the benchmark interest rate and credit spreads are excluded from the hedge effectiveness. For the three and nine months ended September 30, 2016, \$1.6 million and \$(5.4) million, respectively, of the change in the estimated fair value of derivatives, was excluded from hedge effectiveness. For the three and nine months ended September 30, 2015, \$2.1 million of the change in the estimated fair value of derivatives, was excluded from hedge effectiveness.

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 flow hedges: (i) certain interest rate swaps, in which the cash flows of assets are denominated in different currencies, commonly referred to as cross-currency swaps; (ii) certain interest rate swaps, in which the cash flows of liabilities are variable based on a benchmark rate (LIBOR); and (iii) forward bond purchase commitments.

Table of Contents

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 nine months ended September 30, 2016 and 2015 (dollars in thousands):

	Three months ended September 30,	
	2016	2015
Balance beginning of period	\$(41,192)	\$(23,901)
Gains (losses) deferred in other comprehensive income (loss) on the effective portion of cash flow hedges	932	(13,199)
Amounts reclassified to investment related (gains) losses, net	(116)	(179)
Amounts reclassified to investment income	(221)	112
Balance end of period	\$(40,597)	\$(37,167)
	Nine months ended September 30,	
	2016	2015
Balance beginning of period	\$(29,397)	\$(31,591)
Gains (losses) deferred in other comprehensive income (loss) on the effective portion of cash flow hedges	(10,866)	(4,251)
Amounts reclassified to investment related (gains) losses, net	53	(834)
Amounts reclassified to investment income	(387)	(491)
Balance end of period	\$(40,597)	\$(37,167)

As of September 30, 2016, the before-tax deferred net gains on derivative instruments recorded in AOCI that are expected to be reclassified to earnings during the next twelve months are approximately \$0.6 million. This expectation is based on the anticipated interest payments on hedged investments in fixed maturity securities that will occur over the next twelve months, at which time the Company will recognize the deferred net gains (losses) as an adjustment to investment income over the term of the investment cash flows.

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 nine months ended September 30, 2016 and 2015 (dollars in thousands):

Derivative Type	Effective Portion		
	Gain (Loss) Recognized in OCI	Gain (Loss) Reclassified into Income from OCI	Investment Related Gains (Losses), net
For the three months ended September 30, 2016:			
Interest rate swaps	\$932	\$—	\$ 200
Forward bond purchase commitments	—	116	21
Total	\$932	\$116	\$ 221
For the three months ended September 30, 2015:			
Interest rate swaps	\$(13,199)	\$—	\$(60)
Forward bond purchase commitments	—	179	(52)
Total	\$(13,199)	\$179	\$(112)

For the nine months ended September 30, 2016:

Interest rate swaps	\$(10,866)	\$—	\$ 454
Forward bond purchase commitments	—	(53)	(67)
Total	\$(10,866)	\$(53)	\$ 387

For the nine months ended September 30, 2015:

Interest rate swaps	\$(18,349)	\$—	\$ 231
Forward bond purchase commitments	14,098	834	260
Total	\$(4,251)	\$834	\$ 491

All components of each derivative's gain or loss were included in the assessment of hedge effectiveness. For the three and nine months ended September 30, 2016 and 2015, 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.

Table of Contents

Hedges of Net Investments in Foreign Operations

The Company uses foreign currency swaps 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 nine months ended September 30, 2016 and 2015 (dollars in thousands):

Type of NIFO Hedge ⁽¹⁾⁽²⁾	Derivative Gains (Losses) Deferred in AOCI			
	For the three months ended September 30,		For the nine months ended September 30,	
	2016	2015	2016	2015
Foreign currency swaps	\$ 8,341	\$ 42,702	\$ (23,151)	\$ 79,723

There were no sales or substantial liquidations of net investments in foreign operations that would have required (1) 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 \$148.7 million and \$171.9 million at September 30, 2016 and December 31, 2015, respectively. If a 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 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.

Table of Contents

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 nine months ended September 30, 2016 and 2015 is as follows (dollars in thousands):

Type of Non-hedging Derivative	Income Statement Location of Gain (Loss)	Gain (Loss) for the three months ended September 30,	
		2016	2015
Interest rate swaps	Investment related gains (losses), net	\$ 4,122	\$ 42,014
Financial futures	Investment related gains (losses), net	(11,677	) 16,654
Foreign currency forwards	Investment related gains (losses), net	507	708
CPI swaps	Investment related gains (losses), net	76	(250)
Credit default swaps	Investment related gains (losses), net	6,672	(8,407)
Equity options	Investment related gains (losses), net	(13,648	) 15,150
Longevity swaps	Other revenues	8,921	2,404
Mortality swaps	Other revenues	(400	) (442)
Subtotal		(5,427	) 67,831
Embedded derivatives in:			
Modified coinsurance or funds withheld arrangements	Investment related gains (losses), net	49,078	(46,169)
Indexed annuity products	Interest credited	(20,104	) 50,246
Variable annuity products	Investment related gains (losses), net	7,988	(95,372)
Total non-hedging derivatives		\$ 31,535	\$ (23,464)
Type of Non-hedging Derivative	Income Statement Location of Gain (Loss)	Gain (Loss) for the nine months ended September 30,	
		2016	2015
Interest rate swaps	Investment related gains (losses), net	\$ 108,149	\$ 29,629
Interest rate options	Investment related gains (losses), net	—	3,275
Financial futures	Investment related gains (losses), net	(30,285	) 7,141
Foreign currency forwards	Investment related gains (losses), net	6,584	(946)
CPI swaps	Investment related gains (losses), net	(624	) (153)
Credit default swaps	Investment related gains (losses), net	13,536	(5,936)
Equity options	Investment related gains (losses), net	(19,576) 4,477

