REINSURANCE GROUP OF AMERICA INC

Form 10-Q August 03, 2016 Table of Contents

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

(Mark One)

X

QUARTERLY REPORT PURSUANT TO SECTION 13 OR 15(d)

OF THE SECURITIES EXCHANGE ACT OF 1934

For the quarterly period ended June 30, 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 T No o

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

Yes T No o

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 T Accelerated filer o Non-accelerated filer o Smaller reporting company o Indicate by check mark whether the registrant is a shell company (as defined in Rule 12b-2 of the Exchange Act). Yes o No T

As of July 31, 2016, 64,065,779 shares of the registrant's common stock were outstanding.

Table of Contents

REINSURANCE GROUP OF AMERICA, INCORPORATED AND SUBSIDIARIES TABLE OF CONTENTS

Item		Page
	PART I – FINANCIAL INFORMATION	
1	Financial Statements	
	Condensed Consolidated Balance Sheets (Unaudited)	2
	June 30, 2016 and December 31, 2015	<u>3</u>
	Condensed Consolidated Statements of Income (Unaudited)	<u>4</u>
	Three and six months ended June 30, 2016 and 2015	_
	Condensed Consolidated Statements of Comprehensive Income (Unaudited)	<u>5</u>
	Three and six months ended June 30, 2016 and 2015	<u>~</u>
	Condensed Consolidated Statements of Cash Flows (Unaudited)	6
	Six months ended June 30, 2016 and 2015	_
	Notes to Condensed Consolidated Financial Statements (Unaudited):	7
	1. Business and Basis of Presentation	7 7 8 9
	2. Earnings Per Share	<u>/</u>
	3. Equity 4. Investments	<u>o</u>
	5. Derivative Instruments	<u>18</u>
	6. Fair Value of Assets and Liabilities	<u>16</u> 26
	7. Segment Information	<u>40</u>
	8. Commitments, Contingencies and Guarantees	<u>41</u>
	9. Income Tax	<u>42</u>
	10. Employee Benefit Plans	43
	11. Equity Based Compensation	<u>43</u>
	12. Reinsurance	<u>43</u>
	13. Financing Activities	<u>44</u>
	14. New Accounting Standards	<u>44</u>
2	Management's Discussion and Analysis of	<u>47</u>
2	Financial Condition and Results of Operations	<u>47</u>
3	Quantitative and Qualitative Disclosures About Market Risk	<u>83</u>
4	Controls and Procedures	<u>83</u>
	PART II – OTHER INFORMATION	
1	Legal Proceedings	<u>84</u>
1A	Risk Factors	<u>84</u>
2	<u>Unregistered Sales of Equity Securities and Use of Proceeds</u>	<u>84</u>
6	<u>Exhibits</u>	<u>85</u>
	Signatures	<u>86</u>
	Index to Exhibits	<u>87</u>
2		

Table of Contents

PART I - FINANCIAL INFORMATION

ITEM 1. Financial Statements

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

(Unaudited)

	June 30, 2016 (Dollars in thous	December 31, 2015 ands, except share da	ıta)
	(Donars in thous	ands, except share da	ita)
Assets			
Fixed maturity securities:			
Available-for-sale at fair value (amortized cost of \$30,076,884 and	¢ 22 160 076	¢ 20 642 005	
\$28,322,977)	\$ 33,160,976	\$ 29,642,905	
Mortgage loans on real estate (net of allowances of \$6,499 and \$6,813)	3,377,039	3,129,951	
Policy loans	1,445,410	1,468,796	
Funds withheld at interest	5,899,289	5,880,203	
Short-term investments	195,979	558,284	
Other invested assets	1,682,143	1,298,120	
Total investments	45,760,836	41,978,259	
Cash and cash equivalents	1,034,329	1,525,275	
Accrued investment income	368,926	339,452	
Premiums receivable and other reinsurance balances	1,917,844	1,797,504	
Reinsurance ceded receivables	681,425	637,859	
Deferred policy acquisition costs	3,401,935	3,392,437	
Other assets	711,408	712,366	
Total assets	\$ 53,876,703	\$ 50,383,152	
Liabilities and Stockholders' Equity			
Future policy benefits	\$ 19,605,021	\$ 19,612,251	
Interest-sensitive contract liabilities	14,024,012	13,663,873	
Other policy claims and benefits	4,305,219	4,094,640	
Other reinsurance balances	344,527	296,899	
Deferred income taxes	2,901,264	2,218,328	
Other liabilities	1,157,252	1,165,071	
Short-term debt	299,807	_	
Long-term debt	2,788,473	2,297,548	
Collateral finance and securitization notes	870,482	899,161	
Total liabilities	46,296,057	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,	701	791	
79,137,758 shares issued at June 30, 2016 and December 31, 2015	791	791	
Additional paid-in capital	1,834,995	1,816,142	
Retained earnings	4,870,711	4,620,303	
Treasury stock, at cost - 15,068,009 and 13,933,232 shares	(1,111,225) (1,010,139)
Accumulated other comprehensive income	1,985,374	708,284	

Total stockholders' equity 7,580,646 6,135,381
Total liabilities and stockholders' equity \$ 53,876,703 \$ 50,383,152

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

Table of Contents

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

		ns ended June	Six months ended June		
	30,	2015	30,	2015	
	2016	2015	2016	2015	
Revenues:		housands, exc			
Net premiums	\$2,346,945		. , ,	\$4,152,895	
Investment income, net of related expenses	507,666	450,539	924,932	877,430	
Investment related gains (losses), net:					
Other-than-temporary impairments on fixed maturity securities	` '		` '	(6,664)	
Other investment related gains (losses), net	119,110	(12,041)	32,041	(1,931)	
Total investment related gains (losses), net	118,264	(16,178)	(2,622	(8,595)	
Other revenues	66,193	66,936	125,376	129,223	
Total revenues	3,039,068	2,630,340	5,551,636	5,150,953	
Benefits and Expenses:					
Claims and other policy benefits	1,997,502	1,866,183	3,884,266	3,641,634	
Interest credited	95,849	77,246	183,754	197,924	
Policy acquisition costs and other insurance expenses	405,681	300,412	639,444	577,455	
Other operating expenses	159,895	131,600	317,319	253,218	
Interest expense	20,331	35,851	53,138	71,478	
Collateral finance and securitization expense	6,587	5,258	12,912	11,329	
Total benefits and expenses	2,685,845	2,416,550	5,090,833	4,753,038	
Income before income taxes	353,223	213,790	460,803	397,915	
Provision for income taxes	117,120	83,399	148,228	142,410	
Net income	\$236,103	\$130,391	\$312,575	\$255,505	
Earnings per share:					
Basic earnings per share	\$3.68	\$1.97	\$4.86	\$3.80	
Diluted earnings per share	\$3.64	\$1.94	\$4.81	\$3.76	
Dividends declared per share	\$0.37	\$0.33	\$0.74	\$0.66	
See accompanying notes to condensed consolidated financial sta	atements (una	udited).			
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Table of Contents

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

	Three mo	nths ended	Six months e	ended June	
	June 30,		30,		
	2016	2015	2016	2015	
Comprehensive income (loss)	(Dollars in	n thousands)			
Net income	\$236,103	\$130,391	\$312,575	\$255,505	
Other comprehensive income (loss), net of tax:					
Foreign currency translation adjustments	9,942	21,935	87,675	(95,836)	
Net unrealized investment gains	643,893	(757,641)	1,191,118	(413,717)	
Defined benefit pension and postretirement plan adjustments	1,156	834	(1,703)	1,788	
Total other comprehensive income (loss), net of tax	654,991	(734,872)	1,277,090	(507,765)	
Total comprehensive income (loss)	\$891,094	\$(604,481)	\$1,589,665	\$(252,260)	
See accompanying notes to condensed consolidated financial s	statements	(unaudited).			

Table of Contents

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

(Chaddice)	Six months 30,	s ended June
	2016 (Dollars in	2015 a thousands)
Cash Flows from Operating Activities:	(= ====================================	
Net income	\$312,575	\$255,505
Adjustments to reconcile net income to net cash provided by operating activities:	, ,	,
Change in operating assets and liabilities:		
Accrued investment income	(34,705) (26,656)
Premiums receivable and other reinsurance balances	(98,610) (19,683)
Deferred policy acquisition costs	(5,435) 5,136
Reinsurance ceded receivable balances	(60,465) (115,355)
Future policy benefits, other policy claims and benefits, and other reinsurance balances	380,297	353,946
Deferred income taxes	101,163	77,047
Other assets and other liabilities, net	(43,708) 42,363
Amortization of net investment premiums, discounts and other	(42,843) (39,021)
Investment related (gains) losses, net	2,622	8,595
Other, net	83,555	63,815
Net cash provided by operating activities	594,446	605,692
Cash Flows from Investing Activities:	•	,
Sales of fixed maturity securities available-for-sale	2,271,414	2,742,814
Maturities of fixed maturity securities available-for-sale	273,552	232,712
Sales of equity securities	132,932	50,083
Principal payments on mortgage loans on real estate	294,843	166,583
Principal payments on policy loans	25,065	441
Purchases of fixed maturity securities available-for-sale	(4,416,290) (2,806,351)
Purchases of equity securities	(408,684) (68,116)
Cash invested in mortgage loans on real estate	(543,454) (531,317)
Cash invested in policy loans	(1,679) (686
Cash invested in funds withheld at interest	(27,868) (57,708)
Purchase of businesses, net of cash acquired of \$19,377	_	(191,450)
Purchases of property and equipment	_	(22,944)
Cash paid under securities repurchase agreements	_	(101,203)
Change in short-term investments	350,062	22,543
Change in other invested assets	(8,100) 91,562
Net cash used in investing activities	(2,058,207) (473,037)
Cash Flows from Financing Activities:		
Dividends to stockholders	(47,746) (44,519)
Repayment of collateral finance and securitization notes	(35,369) (17,632)
Proceeds from issuance of collateral finance and securitization notes		160,060
Proceeds from long-term debt issuance	799,984	
Debt issuance costs	(9,026) (1,170)
Principal payments of long-term debt	(1,227) (1,178)
Purchases of treasury stock	(120,806) (262,515)
Exercise of stock options, net	5,219	12,641