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Longevity swaps	Other revenues	11,402	6,136	
Mortality swaps	Other revenues	222	(1,399)
Subtotal		89,408	42,224	
Embedded derivatives in:				
Modified coinsurance or funds withheld arrangements	Investment related gains (losses), net	33,795	(71,592)
Indexed annuity products	Interest credited	(20,730	)	28,999
Variable annuity products	Investment related gains (losses), net	(83,089	)	(69,628
Total non-hedging derivatives		\$ 19,384	\$ (69,997)

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 (LIBOR). 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.

Table of Contents

Interest Rate Options

Interest rate options, commonly referred to as swaptions, have been used by the Company primarily to hedge living benefit guarantees embedded in certain variable annuity products. A swaption, used to hedge against adverse changes in interest rates, is an option to enter into a swap with a forward starting effective date. The Company pays an upfront premium for the right to exercise this option in the future.

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.

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. Equity warrants are also used by the Company to economically hedge the variability in anticipated cash flows for the acquisition of investment securities.

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 to hedge a portion of its net investment in certain foreign operations and foreign currency securities against adverse movements in exchange rates. The Company also uses foreign currency swaps to hedge its exposure to market risks from changes in currency exchange rates with respect to investments denominated in foreign currencies that the Company either holds or intends to acquire or sell.

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.

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.

Table of Contents

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 September 30, 2016 and December 31, 2015 (dollars in thousands):

Rating Agency Designation of Referenced Credit Obligations ⁽¹⁾	September 30, 2016			December 31, 2015		
	Estimated Fair Value of Default Swaps	Maximum Amount of Future Payments under Credit Default Swaps ⁽²⁾	Weighted Average Years to Maturity ⁽³⁾	Estimated Fair Value of Default Swaps	Maximum Amount of Future Payments under Credit Default Swaps ⁽²⁾	Weighted Average Years to Maturity ⁽³⁾
AA/AA-/A+/A/A-						
Single name credit default swaps	\$1,625	\$ 145,500	4.0	\$1,689	\$ 152,500	3.9
Credit default swaps referencing indices	—	—	—	—	—	—
Subtotal	1,625	145,500	4.0	1,689	152,500	3.9
BBB+/BBB/BBB-						
Single name credit default swaps	75	339,200	4.0	(5,066)	315,200	4.2
Credit default swaps referencing indices	5,165	416,000	5.2	2,274	416,000	5.0
Subtotal	5,240	755,200	4.7	(2,792)	731,200	4.6
BB+/BB						
Single name credit default swaps	(56)	5,000	2.7	(2,900)	10,000	4.1
Credit default swaps referencing indices	—	—	—	—	—	—
Subtotal	(56)	5,000	2.7	(2,900)	10,000	4.1
Total	\$6,809	\$ 905,700	4.6	\$(4,003)	\$ 893,700	4.5

(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, recorded at

fair value and classified as interest rate derivatives.

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 nine months ended September 30, 2016 and 2015.

25

Table of Contents

The related gains (losses) and the effect on net income after amortization of deferred acquisition costs ("DAC") and income taxes for the three and nine months ended September 30, 2016 and 2015 are reflected in the following table (dollars in thousands):

	Three months ended September 30,		Nine months ended September 30,	
	2016	2015	2016	2015
Embedded derivatives in modco or funds withheld arrangements included in investment related gains	\$49,078	\$(46,169)	\$33,795	\$(71,592)
After the associated amortization of DAC and taxes, the related amounts included in net income	9,653	(11,783)	1,683	(18,287)
Embedded derivatives in variable annuity contracts included in investment related gains	7,988	(95,372)	(83,089)	(69,628)
After the associated amortization of DAC and taxes, the related amounts included in net income	2,595	(116,994)	(63,415)	(106,796)
Amounts related to embedded derivatives in equity-indexed annuities included in benefits and expenses	(20,104)	50,246	(20,730)	28,999
After the associated amortization of DAC and taxes, the related amounts included in net income	(13,397)	27,861	(9,979)	13,095

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. 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.

Table of Contents

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 September 30, 2016 and December 31, 2015 are reflected in the following table (dollars in thousands):

	September 30, 2016	December 31, 2015
Estimated fair value of derivatives in net asset position	\$313,817	\$248,968
Cash provided as collateral ⁽¹⁾	20,078	12,540
Securities pledged to counterparties as collateral ⁽²⁾	74,680	47,149
Cash pledged from counterparties as collateral ⁽³⁾	(305,658)	(245,038)
Securities pledged from counterparties as collateral ⁽⁴⁾	(48,024)	(20,888)
Initial margin for cleared derivatives ⁽²⁾	(63,056)	(34,898)
Net amount after application of master netting agreements and collateral	\$(8,163)	\$7,833
Margin account related to exchange-traded futures ⁽⁵⁾	\$10,101	\$11,004

(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.

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 include assets and liabilities that 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.

When inputs used to measure the fair value of an asset or liability fall within different levels of the hierarchy, the level within which the fair value measurement is categorized is based on the lowest level input that is significant to the fair value measurement in its entirety, except for fair value measurements using net asset value. For example, a Level 3 fair value measurement may include inputs that are observable (Levels 1 and 2) and unobservable (Level 3).

Therefore, gains and losses for such assets and liabilities categorized within Level 3 may include changes in fair value that are attributable to both observable inputs (Levels 1 and 2) and unobservable inputs (Level 3).

Table of Contents

Assets and Liabilities by Hierarchy Level

Assets and liabilities measured at fair value on a recurring basis as of September 30, 2016 and December 31, 2015 are summarized below (dollars in thousands):

September 30, 2016:

	Total	Fair Value Measurements Using:		
		Level 1	Level 2	Level 3
Assets:				
Fixed maturity securities – available-for-sale:				
Corporate securities	\$20,164,848	\$302,603	\$18,606,341	\$1,255,904
Canadian and Canadian provincial governments	4,140,379	—	3,566,760	573,619
Residential mortgage-backed securities	1,311,692	—	1,120,999	190,693
Asset-backed securities	1,382,574	—	1,158,923	223,651
Commercial mortgage-backed securities	1,475,033	—	1,437,526	37,507
U.S. government and agencies	1,559,536	1,427,369	106,334	25,833
State and political subdivisions	617,849	—	580,086	37,763
Other foreign government supranational and foreign government-sponsored enterprises	2,884,508	326,297	2,544,785	13,426
Total fixed maturity securities – available-for-sale	33,536,419	2,056,269	29,121,754	2,358,396
Funds withheld at interest – embedded derivatives	(42,903)	—	—	(42,903)
Cash equivalents	423,457	378,980	44,477	—
Short-term investments	92,151	56,017	36,134	—
Other invested assets:				
Non-redeemable preferred stock	52,852	39,735	13,117	—
Other equity securities	367,396	367,396	—	—
Derivatives:				
Interest rate swaps	161,008	—	161,008	—
CPI swaps	(447)	—	(447)	—
Credit default swaps	7,429	—	7,429	—
Equity options	40,021	—	40,021	—
Foreign currency swaps	102,157	—	102,157	—
FVO contractholder-directed unit-linked investments	200,208	198,925	1,283	—
Other	37	37	—	—
Total other invested assets	930,661	606,093	324,568	—
Other assets - longevity swaps	27,029	—	—	27,029
Total	\$34,966,814	\$3,097,359	\$29,526,933	\$2,342,522
Liabilities:				
Interest sensitive contract liabilities – embedded derivatives	\$1,130,124	\$—	\$—	\$1,130,124
Other liabilities:				
Derivatives:				
Interest rate swaps	28,012	—	28,012	—
Foreign currency forwards	2,560	—	2,560	—
Credit default swaps	254	—	254	—
Equity options	(8,141)	—	(8,141)	—
Foreign currency swaps	695	—	695	—
Mortality swaps	2,068	—	—	2,068
Total	\$1,155,572	\$—	\$23,380	\$1,132,192