Change in cash collateral for derivative positions and other arrangements Deposits on universal life and other investment type policies and contracts	57,055 513,679	(31,244) 132,679
Withdrawals on universal life and other investment type policies and contracts	·	(363,600)
Net cash provided by (used in) financing activities	953,020	(416,478)
Effect of exchange rate changes on cash	19,795	(26,185)
Change in cash and cash equivalents	(490,946)	(310,008)
Cash and cash equivalents, beginning of period	1,525,275	1,645,669
Cash and cash equivalents, end of period	\$1,034,329	\$1,335,661
Supplemental disclosures of cash flow information:		
Interest paid	\$68,445	\$74,637
Income taxes paid, net of refunds	\$43,838	\$(19,307)
Non-cash transactions:		
Transfer of invested assets	\$1,730	\$118
Accrual for capitalized assets	\$ —	\$2,121
Purchase of businesses:		
Assets acquired, excluding cash acquired	\$ —	\$3,681,699
Liabilities assumed	_	(3,490,249)
Net cash paid on purchase	 \$	\$191,450
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 six months ended June 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 Six months ended			
	June 30,		June 30,	
	2016	2015	2016	2015
Earnings:				
Net income (numerator for basic and diluted calculations)	\$236,103	\$130,391	\$312,575	\$255,505
Shares:				
Weighted average outstanding shares (denominator for basic calculation)	64,126	66,351	64,348	67,246
Equivalent shares from outstanding stock options	670	769	660	785
Denominator for diluted calculation	64,796	67,120	65,008	68,031
Earnings per share:				
Basic	\$3.68	\$1.97	\$4.86	\$3.80
Diluted	\$3.64	\$1.94	\$4.81	\$3.76

The calculation of common equivalent shares does not include the impact of options having a strike or conversion price that exceeds the average stock price for the earnings period, as the result would be antidilutive. The calculation of common equivalent shares also excludes the impact of outstanding performance contingent shares, as the conditions necessary for their issuance have not been satisfied as of the end of the reporting period. For the three months ended June 30, 2016, no stock options and approximately 0.7 million performance contingent shares were excluded from the calculation. For the three months ended June 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	_	1,352,211	(1,352,211)
Stock-based compensation (1)	_	(217,434)	217,434
Balance, June 30, 2016	79,137,758	15,068,009	64,069,749
	Issued	Held In	Outstanding
	155646	Treasury	o atomicing
Balance, December 31, 2014	79,137,758	10,364,797	68,772,961
Common stock acquired		2,791,360	(2,791,360)
Stock-based compensation (1)		(440,059)	440,059
Balance, June 30, 2015	79,137,758	12,716,098	66,421,660

(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 six months of 2016, RGA repurchased 1.4 million shares of common stock under this program for \$116.1 million.

Accumulated Other Comprehensive Income (Loss)

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

	AOCI, Net of Income Tax						
	Accumulated Unrealized Pension and						
	Currency Appreciation						
	Translation (Depreciation)	Postretirement Total					
	Adjustmentsof Investments(1)	Benefits					
Balance, December 31, 2015	\$(181,151) \$ 935,697	\$ (46,262) \$708,284					
Other comprehensive income before reclassifications	99,374 1,759,753	(6,083) 1,853,044					
Amounts reclassified to (from) AOCI	— (24,366)	3,467 (20,899)					
Deferred income tax benefit (expense)	(11,699) (544,269)	913 (555,055)					
Balance, June 30, 2016	\$(93,476) \$ 2,126,815	\$ (47,965) \$1,985,374					
	AOCI, Net of Income Tax						
	Accumulated Inrealized	Danaian and					
	Currency Appreciation	Pension and Postretirement Total					
	Translation(Depreciation)						
	Adjustments Investments (1)	Benefits					
Balance, December 31, 2014	3	\$ (49,491) \$1,657,129					
Other comprehensive income before reclassifications	(89,220) (612,314)	733 (700,801)					
Amounts reclassified to (from) AOCI	— (6,192)	1,965 (4,227)					

Deferred income tax benefit (expense) (6,616) 204,789 (910) 197,263

Balance, June 30, 2015 \$(13,989) \$1,211,056 \$(47,703) \$1,149,364

Includes cash flow hedges of \$(41,192) and \$(29,397) as of June 30, 2016 and December 31, 2015, respectively, (1) and \$(23,901) and \$(31,591) as of June 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 six months ended June 30, 2016 and 2015 (dollars in thousands):

	Amount Reclassified from AOCI					
	Three months S		Six mo	ntl	ns ended	
	ended Jur	ne 30,	June 30),		
Details about AOCI Components	2016	2015	2016		2015	Affected Line Item in Statements of Income
Net unrealized investment gains (losses):						
Net unrealized gains (losses) on available-for-sale securities	\$30,190	\$1,829	\$11,89	9	\$4,908	Investment related gains (losses), net
Cash flow hedges - Interest rate swaps	93	231	253		291	(1)
Cash flow hedges - Forward bond purchase commitments	(1,045)	1,807	(257)	967	(1)
Deferred policy acquisition costs attributed to unrealized gains and losses	5,365	(4,307) 12,471		26	(2)
Total	34,603	(440) 24,366		6,192	
Provision for income taxes	(9,646)	(245) (4,996)	(537)
Net unrealized gains (losses), net of tax	\$24,957	\$(685) \$19,37	0	\$5,655	
Amortization of defined benefit plan items:						
Prior service cost	\$(75)	\$(80) \$(153)	\$(163) (3)
Actuarial gains (losses)	(1,841)	(1,098) (3,314)	(1,802) (3)
Total	(1,916)	(1,178) (3,467)	(1,965)
Provision for income taxes	670	413	1,213		688	
Amortization of defined benefit plans, net of tax	\$(1,246)	\$(765) \$(2,25	4)	\$(1,277)

Total reclassifications for the period

\$23,711 \$(1,450) \$17,116 \$4,378

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

June 30, 2016:	Amortized	Unrealized	Unrealized	Estimated Fair	% of	Other-than- temporary impairment	
	Cost	Gains	Losses	Value	Total	in AOCI	
Available-for-sale:							
Corporate securities	\$18,417,375	\$1,260,330	\$134,468	\$19,543,237	58.9 %	\$ —	
Canadian and Canadian provincial governments	2,607,276	1,497,998	_	4,105,274	12.4	_	
Residential mortgage-backed securities	1,225,718	72,733	5,673	1,292,778	3.9	(300)
Asset-backed securities	1,377,736	11,054	32,113	1,356,677	4.1	275	
Commercial mortgage-backed securities	1,441,091	67,727	1,125	1,507,693	4.5	(1,609)

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

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.

U.S. government and agencies	1,907,648	99,690	_	2,007,338	6.1	_	
State and political subdivisions	538,037	74,042	6,137	605,942	1.8	_	
Other foreign government, supranational							
and foreign government-sponsored	2,562,003	190,688	10,654	2,742,037	8.3	_	
enterprises							
Total fixed maturity securities	\$30,076,884	\$3,274,262	\$190,170	\$33,160,976	100.0%	\$ (1,634)
Non-redeemable preferred stock	\$66,464	\$2,575	\$7,936	\$61,103	14.6 %		
Other equity securities	349,577	7,952	446	357,083	85.4		
Total equity securities	\$416,041	\$10,527	\$8,382	\$418,186	100.0%		

Table of Contents

December 31, 2015:	Amortized	Unrealized	Unrealized	Estimated Fair	% of	Other-than temporary impairmen	
	Cost	Gains	Losses	Value	Total	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	2,420,757	78,964	41,644	2,458,077	8.3		
enterprises							
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 June 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 June 30, 2016 and December 31, 2015 (dollars in thousands):

	June 30, 2016		December	31, 2015
	AmortizedEstimated		AmortizedEstimated	
	Cost	Fair Value	Cost	Fair Value
Fixed maturity securities pledged as collateral	\$189,370	\$ 202,763	\$169,678	\$ 176,782
Fixed maturity securities received as collateral	n/a	261,461	n/a	242,914
Assets in trust held to satisfy collateral requirements	12,318,43	213,375,925	10,535,72	910,928,393

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

·	June 30, 2016		December	31, 2015
	Amortize	dEstimated	AmortizedEstimated	
	Cost	Fair Value	Cost	Fair Value
Fixed maturity securities guaranteed or issued by:				
Canadian province of Ontario	\$853,014	\$1,257,954	\$864,444	\$1,199,080
Canadian province of Quebec	1,026,507	1,854,422	943,484	1,525,903

The amortized cost and estimated fair value of fixed maturity securities classified as available-for-sale at June 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

Utility

Total

	Amortized	Estimated
	Cost	Fair Value
Available-for-sale:		
Due in one year or less	\$776,005	\$783,582
Due after one year through five years	6,682,598	7,007,050
Due after five years through ten years	8,706,784	9,309,939
Due after ten years	9,866,952	11,903,257
Asset and mortgage-backed securities	4,044,545	4,157,148
Total	\$30,076,884	\$33,160,976

Corporate Fixed Maturity Securities

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

June 30, 2016:		Estimated		
	Amortized Cost	Fair Value	% of Total	
Finance	\$ 6,268,530	\$6,577,989	33.8	%
Industrial	10,192,465	10,811,758	55.2	
Utility	1,956,380	2,153,490	11.0	
Total	\$ 18,417,375	\$19,543,237	100.0	%
December 31, 2015:		Estimated		
	Amortized Cost	Fair Value	% of Total	
Finance	\$ 5,408,791	\$5,555,044	31.4	%
Industrial	10,211,426	10,129,917	57.2	

1,955,290

\$ 17,575,507

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

2,023,195

\$17,708,156 100.0

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):

11.4

%

	Three months	Six months
	ended June 30,	ended June 30,
	2016 2015	2016 2015
Balance, beginning of period	\$7,284 \$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) —	(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 908 and 2,080 fixed maturity and equity securities as of June 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):