Table of Contents

December 31, 2015:	Fair Value Measurements Using:			
	Total	Level 1	Level 2	Level 3
Assets:				
Fixed maturity securities – available-for-sale:				
Corporate securities	\$17,708,156	\$269,039	\$16,212,147	\$1,226,970
Canadian and Canadian provincial governments	3,576,759	—	3,160,683	416,076
Residential mortgage-backed securities	1,311,477	—	980,828	330,649
Asset-backed securities	1,212,676	—	908,840	303,836
Commercial mortgage-backed securities	1,483,087	—	1,414,524	68,563
U.S. government and agencies	1,381,659	1,227,858	127,536	26,265
State and political subdivisions	511,014	—	472,672	38,342
Other foreign government, supranational and foreign government-sponsored enterprises	2,458,077	260,552	2,183,460	14,065
Total fixed maturity securities – available-for-sale	29,642,905	1,757,449	25,460,690	2,424,766
Funds withheld at interest – embedded derivatives	(76,698	) —	—	(76,698
Cash equivalents	406,521	406,521	—	—
Short-term investments	530,773	524,946	5,827	—
Other invested assets:				
Non-redeemable preferred stock	87,520	81,809	5,711	—
Other equity securities	38,342	38,342	—	—
Derivatives:				
Interest rate swaps	71,882	—	71,882	—
Foreign currency forwards	20	—	20	—
CPI swaps	(292	) —	(292) —
Credit default swaps	2,567	—	2,567	—
Equity options	40,644	—	40,644	—
Foreign currency swaps	141,357	—	141,357	—
FVO contractholder-directed unit-linked investments	197,547	195,317	2,230	—
Other	8,170	8,170	—	—
Total other invested assets	587,757	323,638	264,119	—
Other assets - longevity swaps	14,996	—	—	14,996
Total	\$31,106,254	\$3,012,554	\$25,730,636	\$2,363,064
Liabilities:				
Interest sensitive contract liabilities – embedded derivatives	\$1,070,584	\$—	\$—	\$1,070,584
Other liabilities:				
Derivatives:				
Interest rate swaps	20,989	—	20,989	—
Foreign currency forwards	6,744	—	6,744	—
Credit default swaps	5,390	—	5,390	—
Equity options	(6,009	) —	(6,009) —
Foreign currency swaps	(4,908	) —	(4,908) —
Mortality swaps	2,619	—	—	2,619
Total	\$1,095,409	\$—	\$22,206	\$1,073,203

The Company may utilize information from third parties, such as pricing services and brokers, to assist in determining the fair value for certain assets and liabilities; however, management is ultimately responsible for all fair values presented in the Company's condensed consolidated financial statements. This includes responsibility for monitoring the fair value process, ensuring objective and reliable valuation practices and pricing of assets and liabilities, and approving changes to valuation methodologies and pricing sources. The selection of the valuation technique(s) to

apply considers the definition of an exit price and the nature of the asset or liability being valued and significant expertise and judgment is required.

Table of Contents

The Company performs initial and ongoing analysis and review of the various techniques utilized in determining fair value to ensure that they are appropriate and consistently applied, and that the various assumptions are reasonable. The Company analyzes and reviews the information and prices received from third parties to ensure that the prices represent a reasonable estimate of the fair value and to monitor controls around pricing, which includes quantitative and qualitative analysis and is overseen by the Company's investment and accounting personnel. Examples of procedures performed include, but are not limited to, review of pricing trends, comparison of a sample of executed prices of securities sold to the fair value estimates, comparison of fair value estimates to management's knowledge of the current market, and ongoing confirmation that third party pricing services use, wherever possible, market-based parameters for valuation. In addition, the Company utilizes both internal and external cash flow models to analyze the reasonableness of fair values utilizing credit spread and other market assumptions, where appropriate. As a result of the analysis, if the Company determines there is a more appropriate fair value based upon the available market data, the price received from the third party is adjusted accordingly. The Company also determines if the inputs used in estimated fair values received from pricing services are observable by assessing whether these inputs can be corroborated by observable market data.

For assets and liabilities reported at fair value, the Company utilizes, when available, fair values based on quoted prices in active markets that are regularly and readily obtainable. Generally, these are very liquid investments and the valuation does not require management judgment. When quoted prices in active markets are not available, fair value is based on market valuation techniques, market comparable pricing and the income approach. The use of different techniques, assumptions and inputs may have a material effect on the estimated fair values of the Company's securities holdings. For the periods presented, the application of market standard valuation techniques applied to similar assets and liabilities has been consistent.

The methods and assumptions the Company uses to estimate the fair value of assets and liabilities measured at fair value on a recurring basis are summarized below.

Fixed Maturity Securities – The fair values of the Company's publicly-traded fixed maturity securities are generally based on prices obtained from independent pricing services. Prices from pricing services are sourced from multiple vendors, and a vendor hierarchy is maintained by asset type based on historical pricing experience and vendor expertise. The Company generally receives prices from multiple pricing services for each security, but ultimately uses the price from the vendor that is highest in the hierarchy for the respective asset type. To validate reasonableness, prices are periodically reviewed as explained above. Consistent with the fair value hierarchy described above, securities with quotes from pricing services are generally reflected within Level 2, as they are primarily based on observable pricing for similar assets and/or other market observable inputs. If the pricing information received from third party pricing services is not reflective of market activity or other inputs observable in the market, the Company may challenge the price through a formal process with the pricing service.

If the Company ultimately concludes that pricing information received from the independent pricing service is not reflective of fair value, non-binding broker quotes are used, if available. If the Company concludes that the values from both pricing services and brokers are not reflective of fair value, an internally developed valuation may be prepared; however, this occurs infrequently. Internally developed valuations or non-binding broker quotes are also used to determine fair value in circumstances where vendor pricing is not available. These valuations may use significant unobservable inputs, which reflect the Company's assumptions about the inputs that market participants would use in pricing the asset. Observable market data may not be available in certain circumstances, such as market illiquidity and credit events related to the security. Pricing service overrides, internally developed valuations and non-binding broker quotes are generally based on significant unobservable inputs and are reflected as Level 3 in the valuation hierarchy.