	June 30, 2016	December 31, 2015
	Gross	Gross
	Unrealized% of Total	Unrealized% of Total
	Losses	Losses
Less than 20%	\$150,638 75.8 %	\$463,109 73.8 %
20% or more for less than six months	8,933 4.5	142,495 22.7
20% or more for six months or greater	38,981 19.7	21,847 3.5
Total	\$198,552 100.0 %	\$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 908 and 2,080 fixed maturity and equity securities that have estimated fair values below amortized cost as of June 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
ine 30, 2016:	Estimated	Unrealized	l Estimated	Unrealized	Estimated	Unrealized
	Fair Value	Losses	Fair Value	Losses	Fair Value	Losses
vestment grade securities:						
orporate securities	\$649,275	\$ 15,424	\$1,208,939	\$59,206	\$1,858,214	\$74,630
esidential mortgage-backed securities	67,472	1,672	120,431	3,990	187,903	5,662
sset-backed securities	534,180	18,943	258,828	10,507	793,008	29,450
ommercial mortgage-backed securities	78,002	423	41,399	702	119,401	1,125
tate and political subdivisions	9,697	443	56,930	5,694	66,627	6,137
ther foreign government, supranational and oreign government-sponsored enterprises	99,330	1,135	79,592	3,677	178,922	4,812
otal investment grade securities	1,437,956	38,040	1,766,119	83,776	3,204,075	121,816
elow investment grade securities:						
orporate securities	282,830	14,077	335,351	45,761	618,181	59,838
esidential mortgage-backed securities		_	379	11	379	11
sset-backed securities	5,858	1,118	8,623	1,545	14,481	2,663
	2,328	23	59,437	5,819	61,765	5,842
otal below investment grade securities otal fixed maturity securities on-redeemable preferred stock	291,016 \$1,728,972 \$3,248	15,218 \$ 53,258 \$ 261	403,790 \$2,169,909 \$24,247	53,136 \$136,912 \$7,675	694,806 \$3,898,881 \$27,495	68,354 \$ 190,170 \$ 7,936
corporate securities esidential mortgage-backed securities esset-backed securities commercial mortgage-backed securities tate and political subdivisions other foreign government, supranational and preign government-sponsored enterprises otal investment grade securities elow investment grade securities: corporate securities esidential mortgage-backed securities esidential mortgage-backed securities other foreign government, supranational and preign government-sponsored enterprises otal below investment grade securities otal fixed maturity securities	67,472 534,180 78,002 9,697 99,330 1,437,956 282,830 — 5,858 2,328 291,016 \$1,728,972	1,672 18,943 423 443 1,135 38,040 14,077 	120,431 258,828 41,399 56,930 79,592 1,766,119 335,351 379 8,623 59,437 403,790 \$2,169,909	3,990 10,507 702 5,694 3,677 83,776 45,761 11 1,545 5,819 53,136 \$136,912	187,903 793,008 119,401 66,627 178,922 3,204,075 618,181 379 14,481 61,765 694,806 \$3,898,881	5,66 29,4 1,12 6,13 4,81 121, 59,8 11 2,66 5,84 68,3 \$ 190

Other equity securities			6,606	446	6,606	446
Total equity securities	\$3,248	\$ 261	\$30,853	\$8,121	\$34,101	\$8,382

Table of Contents

	Less than 12		12 months	s or greater	Total	
5 1 24 2047		Gross		Gross		Gross
December 31, 2015:	Estimated			Unrealized		Unrealized
	Fair Value	Losses	Fair Value	eLosses	Fair Value	Losses
Investment grade securities:						
Corporate securities	\$6,388,148	\$323,961	\$294,755	\$40,861	\$6,682,903	\$ 364,822
Canadian and Canadian provincial	122,746	2,532			122,746	2,532
governments	122,740	2,332			122,740	2,332
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	702,962	18,279	38,379	4,206	741,341	22,485
enterprises						
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	60,668	7,356	31,693	11,803	92,361	19,159
enterprises						
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 June 30, 2016 are primarily related to high-yield corporate and other foreign government, supranational and foreign government-sponsored enterprise securities. Unrealized losses decreased across most security types as treasury rates decreased during the first six 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 June 30,		Six months ended June 30,	
	2016	2015	2016	2015
Fixed maturity securities available-for-sale	\$323,592	\$303,792	\$636,007	\$573,560
Mortgage loans on real estate	41,900	37,121	81,692	71,893
Policy loans	16,372	16,248	32,506	30,288
Funds withheld at interest	112,893	87,325	168,873	199,585

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Short-term investments	985	814	1,960	1,509
Other invested assets	29,487	22,418	39,311	34,445
Investment income	525,229	467,718	960,349	911,280
Investment expense	(17,563)	(17,179)	(35,417)	(33,850)
Investment income, net of related expenses	\$507,666	\$450,539	\$924,932	\$877,430

Table of Contents

Investment Related Gains (Losses), Net

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

	Three months ended		d Six months ended	
	June 30,		June 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	\$(846) \$(4,137)	\$(34,663)	\$(6,664)
Gain on investment activity	53,615	20,009	80,807	39,210
Loss on investment activity	(22,556) (14,475)	(34,343)	(28,071)
Other impairment losses and change in mortgage loan provision	211	143	(1,849)	(4,025)
Derivatives and other, net	87,840	(17,718)	(12,574)	(9,045)
Total investment related gains (losses), net	\$118,264	\$ (16,178)	\$(2,622)	\$(8,595)

The fixed maturity impairments for the three and six months ended June 30, 2016 and 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 six months ended June 30, 2016, compared to the same period in 2015, are primarily due to changes in the fair value of interest rate swaps.

During the three months ended June 30, 2016 and 2015, the Company sold fixed maturity and equity securities with fair values of \$343.3 million and \$651.3 million at losses of \$22.6 million and \$14.5 million, respectively. During the six months ended June 30, 2016 and 2015, the Company sold fixed maturity and equity securities with fair values of \$585.8 million and \$850.9 million at losses of \$34.3 million and \$28.1 million, respectively. The Company generally does not buy and sell securities on a short-term basis.

Securities Borrowing 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 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, repurchased securities pledged and repurchased/reverse repurchased securities pledged and received as of June 30, 2016 and December 31, 2015 (dollars in thousands).

	June 30, 2	2016	December	31, 2015
	Amortized Cost	Estimated Fair Value	Amortized Cost	Estimated Fair Value
Borrowed securities	\$269,740	\$289,454	\$259,540	\$266,297
Repurchase program/reverse repurchase program:				
Securities pledged	448,615	480,618	443,435	465,889
Securities received	n/a	485,826	n/a	481,197

The following table presents information on the securities pledged as collateral by the Company related to its repurchase/reverse repurchase program as of June 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.

Table of Contents

	June 30 Remain Agreem Overnig	ing Con ents	tractual	Maturity o	f the
	and Continu	30 1 Das ys	Days	than 90 Days	Total
Collateral on repurchase program:					
Corporate securities	\$ —	\$5,329	\$4,031	\$137,505	
Residential mortgage-backed securities	s —	_	_	101,715	
U.S. government and agencies		_	_	212,918	212,918
Foreign government				14,524	14,524
Other	4,596				4,596
Total borrowings	\$4,596	\$5,329	\$4,031	\$466,662	\$480,618
Gross amount of recognized liabilities preceding table	for repur	chase ag	greemen	t in	\$485,826
Amounts related to agreements not incl	luded in	offsettin	g disclo	sure	\$5,208
S		oer 31, 2			. ,
		,		Maturity o	f the
	Agreen	-		•	
	_	gh U p to	20.00	Greater	
	and	30	30-90	than 90	Total
	Continu	ıo D ays	Days	Days	
Collateral on repurchase program:		3		•	
Corporate securities	\$ —	\$2,95	1 \$ -	\$147,324	\$150,275
Residential mortgage-backed securities	s —	_		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 borrowings			1 \$ -	\$447,752	
<u> </u>					
Gross amount of recognized liabilities preceding table	for repur	chase ag	greemen	t in	\$481,197
Amounts related to agreements not incl	luded in	offsettin	g disclo	sure	\$15,308
Mortgage Loans on Real Estate	iuucu iii	0115000111	5 415010		¥ 12,200

Mortgage loans represented approximately 7.4% and 7.5% of the Company's total investments as of June 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 24.1% and 22.3% of mortgage loans on real estate as of June 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 June 30, 2016 and December 31, 2015 (dollars in thousands):

	June 30, 2016		December 3	1, 2015
Droporty type	Recorded	% of	Recorded	% of
Property type:	Investment Total		Investment	Total
Office building	\$1,057,245	31.3 %	\$980,858	31.3 %
Retail	1,033,538	30.5	1,026,018	32.7
Industrial	708,764	20.9	527,485	16.8

Apartment	397,719	11.8	420,014	13.4
Other commercial	186,272	5.5	182,389	5.8
Total	\$3,383,538	100.0%	\$3,136,764	100.0%

Table of Contents

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

	June 30, 2016		December 3	1,2015
	Recorded	% of	Recorded	% of
	Investment	Total	Investment	Total
Due within five years	\$768,747	22.7 %	\$873,280	27.8 %
Due after five years through ten years	1,800,601	53.2	1,561,535	49.8
Due after ten years	814,190	24.1	701,949	22.4
Total	\$3,383,538	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 June 30, 2016 and December 31, 2015 is as follows (dollars in thousands):

	June 30, 2016		December 3	1, 2015
Internal anadit quality anada.	Recorded	% of	Recorded	% of
Internal credit quality grade:	Investment	Total	Investment	Total
High investment grade	\$1,904,494	56.3 %	\$1,621,601	51.7 %
Investment grade	1,396,572	41.3	1,397,996	44.6
Average	39,444	1.2	87,196	2.8
Watch list	36,035	1.0	13,550	0.4
In or near default	6,993	0.2	16,421	0.5
Total	\$3,383,538	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 June 30, 2016 and December 31, 2015.