The inputs used in the valuation of corporate and government securities include, but are not limited to standard market observable inputs which are derived from, or corroborated by, market observable data including market yield curve, duration, call provisions, observable prices and spreads for similar publicly traded or privately traded issues that incorporate the credit quality and industry sector of the issuer. For structured securities, valuation is based primarily on matrix pricing or other similar techniques using standard market inputs including spreads for actively traded

securities, spreads off benchmark yields, expected prepayment speeds and volumes, current and forecasted loss severity, rating, weighted average coupon, weighted average maturity, average delinquency rates, geographic region, debt-service coverage ratios and issuance-specific information including, but not limited to: collateral type, payment terms of the underlying assets, payment priority within the tranche, structure of the security, deal performance and vintage of loans.

The fair values of private placement securities are primarily determined using a discounted cash flow model. In certain cases these models primarily use observable inputs with a discount rate based upon the average of spread surveys collected from private market intermediaries who are active in both primary and secondary transactions, taking into account, among other factors, the credit quality and industry sector of the issuer and the reduced liquidity associated with private placements. Generally, these securities have been reflected within Level 3. For certain private fixed maturities, the discounted cash flow model may also incorporate significant unobservable inputs, which reflect the Company's own assumptions about the inputs market participants would use in pricing the security. To the extent management determines that such unobservable inputs are not significant to the price of a security, a Level 2 classification is made. Otherwise, a Level 3 classification is used.

Table of Contents

Embedded Derivatives – The fair value of embedded derivative liabilities, including those calculated by third parties, are monitored through the use of attribution reports to quantify the effect of underlying sources of fair value change, including capital market inputs based on policyholder account values, interest rates and short-term and long-term implied volatilities, from period to period. Actuarial assumptions are based on experience studies performed internally in combination with available industry information and are reviewed on a periodic basis, at least annually.

For embedded derivative liabilities associated with the underlying products in reinsurance treaties, primarily equity-indexed and variable annuity treaties, the Company utilizes a discounted cash flow model, which includes an estimate of future equity option purchases and an adjustment for a CVA. The variable annuity embedded derivative calculations are performed by third parties based on methodology and input assumptions provided by the Company. To validate the reasonableness of the resulting fair value, the Company’s internal actuaries perform reviews and analytical procedures on the results. The capital market inputs to the model, such as equity indexes, short-term equity volatility and interest rates, are generally observable. The valuation also requires certain significant inputs, which are generally not observable and accordingly, the valuation is considered Level 3 in the fair value hierarchy, see “Level 3 Measurements and Transfers” below for a description.

The fair value of embedded derivatives associated with funds withheld reinsurance treaties is determined based upon a total return swap technique with reference to the fair value of the investments held by the ceding company that support the Company’s funds withheld at interest asset with an adjustment for a CVA. The fair value of the underlying assets is generally based on market observable inputs using industry standard valuation techniques. The valuation also requires certain significant inputs, which are generally not observable and accordingly, the valuation is considered Level 3 in the fair value hierarchy, see “Level 3 Measurements and Transfers” below for a description.

Credit Valuation Adjustment – The Company uses a structural default risk model to estimate a CVA. The input assumptions are a combination of externally derived and published values (default threshold and uncertainty), market inputs (interest rate, equity price per share, debt per share, equity price volatility) and insurance industry data (Loss Given Default), adjusted for market recoverability.

Cash Equivalents and Short-Term Investments – Cash equivalents and short-term investments include money market instruments, commercial paper and other highly liquid debt instruments. Money market instruments are generally valued using unadjusted quoted prices in active markets that are accessible for identical assets and are primarily classified as Level 1. The fair value of certain other cash equivalents and short-term investments, such as floating rate notes and bonds with original maturities less than twelve months, are based upon other market observable data and are typically classified as Level 2. However, certain short-term investments may incorporate significant unobservable inputs resulting in a Level 3 classification. Various time deposits carried as cash equivalents or short-term investments are not measured at estimated fair value and therefore are excluded from the tables presented.

Equity Securities – Equity securities consist principally of exchange-traded funds and preferred stock of publicly and privately traded companies. The fair values of publicly traded equity securities are primarily based on quoted market prices in active markets and are classified within Level 1 in the fair value hierarchy. The fair values of preferred equity securities, for which quoted market prices are not readily available, are based on prices obtained from independent pricing services and these securities are generally classified within Level 2 in the fair value hierarchy. Non-binding broker quotes for equity securities are generally based on significant unobservable inputs and are reflected as Level 3 in the fair value hierarchy.