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

	June 30,	December
	2016	31, 2015
Mortgage loans:		
Individually measured for impairment	\$6,993	\$16,421
Collectively measured for impairment	3,376,545	3,120,343
Mortgage loans, gross of valuation allowances	3,383,538	3,136,764
Valuation allowances:		
Individually measured for impairment	_	588
Collectively measured for impairment	6,499	6,225
Total valuation allowances	6,499	6,813

Mortgage loans, net of valuation allowances

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

\$3,377,039 \$3,129,951

	Three months		Six months	
	ended June 30,		ended Ju	ine 30,
	2016	2015	2016	2015
Balance, beginning of period	\$6,824	\$6,130	\$6,813	\$6,471
Provision (release)	(325)	(188)	(314)	(529)
Balance, end of period	\$6,499	\$5,942	\$6,499	\$5,942

Table of Contents

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

	Unpaid Principal Balance	Recorded Investment	Related Allowan	Carrying cValue
June 30, 2016:				
Impaired mortgage loans with no valuation allowance recorded	\$7,495	\$ 6,993	\$—	\$6,993
Impaired mortgage loans with valuation allowance recorded	_			_
Total impaired mortgage loans	\$7,495	\$ 6,993	\$ —	\$6,993
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 June 30,	
	2016	2015
	Average Interest	Average Interest
	Recorded	Recorded
	Investment (1)	Investment (1)
Impaired mortgage loans with no valuation allowance recorded	\$3,901 \$ 107	\$5,524 \$35
Impaired mortgage loans with valuation allowance recorded	4,724 —	11,397 229
Total impaired mortgage loans	\$8,625 \$ 107	\$16,921 \$264
	Six months ended Ju	une 30,
	2016	2015
	Average	Average Interest
	PagardadInterest	Pagardad
	PagardadInterest	Pagardad
Impaired mortgage loans with no valuation allowance recorded	Interest	meresi
Impaired mortgage loans with no valuation allowance recorded Impaired mortgage loans with valuation allowance recorded	Recorded Income Investment(1)	Recorded Income Investment(1)

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

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

Policy loans comprised approximately 3.2% and 3.5% of the Company's total investments as of June 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 12.9% and 14.0% of the Company's total investments as of June 30, 2016 and December 31, 2015, respectively. Of the \$5.9 billion funds withheld at interest balance, net of embedded derivatives, as of June 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

Table of Contents

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 3.7% and 3.1% of the Company's total investments as of June 30, 2016 and December 31, 2015, respectively. Carrying values of these assets as of June 30, 2016 and December 31, 2015 are as follows (dollars in thousands):

	June 30,	December
	2016	31, 2015
Equity securities	\$418,186	\$125,862
Limited partnership interests and real estate joint ventures	635,574	567,697
Derivatives	310,796	256,178
FVO contractholder-directed unit-linked investments	195,842	197,547
Other	121,745	150,836
Total other invested assets	\$1,682,143	\$1,298,120

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

	June 30, 2016			December 31, 2015			
	Notional	Carrying Value/Fair Value		Notional	Carrying Value	Value/Fair	
	Amount	Assets	Liabilities	Amount	Assets	Liabilities	
Derivatives not designated as hedging							
instruments:							
Interest rate swaps	\$1,118,523	\$175,987	\$970	\$1,123,057	\$85,075	\$4,196	
Financial futures	508,310	_		420,665			
Foreign currency forwards	43,000	1,703	2,732	45,000	44	6,768	
Consumer price index swaps	29,208	_	613	28,561	_	292	
Credit default swaps	865,000	8,635	5,300	897,000	8,230	11,053	
Equity options	541,749	54,322	_	453,435	46,653		
Longevity swaps	888,480	17,781	_	868,960	15,003	7	
Mortality swaps	50,000	_	1,997	50,000	_	2,619	
Synthetic guaranteed investment contracts	8,235,734	_	_	7,098,825	_		
Embedded derivatives in:							
Modified coinsurance or funds withheld			01 001			76 600	
arrangements	_	_	91,981		_	76,698	
Indexed annuity products	_		841,832			878,114	
Variable annuity products	_	_	283,548		_	192,470	
Total non-hedging derivatives	12,280,004	258,428	1,228,973	10,985,503	155,005	1,172,217	
Derivatives designated as hedging							
instruments:							

Interest rate swaps	435,000	_	42,038	120,000	_	29,986
Foreign currency swaps	909,524	102,406	3,383	823,486	146,265	_
Total hedging derivatives	1,344,524	102,406	45,421	943,486	146,265	29,986
Total derivatives	\$13,624,528	\$360,834	\$1,274,394	\$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.

Table of Contents

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, repurchase and repurchase/reverse repurchase programs. See "Embedded Derivatives" below for information regarding the Company's bifurcated embedded derivatives.

The following table provides information relating to the Company's derivative instruments as of June 30, 2016 and December 31, 2015 (dollars in thousands):

					Gross Amounts Not				
					Offset in t	he Balance Sheet			
	Gross Amounts Recognized	Gross Amoun Offset in the Balance Sheet		Net Amounts Presented in the Balance Sheet	Financial Instrument	Cash Collateral Pledged/ ts (F) Received		Net Amount	
June 30, 2016:									
Derivative assets	\$ 360,834	\$ (32,257)	\$ 328,577	\$(40,876)	\$ (298,459)	,	\$ (10,758)
Derivative liabilities	57,033	(32,257)	24,776	(74,538)	(16,822)	,	(66,584)
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.

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 June 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 June 30, 2016, were (dollars in thousands):

Type of Fair Value Hedge	Hedged Item	Gains (Losses) Recognized for Derivatives	_	Ineffectiveness Recognized in Investment Related Gains (Losses), net
For the three months ended	I June 30, 2016:	2011,001,00	1001115	(20000), 1100
Foreign currency swaps	Foreign-denominated fixed maturity securities	\$ (3,755)	\$ 3,755	\$ —
For the six months ended J	une 30, 2016:			
Foreign currency swaps	Foreign-denominated fixed maturity securities	\$ 2,112	\$ (2,112)	\$ —

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 six months ended June 30, 2016, \$2.4 million and \$7.0 million, respectively, of the change in the estimated fair value of derivatives, was excluded from hedge effectiveness. There were no fair value hedges as of June 30, 2015.

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 six months ended June 30, 2016 and 2015 (dollars in thousands):

	Three months ended
	June 30,
	2016 2015
Balance beginning of period	\$(21,794) \$(30,598)
Gains (losses) deferred in other comprehensive income (loss) on the effective portion of cash	(20,350) 8,735
flow hedges	(20,550) 6,755
Amounts reclassified to investment related gains (losses), net	1,010 (1,495)
Amounts reclassified to investment income	(58) (543)
Balance end of period	\$(41,192) \$(23,901)
	Six months ended
	Six months ended June 30,
Balance beginning of period	June 30,
Balance beginning of period Gains (losses) deferred in other comprehensive income (loss) on the effective portion of cash	June 30, 2016 2015 \$(29,397) \$(31,591)
	June 30, 2016 2015
Gains (losses) deferred in other comprehensive income (loss) on the effective portion of cash	June 30, 2016 2015 \$(29,397) \$(31,591)
Gains (losses) deferred in other comprehensive income (loss) on the effective portion of cash flow hedges	June 30, 2016 2015 \$(29,397) \$(31,591) (11,799) 8,948
Gains (losses) deferred in other comprehensive income (loss) on the effective portion of cash flow hedges Amounts reclassified to investment related (gains) losses, net	June 30, 2016 2015 \$(29,397) \$(31,591) (11,799) 8,948 169 (655)

As of June 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 \$0.5 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 six months ended June 30, 2016 and 2015 (dollars in thousands):

	Effective 1	Portion			
Derivative Type	Gain (Loss) Recognize in OCI	Gain (Loss) Reclassified into Income from OCI			
		Investme Related Gains (Losses), net	nt Investme Income	ent	
For the three months ended June 30, 2016:					
Interest rate swaps	\$(20,350)	\$—	\$ 93		
Forward bond purchase commitments		(1,010)	(35)	
Total	\$(20,350)	\$(1,010)	\$ 58		
For the three months ended June 30, 2015:					
Interest rate swaps	\$2,417	\$ —	\$ 231		
Forward bond purchase commitments	6,318	*			
Total	\$8,735	\$1,495	\$ 543		

For the six months ended June 30, 2016:				
Interest rate swaps	\$(11,799)	\$	\$ 253	
Forward bond purchase commitments		(169) (88	,
Total	\$(11,799)	\$(169) \$ 165	
For the six months ended June 30, 2015:				
Interest rate swaps	\$(5,150)	\$ —	\$ 291	
Forward bond purchase commitments	14,098	655	312	
Total	\$8,948	\$655	\$ 603	

All components of each derivative's gain or loss were included in the assessment of hedge effectiveness. For the three and six months ended June 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 six months ended June 30, 2016 and 2015 (dollars in thousands):

Derivative Gains (Losses) Deferred in AOCI

For the three months For the six months ended June 30, ended June 30, Type of NIFO Hedge $^{(1)}(2)$ 2016 2015 2016 2015 Foreign currency swaps \$ 302 \$ (12,945) \$ (31,493) \$ 37,021

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 \$140.4 million and \$171.9 million at June 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, including derivatives used to economically hedge changes in the fair value of liabilities associated with the reinsurance of variable annuities with guaranteed living benefits. 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 six months ended June 30, 2016 and 2015 is as follows (dollars in thousands):

tilousands).		Gain (Loss) for the June 30,	he three months	ended
Type of Non-hedging Derivative	Income Statement Location of Gain (Loss)	2016	2015	
Interest rate swaps	Investment related gains (losses), net	\$ 41,500	\$ (41,729)
Financial futures	Investment related gains (losses), net	(7,557) (2,183)
Foreign currency forwards	Investment related gains (losses), net	3,577	(1,433)
CPI swaps	Investment related gains (losses), net	(520) 168	
Credit default swaps	Investment related gains (losses), net	3,518	(187)
Equity options	Investment related gains (losses), net	(3,225) (2,606)
Longevity swaps Mortality swaps Subtotal Embedded derivatives in:	Other revenues Other revenues	2,394 1,046 40,733	1,911 (478 (46,537)
Modified coinsurance or funds withheld arrangements	Investment related gains (losses), net	76,966	(23,098)
Indexed annuity products	Interest credited	(2,019) 8,080	
Variable annuity products	Investment related gains (losses), net	(28,137) 50,878	
Total non-hedging derivatives	net	\$ 87,543	\$ (10,677)
		Gain (Loss) for the June 30,	he six months en	nded
Type of Non-hedging Derivative	Income Statement Location of Gain (Loss)	2016	2015	
Interest rate swaps	Investment related gains (losses), net	\$ 104,027	\$ (12,385)
Interest rate options	Investment related gains (losses), net	_	3,275	
Financial futures	Investment related gains (losses), net	(18,608) (9,514)
Foreign currency forwards	Investment related gains (losses), net	6,077	(1,653)
CPI swaps	Investment related gains (losses), net	(700) 97	
Credit default swaps	Investment related gains (losses), net	6,864	2,471	
Equity options	Investment related gains (losses), net	(5,928) (10,672)

Longevity swaps	Other revenues	2,481		3,731	
Mortality swaps	Other revenues	622		(957)
Subtotal		94,835		(25,607)
Embedded derivatives in:					
Modified coinsurance or funds withheld	Investment related gains (losses),	(15,283)	(25,423)
arrangements	net	(13,203	,	(23, 123	,
Indexed annuity products	Interest credited	(626)	(21,246)
Variable annuity products	Investment related gains (losses), net	(91,077)	25,745	
Total non-hedging derivatives		\$ (12,151)	\$ (46,531)

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.