FVO Contractholder-Directed Unit-Linked Investments – FVO contractholder-directed investments supporting unit-linked variable annuity type liabilities primarily consist of exchange-traded funds and, to a lesser extent, fixed maturity securities and cash and cash equivalents. The fair values of the exchange-traded securities are primarily based on quoted market prices in active markets and are classified within Level 1 of the hierarchy. The fair value of the fixed maturity contractholder-directed securities is determined on a basis consistent with the methodologies described above for fixed maturity securities and are classified within Level 2 of the hierarchy.

Derivative Assets and Derivative Liabilities – All of the derivative instruments utilized by the Company, except for longevity and mortality swaps, are classified within Level 2 on the fair value hierarchy. These derivatives are principally valued using an income approach. Valuations of interest rate contracts are based on present value

techniques, which utilize significant inputs that may include the swap yield curve, LIBOR basis curves, and repurchase rates. Valuations of foreign currency contracts, are based on present value techniques, which utilize significant inputs that may include the swap yield curve, LIBOR basis curves, currency spot rates, and cross currency basis curves. Valuations of credit contracts are based on present value techniques, which utilize significant inputs that may include the swap yield curve, credit curves, and recovery rates. Valuations of equity market contracts, are based on present value techniques, which utilize significant inputs that may include the swap yield curve, spot equity index levels, and dividend yield curves. Valuations of equity market contracts, option-based, are based on option pricing models, which utilize significant inputs that may include the swap yield curve, spot equity index levels, dividend yield curves, and equity volatility. The Company does not currently have derivatives, except for longevity and mortality swaps, included in Level 3 measurement.

Table of Contents

Longevity and Mortality Swaps – The Company utilizes a discounted cash flow model to estimate the fair value of longevity and mortality swaps. The fair value of these swaps includes an accrual for premiums payable and receivable. Some inputs to the valuation model are generally observable, such as interest rates and actual population mortality experience. The valuation also requires significant inputs that are generally not observable and, accordingly, the valuation is considered Level 3 in the fair value hierarchy.

Level 3 Measurements and Transfers

As of September 30, 2016 and December 31, 2015, the Company classified approximately 7.0% and 8.2%, respectively, of its fixed maturity securities in the Level 3 category. These securities primarily consist of private placement corporate securities and bank loans with inactive trading markets. Additionally, the Company has included asset-backed securities with subprime exposure and mortgage-backed securities with below investment grade ratings in the Level 3 category due to market uncertainty associated with these securities and the Company's utilization of unobservable information from third parties for the valuation of these securities.

The significant unobservable inputs used in the fair value measurement of the Company's corporate, sovereign, government-backed, and other political subdivision investments are probability of default, liquidity premium and subordination premium. Significant increases (decreases) in any of those inputs in isolation would result in a significantly lower (higher) fair value measurement. Generally, a change in the assumption used for the probability of default is accompanied by a directionally similar change in the assumptions used for the liquidity premium and subordination premium. For securities with a fair value derived using the market comparable pricing valuation technique, liquidity premium is the only significant unobservable input.

The significant unobservable inputs used in the fair value measurement of the Company's asset and mortgage-backed securities are prepayment rates, probability of default, liquidity premium and loss severity in the event of default. Significant increases (decreases) in any of those inputs in isolation would result in a significantly lower (higher) fair value measurement. Generally, a change in the assumption used for the probability of default is accompanied by a directionally similar change in the assumption used for the liquidity premium and loss severity and a directionally opposite change in the assumption used for prepayment rates.

The actuarial assumptions used in the fair value of embedded derivatives which include assumptions related to lapses, withdrawals, and mortality, are based on experience studies performed by the Company in combination with available industry information and are reviewed on a periodic basis, at least annually. The significant unobservable inputs used in the fair value measurement of embedded derivatives are assumptions associated with policyholder experience and selected capital market assumptions for equity-indexed and variable annuities. The selected capital market assumptions, which include long-term implied volatilities, are projections based on short-term historical information. Changes in interest rates, equity indices, equity volatility, CVA, and actuarial assumptions regarding policyholder experience may result in significant fluctuations in the value of embedded derivatives.

Fair value measurements associated with funds withheld reinsurance treaties are generally not materially sensitive to changes in unobservable inputs associated with policyholder experience. The primary drivers of change in these fair values are related to movements of credit spreads, which are generally observable. Increases (decreases) in market credit spreads tend to decrease (increase) the fair value of embedded derivatives. Increases (decreases) in the CVA assumption tend to decrease (increase) the magnitude of the fair value of embedded derivatives.

Fair value measurements associated with variable annuity treaties are sensitive to both capital markets inputs and policyholder experience inputs. Increases (decreases) in lapse rates tend to decrease (increase) the value of the embedded derivatives associated with variable annuity treaties. Increases (decreases) in the long-term volatility assumption tend to increase (decrease) the fair value of embedded derivatives. Increases (decreases) in the CVA assumption tend to decrease (increase) the magnitude of the fair value of embedded derivatives.

The actuarial assumptions used in the fair value of longevity and mortality swaps include assumptions related to the level and volatility of mortality. The assumptions are based on studies performed by the Company in combination with available industry information and are reviewed on a periodic basis, at least annually.