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

	June 30,	2016		Decembe	er 31, 2015	
Rating Agency Designation of Referenced Credit Obligations ⁽¹⁾		Maximum edAfraciunt of Fut f Paychents under Credit Default Swaps ⁽²⁾	Average Years to	Estimated Value of Default Swaps	Amount of Full	Weighted ure Average Years to Maturity ⁽³⁾
AA/AA-/A+/A/A-						
Single name credit default swaps	\$851	\$ 151,500	4.2	\$1,689	\$ 152,500	3.9
Credit default swaps referencing indices						
Subtotal	851	151,500	4.2	1,689	152,500	3.9
BBB+/BBB/BBB-						
Single name credit default swaps	(2,451)	289,200	4.2	(5,066)	315,200	4.2
Credit default swaps referencing indices	4,554	416,000	5.0	2,274	416,000	5.0
Subtotal	2,103	705,200	4.7	(2,792)	731,200	4.6
BB+/BB						
Single name credit default swaps	(134)	5,000	3.2	(2,900)	10,000	4.1
Credit default swaps referencing indices		_	_		_	
Subtotal	(134)	5,000	3.2	(2,900)	10,000	4.1
Total	\$2,820	\$ 861,700	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.
- 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 six months ended June 30, 2016 and 2015.

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 six months ended June 30, 2016 and 2015 are reflected in the following table (dollars in thousands):

		Three mo	nths ended	Six month	is ended	
		June 30,		June 30,		
		2016	2015	2016	2015	
Embedded derivatives in modco or funds withheld arrangements inc in investment related gains	cluded	\$76,966	\$(23,098)	\$(15,283)	\$(25,423	3)
After the associated amortization of DAC and taxes, the related amortization included in net income		18,807	` ' '	(7,970)	(6,504)
Embedded derivatives in variable annuity contracts included in inverelated gains	estment	t (28,137)	50,878	(91,077)	25,745	
After the associated amortization of DAC and taxes, the related amortization included in net income	ounts	(40,167)	19,608	(66,010)	10,198	
Amounts related to embedded derivatives in equity-indexed annuitie included in benefits and expenses	es	(2,019)	8,080	(626)	(21,246)
After the associated amortization of DAC and taxes, the related amortization included in net income	ounts	(7,816)	1,233	3,418	(14,766)
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. The Company's credit exposure related to derivative contracts is generally limited to the fair value at the reporting date plus or minus any collateral posted or held by the Company. The Company's credit exposure to mortality swaps is minimal, as they are fully collateralized by a counterparty. Information regarding the Company's credit exposure related to its over-the-counter derivative contracts, centrally cleared derivative contracts and margin account for exchange-traded futures, excluding mortality swaps, at June 30, 2016 and December 31, 2015 are reflected in the

following table (dollars in thousands):

	June 30,	December
	2016	31, 2015
Estimated fair value of derivatives in net asset position	\$305,798	\$248,968
Cash provided as collateral ⁽¹⁾	16,822	12,540
Securities pledged to counterparties as collateral ⁽²⁾	74,538	47,149
Cash pledged from counterparties as collateral ⁽³⁾	(298,459)	(245,038)
Securities pledged from counterparties as collateral ⁽⁴⁾	(40,876)	(20,888)
Initial margin for cleared derivatives ⁽²⁾	(62,577)	(34,898)
Net amount after application of master netting agreements and collateral	\$(4,754)	\$7,833
Margin account related to exchange-traded futures ⁽⁵⁾	\$10,503	\$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.

Table of Contents

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 June 30, 2016 and December 31, 2015 are summarized below (dollars in thousands):

June 30, 2016:		Fair Value Measurements Using:			
	Total	Level 1	Level 2	Level 3	
Assets:					
Fixed maturity securities – available-for-sale:					
Corporate securities	\$19,543,237	\$252,082	\$17,993,773	\$1,297,382	
Canadian and Canadian provincial governments	4,105,274		3,551,082	554,192	
Residential mortgage-backed securities	1,292,778		1,126,799	165,979	
Asset-backed securities	1,356,677		1,057,861	298,816	
Commercial mortgage-backed securities	1,507,693		1,469,758	37,935	
U.S. government and agencies	2,007,338	1,874,944	106,139	26,255	
State and political subdivisions	605,942		570,696	35,246	
Other foreign government supranational and foreign	2 742 027	200 622	2 429 609	12.706	
government-sponsored enterprises	2,742,037	289,633	2,438,698	13,706	
Total fixed maturity securities – available-for-sale	33,160,976	2,416,659	28,314,806	2,429,511	
Funds withheld at interest – embedded derivatives	(91,981	· —		(91,981)	
Cash equivalents	213,556	213,556			
Short-term investments	160,901	133,716	27,185		
Other invested assets:					
Non-redeemable preferred stock	61,103	48,030	13,073		
Other equity securities	357,083	357,083			
Derivatives:					
Interest rate swaps	159,611	_	159,611		
Foreign currency forwards	1,498		1,498		
CPI swaps	(613	· —	(613)		
Credit default swaps	5,625		5,625		
Equity options	43,543		43,543		
Foreign currency swaps	101,132		101,132		
FVO contractholder-directed unit-linked investments	195,842	194,604	1,238		
Other	934	934	_		
Total other invested assets	925,758	600,651	325,107		
Other assets - longevity swaps	17,781	_	_	17,781	
Total	\$34,386,991	\$3,364,582	\$28,667,098	\$2,355,311	
Liabilities:					
Interest sensitive contract liabilities – embedded derivatives	\$1,125,380	\$—	\$ —	\$1,125,380	
Other liabilities:					
Derivatives:					
Interest rate swaps	26,632		26,632		
Foreign currency forwards	2,527		2,527		
Credit default swaps	2,290	_	2,290		
Equity options	(10,779		(10,779)		
Foreign currency swaps	2,109	_	2,109	_	
Mortality swaps	1,997			1,997	
Total	\$1,150,156	\$ —	\$22,779	\$1,127,377	

Table of Contents

December 31, 2015:		Fair Value l	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	Ψ 2 00,030	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	1,414,324	26,265
State and political subdivisions	511,014	1,227,030		•
•	311,014		472,672	38,342
Other foreign government, supranational and foreign	2,458,077	260,552	2,183,460	14,065
government-sponsored enterprises	20 (42 005	1 757 440	25 460 600	2.424.766
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)	106.501		(76,698)
Cash equivalents	406,521	406,521		
Short-term investments	530,773	524,946	5,827	
Other invested assets:		0.4.000		
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	\$ <u></u>	\$22,206	\$1,073,203
The Commons may still a information from third nortice each	ψ1,0/J, 1 0/	ψ— riogg om d la :1	Ψ44,400 roma to conict is	ψ1,073,203

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 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.

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

Table of Contents

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 June 30, 2016 and December 31, 2015, the Company classified approximately 7.3% 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 June 30, 2016 and December 31, 2015 (dollars in thousands):

	Estimated Fair Valu			Unobservable	Range (Weighted Average)		
	June 30, 2016	December 31, 2015	Technique	Inputs	June 30, 2016	December 31, 2015	
Assets: Corporate securities	\$167,602	\$195,557	Market comparable securities	Liquidity premium	0-2% (1%)	0-2% (1%)	
U.S. government and agencies		26,265	Market comparable securities	Liquidity premium	0-1% (1%)	0-1% (1%)	
State and political subdivisions	4,941	4,770	Market comparable securities	Liquidity premium	1 %	1 %	
Funds withheld at interest- embedded derivatives	(91,981)	(76,698)	Total return swap	Mortality	0-100% (2%)	0-100% (2%)	
				Lapse Withdrawal CVA Crediting rate	0-35% (8%) 0-5% (3%) 0-5% (1%) 2-4% (2%)	0-35% (7%) 0-5% (3%) 0-5% (1%) 2-4% (3%)	
Longevity swaps	17,781	14,996	Discounted cash flow	Mortality	0-100% (2%)	0-100% (2%)	
1				Mortality improvement	(10%)-10% (3%)	(10%)-10% (3%)	
Liabilities: Interest sensitive contract liabilities- embedded derivatives- indexed annuities	841,832	878,114	Discounted cash flow	Mortality	0-100% (2%)	0-100% (2%)	
amulties				Lapse Withdrawal	0-35% (8%) 0-5% (3%)	0-35% (7%) 0-5% (3%)	
				Option budget projection	2-4% (2%)	2-4% (3%)	
Interest sensitive contract liabilities-	283,548	192,470	Discounted cash flow	Mortality	0-100% (2%)	0-100% (2%)	

embedded derivativesvariable annuities

				Lapse	0-25% (7%)	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	1,997	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. The following tables present the transfers between Level 1 and Level 2 during the three and six months ended June 30, 2016 and 2015 (dollars in thousands):

2016		2015	
Transfers	from	Transf	ers from
Level	Transfers from	Level	Transfers from
1 to	Level 2 to	1 to	Level 2 to
Level	Level 1	Level	Level 1
2		2	

Three months ended June 30:

Fixed maturity securities - available-for-sale:

Six months ended June 30:

Fixed maturity securities - available-for-sale:

Corporate securities \$ — \$ 625 \$ 36,996

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

For the three months ended June 30, 2016:

Fixed maturity securities - available-for-sale

	Corporate securities	Canadian and Canadian provincial governments	Residential mortgage- backed securities	Asset-backe securities	Commercial dmortgage- backed securities	U.S. governme and agencies	ent
Fair value, beginning of period	\$1,243,660	\$ 487,383	\$333,253	\$ 285,220	\$ 63,574	\$ 25,880	
Total gains/losses (realized/unrealized)							
Included in earnings, net:							
Investment income, net of related	(592)	3,049	116	252	490	(122)
expenses	· · · · · · · · · · · · · · · · · · ·	2,0.5				(122	,
Investment related gains (losses), net	12	_	(1,891)	823	(2,669)		
Interest credited							
Included in other comprehensive	30,391	63,760	3,839	2,793	453	461	
income	30,391	03,700	3,039	2,193	433	401	
Other revenues	_	_		_	_	_	
Purchases ⁽¹⁾	72,982	_	42,913	59,779	_	144	
Sales ⁽¹⁾	(901)		(167,236)	(30,181)	(22,338)		
Settlements ⁽¹⁾	(47,461)		(13,464)	(4,196)	(68)	(108)
Transfers into Level 3	5,023			18,398			
Transfers out of Level 3	(5,732)		(31,551)	(34,072)	(1,507)		
Fair value, end of period	\$1,297,382	\$ 554,192	\$165,979	\$ 298,816	\$ 37,935	\$ 26,255	
Time of the decision and to see a manufaction							

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 Investment related gains (losses), net Interest credited	\$(608) \$ 3,049	\$530 	\$ 187 	\$ 485 	\$ (122)
33						

Table of Contents

For the three months ended June 30, 2016 (continued): Fair value, beginning of period Total gains/losses (realized/unrealized)	State and political	for go su for pgo en	ity securities r-sale ther foreign overnment, apranational a oreign overnment-spenterprises 13,936			eld crest- dded tive:	Longovity	Interest sensitive contract liabilities embedded derivatives \$(1,118,069)	Other liabilities - mortality swaps
Included in earnings, net: Investment income, net of related	12		_					_	_
expenses	12					_			
Investment related gains (losses), net		_	_		76,96	7		(28,137) —
Interest credited Included in other comprehensive			_					(2,019) —
income	837	95	5				(419) —	_
Other revenues		_	_				2,394	_	1,046
Purchases ⁽¹⁾	_	_	_				_	4,703	_
Sales ⁽¹⁾	_	_	_		_		_	_	_
Settlements ⁽¹⁾	(227)	(3	325)			_	18,142	_
Transfers into Level 3 Transfers out of Level 3	_		_				_		_
Fair value, end of period		\$	13,706		— \$(91 (081) \$17,781	\$(1,125,380	—)) \$(1 997)
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:		Ψ	15,700		Ψ (> 1 , >		,	\$\(\(\frac{1}{2}\),\(\frac{1}{2}\)) (((, , ,))
Investment income, net of related expenses	\$12	\$	_		\$ —		\$—	\$ —	\$
Investment related gains (losses), net		_	_		76,96	7		(31,333) —
Other revenues		_	_				2,394		1,046
Interest credited	_	_	_		_		_	(20,162) —
For the six months ended June 30, 2016:	Fixed ma	turi	ity securities -	- av	ailable-	-for-	sale		
	Corporate		Canadian and Canadian provincial governments	mo bao	sidenti ortgage cked curities	- A	sset-backed curities	Commercial mortgage- backed securities	U.S. government and agencies
Fair value, beginning of period Total gains/losses (realized/unrealized) Included in earnings, net:	\$1,226,97	70	\$ 416,076		30,649	\$	303,836	\$ 68,563	\$ 26,265
Investment income, net of related expenses	(1,419)	6,051	(37	71) 42	26	1,133	(245)
Investment related gains (losses), net Interest credited	(21,856)		(1,	922) 1,	101	(3,289)	_ _

Included in other comprehensive income	56,073	132,065	(493) (7,734) (2,359) 1,057
Other revenues		_		_	_	_
Purchases ⁽¹⁾	140,578	_	72,228	97,050	1,545	257
Sales ⁽¹⁾	(10,483) —	(167,684	(38,681) (25,976) —
Settlements ⁽¹⁾	(96,955) —	(24,904) (7,921) (137) (1,079)
Transfers into Level 3	10,206			24,796		
Transfers out of Level 3	(5,732) —	(41,524) (74,057) (1,545) —
Fair value, end of period	\$1,297,382	\$ 554,192	\$165,979	\$ 298,816	\$ 37,935	\$ 26,255
Unrealized gains and losses recorded in	ı					
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	\$(1,428) \$ 6,051	\$42	\$ 350	\$ 1,031	\$ (245)
expenses	Ψ(1, 720) φ 0,031	Ψ+2	ψ 330	ψ 1,031	ψ (243)
Investment related gains (losses), net	(21,726) —				
Interest credited	_	_	_	_	_	_
34						

Table of Contents

For the six months ended June 30, 2016 (continued):	Fixed maavailable-	turity securities for-sale				
	State and political subdivision	Other foreign government, supranational and foreign ogovernment-spons enterprises	Funds withheld at interest- embedded ored. 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	195	_	_	_	_	_
Investment related gains (losses), net		_	(15,283)	_	(91,077)	
Interest credited					(626)	
Included in other comprehensive income	1,171	288		304		
Other revenues	_	_	_	2,481	_	622
Purchases ⁽¹⁾	_	_	_	—	2,035	_
Sales ⁽¹⁾	_	_	_	_	_	_
Settlements ⁽¹⁾	(258)	(647)	_	_	34,872	_
Transfers into Level 3	_	_	_		_	_
Transfers out of Level 3	(4,204)	_	_	_	_	_
Fair value, end of period	\$35,246	\$ 13,706	\$(91,981)	\$ 17,781	\$(1,125,380)	\$(1,997)
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	\$195	\$ —	\$ —	\$	\$ —	\$ —
expenses	Ψ1)0	Ψ	Ψ	Ψ	Ψ	Ψ
Investment related gains (losses), net		_	(15,283)		(96,811)	
Other revenues	_	_	_	2,481		622
Interest credited	_	_		_	(35,497)	

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 six months ended June 30, 2015, as well as the portion of gains or losses included in income for the three and six months ended June 30, 2015 attributable to unrealized gains or losses related to those assets and liabilities still held at June 30, 2015 (dollars in thousands):

For the three months ended June 30, 2015:

Fixed maturity securities - available-for-sale

2013.	Corporate securities	backed securities	Asset-backet securities	backed securities	government and agencies	political subdivisions
Fair value, beginning of period Total gains/losses (realized/unrealized) Included in earnings, net:	\$1,286,979	\$192,579	\$ 609,436	\$ 93,869	\$ 27,756	\$ 41,875
Investment income, net of related expenses	(1,051) (156	1,511	677	112	8
Investment related gains (losses), net Interest credited	(166) —) 17 —	283 —	(770) —	(10) —	(5)
Included in other comprehensive income	(16,902	(1,291) (301) (386	(559)	(1,480)
Purchases ⁽¹⁾	76,982	118,868	44,181	42	154	_
Sales ⁽¹⁾ Settlements ⁽¹⁾ Transfers into Level 3) —) (8,617 1,800) (2,000)) (893) —	— (94) —	(212) —
Transfers out of Level 3 Fair value, end of period	\$1,237,317			(12,720) \$ 77,819		
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	\$(997)	\$(156	\$ 706	\$ 640	\$ 112	\$8
Investment related gains (losses), net Interest credited		_			_	
For the three months ended June 30, 2015 (continued):	Fixed maturit securities available-for-	-				
	Other foreign government, supranational foreign government-s enterprises	Funds withhe and at interessponsemeded	assets - t- non-rede	Other assets - emab le ongevity swaps	Interest sensitive contract liabilities embedded derivatives	Other liabilities - mortality swaps
Fair value, beginning of period Total gains/losses (realized/unrealized) Included in earnings, net:	\$ 15,202	\$ 19,76	59 \$ 7,992	\$8,602	\$(1,132,271	.) \$(1,276)

Investment income, net of related										
expenses										
Investment related gains (losses), net	_		(23,098)			_	50,878			
Interest credited	_			_		_	8,080			
Included in other comprehensive	(232	`		(104	`	340				
income	(232)	_	(104)	340	_			
Other revenues			_			1,911		(478	3)
Purchases ⁽¹⁾	_			4,500		_	(13,924)			
Sales ⁽¹⁾	_						_			
Settlements ⁽¹⁾	(313)					18,083			
Transfers into Level 3			_							
Transfers out of Level 3	_			_		_	_			
Fair value, end of period	\$ 14,657		\$(3,329)	\$ 12,388		\$10,853	\$(1,069,154)	\$(1,	754)
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	\$ —		¢	¢		¢	¢	Φ		
expenses	э —		5 —	5 —		5 —	J —	J —		
Investment related gains (losses), net	_		(23,098)			_	48,603			
Other revenues	_			_		1,911	_	(478	3)
Interest credited	_		_				(10,003)	_		
36										

Table of Contents

For the six months ended June 30, 2015:	Fixed matu	ıri	ty securiti	es	- available-fo	or-sale					
2013.	Corporate securities		Residenti mortgage backed securities	;-	Asset-backed securities	Commercial dmortgage- backed securities	1	U.S. government and agencies		State and political subdivision	ne
Fair value, beginning of period Total gains/losses (realized/unrealized) Included in earnings, net:	\$1,310,42	7	\$188,094		\$ 572,960	\$ 86,746		\$ 28,529		\$ 42,711)11S
Investment income, net of related	(1,854)	(296)	2,930	1,271		93		15	
expenses Investment related gains (losses), net Interest credited	(571		(65 —		356)	(117)	(9)
Included in other comprehensive income	(10,833)	(768)	3,331	(696))	(1,455)
Purchases ⁽¹⁾ Sales ⁽¹⁾ Settlements ⁽¹⁾	113,882 (3,949 (163,296	-	130,307 (714 (14,336	-		` ')	 (241)
Transfers into Level 3	413	,	2,400	,	9,055	12,828	,	_		_	,
Transfers out of Level 3 Fair value, end of period	(6,902 \$1,237,317	-	(6,246	-	(16,450) \$580,510	(12,720 \$ 77,819)	\$ 27,359		(835 \$ 40,186)
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:	¥ 1, = 0 1,0 1	•	Ψ 2 20,676		4 600,610	ψ . , , e i >		¥ 27,000		+ 10,100	
Investment income, net of related expenses	\$(1,800)	\$(297)	\$ 2,105	\$ 1,229		\$ 93		\$ 15	
Investment related gains (losses), net Interest credited	_		_			_				<u> </u>	
2015 (continued):	Fixed matures ecurities available-for Other foreign government, supranational Goreign government-enterprises	r-s n	ale Funds withheand at interes	elo st-	assets -	Other assets - mab l ongevity swaps	y	Interest sensitive contract liabilities embedded derivatives		Other liabilitie - mortalit swaps	
Fair value, beginning of period Total gains/losses (realized/unrealized) Included in earnings, net:	\$ 19,663		\$ 22,0			\$7,727		\$(1,085,16) \$(797)
Investment income, net of related expenses			_		_	_		_			
Investment related gains (losses), net	_		(25,42	23) —	_		25,745 (21,246		_) _	

Policy acquisition costs and other										
insurance expenses										
Included in other comprehensive	(50	`		(16	`	(605)				
income	(30	,		(10	,	(003	, —			
Other revenues						3,731		(957)
Purchases ⁽¹⁾				4,529			(25,568) —		
Sales ⁽¹⁾										
Settlements ⁽¹⁾	(623)								
Transfers into Level 3							37,081	_		
Transfers out of Level 3	(4,333)		(29)			_		
Fair value, end of period	\$ 14,657		\$(3,329)	\$ 12,388		\$10,853	\$(1,069,154)	\$(1,	754)
Unrealized gains and losses recorded										
in earnings for the period relating to										
those Level 3 assets and liabilities that	t									
were still held at the end of the period										
Included in earnings, net:										
Investment income, net of related	\$ —		\$ —	\$ —		\$ —	\$—	\$ —		
expenses	*			*		*		т		
Investment related gains (losses), net			(25,423)			_	20,358	_		
Other revenues			_			3,731		(957)
Interest credited			_				(58,327) —		

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

Nonrecurring Fair Value Measurements

The following table presents information for assets measured at estimated fair value on a nonrecurring basis during the periods presented; they are subject to fair value adjustments only in certain circumstances (for example, when there is evidence of impairment). The estimated fair values for these assets were determined using significant unobservable inputs (Level 3).