Table of Contents

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 September 30, 2016 and December 31, 2015 (dollars in thousands):

	Estimated Fair Value		Valuation Technique	Unobservable Inputs	Range (Weighted Average)	
	September 30, 2016	December 31, 2015			September 30, 2016	December 31, 2015
Assets:						
Corporate securities	\$175,706	\$195,557	Market comparable securities	Liquidity premium	0-2% (1%)	0-2% (1%)
U.S. government and agencies	25,833	26,265	Market comparable securities	Liquidity premium	0-1% (1%)	0-1% (1%)
State and political subdivisions	5,011	4,770	Market comparable securities	Liquidity premium	1	% 1 %
Funds withheld at interest-embedded derivatives	(42,903)	(76,698)	Total return swap	Mortality	0-100% (2%)	0-100% (2%)
				Lapse	0-35% (8%)	0-35% (7%)
				Withdrawal	0-5% (3%)	0-5% (3%)
				CVA	0-5% (1%)	0-5% (1%)
				Crediting rate	2-4% (2%)	2-4% (3%)
Longevity swaps	27,029	14,996	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	854,564	878,114	Discounted cash flow	Mortality	0-100% (2%)	0-100% (2%)
				Lapse	0-35% (8%)	0-35% (7%)
				Withdrawal	0-5% (3%)	0-5% (3%)
				Option budget projection	2-4% (2%)	2-4% (3%)
Interest sensitive contract liabilities-	275,560	192,470	Discounted cash flow	Mortality	0-100% (2%)	0-100% (2%)

embedded
derivatives-
variable
annuities

				Lapse	0-25% (6%)	0-25% (7%)
				Withdrawal	0-7% (3%)	0-7% (3%)
				CVA	0-5% (1%)	0-5% (1%)
				Long-term volatility	0-27% (14%)	0-27% (14%)
Mortality swaps	2,068	2,619	Discounted cash flow	Mortality	0-100% (1%)	0-100% (1%)

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. 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.

Table of Contents

Transfers from Level 1 to Level 2 are due to the lack of observable market data when pricing these securities, while transfers from Level 2 to Level 1 are due to an increase in the availability of market observable data in an active market. There were no transfers between Level 1 and Level 2 during the three and nine months ended September 30, 2016. The following tables present the transfers between Level 1 and Level 2 during the three and nine months ended September 30, 2015 (dollars in thousands):

	2015	
	Transfers from Level 1 to Level 2	Transfers from Level 2 to Level 1
Three months ended September 30:		
Fixed maturity securities - available-for-sale:		
Corporate securities	\$ —	\$ 47,199

Nine months ended September 30:		
Fixed maturity securities - available-for-sale:		
Corporate securities	\$ 625	\$ 84,195

The tables below provide a summary of the changes in fair value of Level 3 assets and liabilities for the three and nine months ended September 30, 2016, as well as the portion of gains or losses included in income for the three and nine months ended September 30, 2016 attributable to unrealized gains or losses related to those assets and liabilities still held at September 30, 2016 (dollars in thousands):

	Fixed maturity securities - available-for-sale					
	Corporate securities	Canadian and Canadian provincial governments	Residential mortgage-backed securities	Asset-backed securities	Commercial mortgage-backed securities	U.S. government and agencies
Fair value, beginning of period	\$1,297,382	\$ 554,192	\$165,979	\$ 298,816	\$ 37,935	\$ 26,255
Total gains/losses (realized/unrealized)						
Included in earnings, net:						
Investment income, net of related expenses	(567)	3,085	(40)	173	304	(122)
Investment related gains (losses), net	17,917	—	—	—	—	—
Claims & other policy benefits	—	—	—	—	—	—
Interest credited	—	—	—	—	—	—
Policy acquisition costs and other insurance expenses	—	—	—	—	—	—
Included in other comprehensive income	(19,635)	16,342	2,597	3,410	(94)	(135)
Other revenues	—	—	—	—	—	—
Purchases ⁽¹⁾	54,492	—	27,548	5,013	—	147
Sales ⁽¹⁾	(26,320)	—	—	—	—	—
Settlements ⁽¹⁾	(44,110)	—	(6,935)	(18,602)	(1)	(312)
Transfers into Level 3	—	—	1,544	28,285	—	—
Transfers out of Level 3	(23,255)	—	—	(93,444)	(637)	—
Fair value, end of period	\$1,255,904	\$ 573,619	\$ 190,693	\$ 223,651	\$ 37,507	\$ 25,833

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	\$ (489	) \$ 3,085	\$ (40	) \$ 173	\$ 304	\$ (122)
Investment related gains (losses), net	—	—	—	—	—	—	—
Interest credited	—	—	—	—	—	—	—