	Carryin After Measur		Net Inv Gains (
	At June	30,			Six more ended J	
			30,		30,	
(dollars in thousands)	2016	2015	2016	2015	2016	2015
Mortgage loans ⁽¹⁾	\$6,993	\$5,850	\$(400)	\$(11)	\$(702)	\$ 39
Limited partnership interests ⁽²⁾	4,460	13,667	(112)		(2,039)	(4,509)

Mortgage loans — The impaired mortgage loans presented above were written down to their estimated fair values at the date the impairments were recognized and are reported as losses above. Subsequent improvements in estimated

- (1) fair value on previously impaired loans recorded through a reduction in the previously established valuation allowance are reported as gains above. Nonrecurring fair value adjustments on mortgage loans are based on the fair value of underlying collateral or discounted cash flows.
- Limited partnership interests The impaired limited partnership interests presented above were accounted for using the cost method. Impairments on these cost method investments were recognized at estimated fair value determined using the net asset values of the Company's ownership interest as provided in the financial statements of the investees. The market for these investments has limited activity and price transparency.

Fair Value of Financial Instruments

The Company is required by general accounting principles for Fair Value Measurements and Disclosures to disclose the fair value of certain financial instruments including those that are not carried at fair value. The following table presents the carrying amounts and estimated fair values of the Company's financial instruments, which were not measured at fair value on a recurring basis, at June 30, 2016 and December 31, 2015 (dollars in thousands). This table excludes any payables or receivables for collateral under repurchase agreements and other transactions. The estimated fair value of the excluded amount approximates carrying value as they equal the amount of cash collateral received/paid.

June 30, 2016:	Carrying Value	Estimated	Fair Value Measurement Using:				
Julie 30, 2010.	Carrying value	Fair Value	Lekevel 2	Level 3	NAV		
Assets:							
Mortgage loans on real estate	\$ 3,377,039	\$3,502,098	\$ -\$ -	-\$3,502,098	\$ —		
Policy loans	1,445,410	1,445,410	1,445,410		_		
Funds withheld at interest ⁽¹⁾	5,987,794	6,368,471		6,368,471	_		
Cash and cash equivalents ⁽²⁾	820,773	820,773	82 0,7 73		_		
Short-term investments ⁽²⁾	35,078	35,078	35 ,07 8		_		
Other invested assets ⁽²⁾	383,295	409,054	4,23967,151	86,092	282,514		
Accrued investment income	368,926	368,926	-368,926		_		
Liabilities:							
Interest-sensitive contract liabilities ⁽¹⁾	\$ 10,058,118	\$10,650,840	\$ -\$ -	_\$10,650,840	\$ —		
Short-term debt	299,807	308,457		308,457	_		
Long-term debt	2,788,473	2,954,981		2,954,981			
Collateral finance and securitization notes	870,482	790,304		790,304	_		
	0,0,.0=	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,			

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		Estimated	Fair Value Measurement Using:				
December 31, 2015:	Carrying Value	Fair Value	Level 1 Level 2	Level 3	NAV		
Assets:							
Mortgage loans on real estate	\$ 3,129,951	\$3,197,808	\$-\$ -	_\$3,197,808	\$ —		
Policy loans	1,468,796	1,468,796	-1,468,796	,			
Funds withheld at interest ⁽¹⁾	5,956,380	6,311,780		6,311,780			
Cash and cash equivalents ⁽²⁾	1,118,754	1,118,754	1,148,754				
Short-term investments ⁽²⁾	27,511	27,511	27 ,5 11				
Other invested assets ⁽²⁾	399,799	444,342	4,4345,886	111,412	293,599		
Accrued investment income	339,452	339,452	—339,452	_	_		
Liabilities:							
Interest-sensitive contract liabilities ⁽¹⁾	\$ 9,746,870	\$9,841,576	\$ -\$ -	_\$9,841,576	\$ —		
Long-term debt	2,297,548	2,415,119		2,415,119	_		
Collateral finance and securitization notes	899,161	791,275		791,275			
38							

Table of Contents

Carrying values presented herein differ from those presented in the condensed consolidated balance sheets because (1) certain items within the respective financial statement caption are embedded derivatives and are measured at fair value on a recurring basis.

Carrying values presented herein differ from those presented in the condensed consolidated balance sheets because certain items within the respective financial statement caption are measured at fair value on a recurring basis. Mortgage Loans on Real Estate – The fair value of mortgage loans on real estate is estimated by discounting cash flows, both principal and interest, using current interest rates for mortgage loans with similar credit ratings and similar remaining maturities. As such, inputs include current treasury yields and spreads, which are based on the credit rating and average life of the loan, corresponding to the market spreads. The valuation of mortgage loans on real estate is considered Level 3 in the fair value hierarchy.

Policy Loans – Policy loans typically carry an interest rate that is adjusted annually based on an observable market index and therefore carrying value approximates fair value. The valuation of policy loans is considered Level 2 in the fair value hierarchy.

Funds Withheld at Interest – The carrying value of funds withheld at interest approximates fair value except where the funds withheld are specifically identified in the agreement. When funds withheld are specifically identified in the agreement, the fair value is based on the fair value of the underlying assets which are held by the ceding company. Ceding companies use a variety of sources and pricing methodologies, which are not transparent to the Company and may include significant unobservable inputs, to value the securities that are held in distinct portfolios, therefore the valuation of these funds withheld assets are considered Level 3 in the fair value hierarchy.

Cash and Cash Equivalents and Short-term Investments – The carrying values of cash and cash equivalents and short-term investments approximates fair values due to the short-term maturities of these instruments and are considered Level 1 in the fair value hierarchy.

Other Invested Assets – This primarily includes limited partnership interests accounted for using the cost method, structured loans, FHLB common stock, cash collateral and equity release mortgages. The fair value of limited partnership interests and other investments accounted for using the cost method is determined using the net asset values ("NAV") of the Company's ownership interest as provided in the financial statements of the investees. The fair value of structured loans is estimated based on a discounted cash flow analysis using discount rates applicable to each structured loan, this is considered Level 3 in the fair value hierarchy. The fair value of the Company's common stock investment in the FHLB is considered to be the carrying value and it is considered Level 2 in the fair value hierarchy. The fair value hierarchy cash collateral is considered to be the carrying value and considered to be Level 1 in the fair value hierarchy, is estimated by discounting cash flows, both principal and interest, using current interest rates and credit spread adjustments derived from benchmarking against similar loans, allowing also for United Kingdom house price inflation and actuarial analyses of borrower behavior, mortality and morbidity.

Accrued Investment Income – The carrying value for accrued investment income approximates fair value as there are no adjustments made to the carrying value. This is considered Level 2 in the fair value hierarchy.

Interest-Sensitive Contract Liabilities – The carrying and fair values of interest-sensitive contract liabilities reflected in the table above exclude contracts with significant mortality risk. The fair value of the Company's interest-sensitive contract liabilities utilizes a market standard technique with both capital market inputs and policyholder behavior assumptions, as well as cash values adjusted for recapture fees. The capital market inputs to the model, such as interest rates, are generally observable. Policyholder behavior assumptions are generally not observable and may require use of significant management judgment. The valuation of interest-sensitive contract liabilities is considered Level 3 in the fair value hierarchy.

Short- and Long-term Debt/Collateral Finance and Securitization Notes – The fair value of the Company's short- and long-term, debt and collateral finance and securitization notes is generally estimated by discounting future cash flows using market rates currently available for debt with similar remaining maturities and reflecting the credit risk of the Company, including inputs when available, from actively traded debt of the Company or other companies with similar

credit quality. The valuation of short- and long-term debt, and collateral finance and securitization notes are generally obtained from brokers and is considered Level 3 in the fair value hierarchy. The Company's short-term debt represents the portion of long-term debt maturing within one year.

Table of Contents

7. Segment Information

The accounting policies of the segments are the same as those described in the Summary of Significant Accounting Policies in Note 2 of the consolidated financial statements accompanying the 2015 Annual Report. The Company measures segment performance primarily based on profit or loss from operations before income taxes. There are no intersegment reinsurance transactions and the Company does not have any material long-lived assets. Investment income is allocated to the segments based upon average assets and related capital levels deemed appropriate to support the segment business volumes.

The Company allocates capital to its segments based on an internally developed economic capital model, the purpose of which is to measure the risk in the business and to provide a basis upon which capital is deployed. The economic capital model considers the unique and specific nature of the risks inherent in the Company's businesses. As a result of the economic capital allocation process, a portion of investment income is attributed to the segments based on the level of allocated capital. In addition, the segments are charged for excess capital utilized above the allocated economic capital basis. This charge is included in policy acquisition costs and other insurance expenses. The Company's reportable segments are strategic business units that are primarily segregated by geographic region. Information related to revenues, income (loss) before income taxes and total assets of the Company for each reportable segment are summarized below (dollars in thousands).