Table of Contents

For the three months ended September 30, 2016 (continued):	Fixed maturity securities available-for-sale					
	State and political subdivisions	Other foreign government and government-sponsored enterprises	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	\$35,246	\$ 13,706	\$(91,981)	\$ 17,781	\$(1,125,380)	\$(1,997)
Total gains/losses (realized/unrealized) Included in earnings, net:						
Investment income, net of related expenses	10	—	—	—	—	—
Investment related gains (losses), net	—	—	49,078	—	7,988	—
Interest credited	—	—	—	—	(20,104)	—
Included in other comprehensive income	553	48	—	327	—	—
Other revenues	—	—	—	8,921	—	(400)
Purchases ⁽¹⁾	1,986	—	—	—	(11,853)	—
Sales ⁽¹⁾	—	—	—	—	—	—
Settlements ⁽¹⁾	(32)	(328)	—	—	19,225	329
Transfers into Level 3	—	—	—	—	—	—
Transfers out of Level 3	—	—	—	—	—	—
Fair value, end of period	\$37,763	\$ 13,426	\$(42,903)	\$ 27,029	\$(1,130,124)	\$(2,068)
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	\$10	\$ —	\$—	\$—	\$—	\$—
Investment related gains (losses), net	—	—	49,078	—	3,969	—
Other revenues	—	—	—	8,921	—	(400)
Interest credited	—	—	—	—	(39,329)	—
For the nine months ended September 30, 2016:	Fixed maturity securities - available-for-sale					
	Corporate securities	Canadian and Canadian provincial governments	Residential mortgage-backed securities	Asset-backed securities	Commercial mortgage-backed securities	U.S. government and agencies
Fair value, beginning of period	\$1,226,970	\$ 416,076	\$330,649	\$ 303,836	\$ 68,563	\$ 26,265
Total gains/losses (realized/unrealized) Included in earnings, net:						
Investment income, net of related expenses	(1,986)	9,136	(411)	599	1,437	(367)
Investment related gains (losses), net	(3,939)	—	(1,922)	1,101	(3,289)	—
Interest credited	—	—	—	—	—	—
	36,438	148,407	2,104	(4,324)	(2,453)	922

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Included in other comprehensive income						
Other revenues	—	—	—	—	—	—
Purchases ⁽¹⁾	195,070	—	99,776	102,063	1,545	404
Sales ⁽¹⁾	(36,803)	—	(167,684)	(38,681)	(25,976)	—
Settlements ⁽¹⁾	(141,065)	—	(31,839)	(26,523)	(138)	(1,391)
Transfers into Level 3	10,206	—	1,544	53,081	—	—
Transfers out of Level 3	(28,987)	—	(41,524)	(167,501)	(2,182)	—
Fair value, end of period	\$1,255,904	\$ 573,619	\$ 190,693	\$ 223,651	\$ 37,507	\$ 25,833
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	\$(1,917)	\$ 9,136	\$ 2	\$ 523	\$ 1,335	\$(367)
Investment related gains (losses), net	—	—	—	—	—	—
Interest credited	—	—	—	—	—	—

Table of Contents

For the nine months ended September 30, 2016 (continued):	Fixed maturity securities available-for-sale					
	State and political subdivisions	Other foreign government, supranational and government-sponsored enterprises	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	\$38,342	\$ 14,065	\$(76,698)	\$ 14,996	\$(1,070,584)	\$(2,619)
Total gains/losses (realized/unrealized) Included in earnings, net:						
Investment income, net of related expenses	205	—	—	—	—	—
Investment related gains (losses), net	—	—	33,795	—	(83,089)	—
Interest credited	—	—	—	—	(20,730)	—
Included in other comprehensive income	1,725	336	—	631	—	—
Other revenues	—	—	—	11,402	—	222
Purchases ⁽¹⁾	1,986	—	—	—	(9,817)	—
Sales ⁽¹⁾	—	—	—	—	—	—
Settlements ⁽¹⁾	(290)	(975)	—	—	54,096	329
Transfers into Level 3	—	—	—	—	—	—
Transfers out of Level 3	(4,205)	—	—	—	—	—
Fair value, end of period	\$37,763	\$ 13,426	\$(42,903)	\$ 27,029	\$(1,130,124)	\$(2,068)
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	\$205	\$ —	\$—	\$—	\$—	\$—
Investment related gains (losses), net	—	—	33,795	—	(92,842)	—
Other revenues	—	—	—	11,402	—	222
Interest credited	—	—	—	—	(74,826)	—

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.

Table of Contents

The tables below provide a summary of the changes in fair value of Level 3 assets and liabilities for the three and nine months ended September 30, 2015, as well as the portion of gains or losses included in income for the three and nine months ended September 30, 2015 attributable to unrealized gains or losses related to those assets and liabilities still held at September 30, 2015 (dollars in thousands):

For the three months ended September 30, 2015:

	Fixed maturity securities - available-for-sale				
	Residential mortgage- backed securities	Asset-backed securities	Commercial mortgage- backed securities	U.S. government and agencies	State and political subdivisions
Fair value, beginning of period	\$				