	Three months ended		Six months ended June		
	Jι	ine 30,		30,	
Revenues:	20	016	2015	2016	2015
U.S. and Latin America:					
Traditional	\$	1,494,003	\$1,342,248	\$2,894,820	\$2,597,538
Non-Traditional	30	05,077	191,775	343,982	384,448
Total	1,	799,080	1,534,023	3,238,802	2,981,986
Canada:					
Traditional	28	38,912	270,090	546,912	535,094
Non-Traditional	1	1,854	11,458	22,538	23,332
Total	30	00,766	281,548	569,450	558,426
Europe, Middle East and Africa:					
Traditional	30	01,642	284,192	591,276	579,424
Non-Traditional	80),977	75,308	148,733	130,684
Total	38	32,619	359,500	740,009	710,108
Asia Pacific:					
Traditional	4	77,571	411,314	871,770	805,189
Non-Traditional	1	7,045	7,076	37,116	26,646
Total	49	94,616	418,390	908,886	831,835
Corporate and Other	6	1,987	36,879	94,489	68,598
Total	\$	3,039,068	\$2,630,340	\$5,551,636	\$5,150,953
		Three mo	onths ended	Six months	ended
		June 30,		June 30,	
Income (loss) before income taxes	s:	2016	2015	2016	2015
U.S. and Latin America:					
Traditional		\$111,430	\$82,793	\$162,528	\$100,636
Non-Traditional		108,854	70,393	93,958	124,898
Total		220,284	153,186	256,486	225,534
Canada:					
Traditional		43,309	22,736	63,404	45,463
Non-Traditional		2,128	3,094	2,720	7,225
Total		45,437	25,830	66,124	52,688

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Europe, Middle East and Africa:				
Traditional	6,834	9,159	5,718	19,641
Non-Traditional	27,469	31,432	52,893	51,066
Total	34,303	40,591	58,611	70,707
Asia Pacific:				
Traditional	34,482	4,315	75,642	56,963
Non-Traditional	(73	(1,405)	8,480	8,740
Total	34,409	2,910	84,122	65,703
Corporate and Other	18,790	(8,727)	(4,540)	(16,717)
Total	\$353,223	\$213,790	\$460,803	\$397,915
40				

Table of Contents

Assets:	June 30, 2016	December 31, 2015
U.S. and Latin America:		
Traditional	\$17,806,550	\$16,554,509
Non-Traditional	13,935,486	13,405,878
Total	31,742,036	29,960,387
Canada:		
Traditional	3,894,407	3,604,344
Non-Traditional	16,933	27,543
Total	3,911,340	3,631,887
Europe, Middle East and Africa:		
Traditional	2,669,404	2,757,593
Non-Traditional	4,076,547	4,162,703
Total	6,745,951	6,920,296
Asia Pacific:		
Traditional	3,757,131	3,227,530
Non-Traditional	742,063	742,528
Total	4,499,194	3,970,058
Corporate and Other	6,978,182	5,900,524
Total	\$53,876,703	\$50,383,152

8. Commitments, Contingencies and Guarantees

Commitments

Funding of Investments

The Company's commitments to fund investments as of June 30, 2016 and December 31, 2015 are presented in the following table (dollars in thousands):

_	June 30,	December 31,
	2016	2015
Limited partnerships and real estate joint ventures	\$252,864	\$ 263,163
Commercial mortgage loans	56,139	86,325
Bank loans	51,041	48,686
Equity release mortgages	40,091	8,504

The Company anticipates that the majority of its current commitments will be invested over the next five years; however, these commitments could become due any time at the request of the counterparties. Investments in limited partnerships and real estate joint ventures are carried at cost or reported using the equity method and included in other invested assets in the condensed consolidated balance sheets. Bank loans are carried at fair value and included in fixed maturity securities available-for-sale. Equity release mortgages are carried at unpaid principal balances, net of any amortized premium or discount and valuation allowance and included in other invested assets.

Contingencies

Litigation

The Company is subject to litigation in the normal course of its business. A legal reserve is established when the Company is notified of an arbitration demand or litigation or is notified that an arbitration demand or litigation is imminent, it is probable that the Company will incur a loss as a result and the amount of the probable loss is reasonably capable of being estimated.

Other Contingencies

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

Guarantees

Statutory Reserve Support

RGA, through wholly-owned subsidiaries, has committed to provide statutory reserve support to third parties, in exchange for a fee, by funding loans if certain defined events occur. Such statutory reserves are required under the U.S. Valuation of Life Policies Model Regulation (commonly referred to as Regulation XXX for term life insurance policies and Regulation A-XXX for universal life secondary guarantees). The third parties have recourse to RGA should the subsidiary fail to provide the required funding, however, as of June 30, 2016, the Company does not believe that it will be required to provide any funding under these commitments

Table of Contents

as the occurrence of the defined events is considered remote. The following table presents the maximum potential obligation for these commitments as of June 30, 2016 (dollars in millions):

	June
Commitment Period:	30,
	2016
2023	\$500.0
2033	950.0
2034	3,000.0
2035	1,314.2
2036	1,432.0

Other Guarantees

RGA has issued guarantees to third parties on behalf of its subsidiaries for the payment of amounts due under certain securities borrowing arrangements, financing arrangements and office lease obligations, whereby, if a subsidiary fails to meet an obligation, RGA or one of its other subsidiaries will make a payment to fulfill the obligation. Additionally, in limited circumstances, treaty guarantees are granted to ceding companies in order to provide them additional security, particularly in cases where RGA's subsidiary is relatively new, unrated, or not of a significant size, relative to the ceding company. Liabilities supported by the treaty guarantees, before consideration for any legally offsetting amounts due from the guaranteed party are reflected on the Company's condensed consolidated balance sheets in future policy benefits. Potential guaranteed amounts of future payments will vary depending on production levels and underwriting results. Guarantees related to borrowed securities provide additional security to third parties should a subsidiary fail to return the borrowed securities when due. RGA's guarantees issued as of June 30, 2016 and December 31, 2015 are reflected in the following table (dollars in thousands):

	June 30,	December 31,
	2016	2015
Treaty guarantees	\$759,175	\$ 765,505
Treaty guarantees, net of assets in trust	631,267	634,909
Borrowed securities	269,740	259,540
Financing arrangements	121,369	100,000
Lease obligations	3,140	5,217

9. Income Tax

Provision for income tax expense differed from the amounts computed by applying the U.S. federal income tax statutory rate of 35% to pre-tax income as a result of the following for the three and six months ended June 30, 2016 and 2015 (dollars in thousands):

	Three mo	ntl	ns ended	Six months ended June			
	June 30,			30,			
	2016		2015	2016	2015		
Tax provision at U.S. statutory rate	\$123,628		\$74,826	\$161,281	\$139,270		
Increase (decrease) in income taxes resulting from:							
Foreign tax rate differing from U.S. tax rate	(8,398)	(764)	(12,282)	(6,285)		
Differences in tax bases in foreign jurisdictions	(5,553)	(6,931)	(14,489)	(13,601)		
Deferred tax valuation allowance	4,288		4,967	9,287	11,758		
Amounts related to tax audit contingencies	3,288		952	3,889	1,905		
Subpart F	738		11,452	1,433	17,886		
Foreign tax credits	(427)	(1,104)	(721)	(3,448)		
Return to provision adjustments	(442)	(212)	(316)	(4,977)		
Other, net	(2)	213	146	(98)		
Total provision for income taxes	\$117,120)	\$83,399	\$148,228	\$142,410		

Effective tax rate 33.2 % 39.0 % 32.2 % 35.8 %

The second quarter and first six months of 2016 effective tax rate was lower than the U.S. Statutory rate of 35.0% primarily as a result of income in non-U.S. jurisdictions with lower tax rates than the U.S. and differences in tax bases in foreign jurisdictions. The 2015 tax benefits from income in non-U.S. jurisdictions were partially offset by a tax accrual related to the Active Financing Exception business extender provision that the U.S. Congress did not pass prior to June 30, 2015.

Table of Contents

10. Employee Benefit Plans

The components of net periodic benefit costs for the three and six months ended June 30, 2016 and 2015 were as follows (dollars in thousands):

	Pension	Benefits	Other Benefits		
	Three m	onths	Three months		
	ended June 30,			une 30,	
	2016	2015	2016	2015	
Service cost	\$2,652	\$2,586	\$1,015	\$589	
Interest cost	1,076	1,283	643	491	
Expected return on plan assets	(1,345)	(1,331)	_	_	
Amortization of prior service cost	75	80	_	_	
Amortization of prior actuarial loss	1,224	833	617	265	
Net periodic benefit cost	\$3,682	\$3,451	\$2,275	\$1,345	
	ъ.	D C.4.	Other Benefits		
	Pension	Benefits	Otner E	senerits	
	Six mon		Six mon		
	Six mon		Six mo		
	Six mon	ths	Six mo	nths	
Service cost	Six mon	ths ine 30,	Six more	nths une 30, 2015	
Service cost Interest cost	Six mon ended Ju 2016	ths ine 30, 2015	Six more ended J 2016	nths une 30, 2015	
	Six mon ended Ju 2016 \$4,958 2,335	ths ine 30, 2015 \$4,616	Six more ended J 2016 \$2,031	nths fune 30, 2015 \$1,178	
Interest cost	Six mon ended Ju 2016 \$4,958 2,335	ths nne 30, 2015 \$4,616 2,526	Six more ended J 2016 \$2,031 1,286	nths fune 30, 2015 \$1,178	
Interest cost Expected return on plan assets	Six mon ended Ju 2016 \$4,958 2,335 (2,569)	ths nne 30, 2015 \$4,616 2,526 (2,449) 163	Six more ended J 2016 \$2,031 1,286	nths fune 30, 2015 \$1,178	
Interest cost Expected return on plan assets Amortization of prior service cost	Six mon ended Ju 2016 \$4,958 2,335 (2,569) 153	ths nne 30, 2015 \$4,616 2,526 (2,449) 163	Six more ended J 2016 \$2,031 1,286 —	nths fune 30, 2015 \$1,178 982 — 530	

The Company has made \$4.0 million in pension contributions during the first six months of 2016 and expects to make total pension contributions of \$8.0 million in 2016.

11. Equity Based Compensation

Equity compensation expense was \$7.4 million and \$3.1 million in the second quarter of 2016 and 2015, respectively. In the first quarter of 2016, the Company granted 0.3 million stock appreciation rights at \$93.53 weighted average exercise price per share and 0.2 million performance contingent units to employees. Additionally, non-employee directors were granted a total of 8,908 shares of common stock. As of June 30, 2016, 1.8 million share options at a weighted average strike price per share of \$56.13 were vested and exercisable, with a remaining weighted average exercise period of 4.7 years. As of June 30, 2016, the total compensation cost of non-vested awards not yet recognized in the condensed consolidated financial statements was \$40.7 million. It is estimated that these costs will vest over a weighted average period of 2.1 years.

12. Reinsurance

The Company generally reports retrocession activity on a gross basis. Amounts paid or deemed to have been paid for reinsurance are reflected in reinsurance ceded receivables. The cost of reinsurance related to long-duration contracts is recognized over the terms of the reinsured policies on a basis consistent with the reporting of those policies. Retrocession reinsurance treaties do not relieve the Company from its obligations to direct writing companies. Failure of retrocessionaires to honor their obligations could result in losses to the Company. Consequently, allowances would be established for amounts deemed uncollectible. At June 30, 2016 and December 31, 2015, no allowances were deemed necessary. The Company regularly evaluates the financial condition of the insurance companies from which it assumes and to which it cedes reinsurance.

Retrocessions are arranged through the Company's retrocession pools for amounts in excess of the Company's retention limit. As of June 30, 2016 and December 31, 2015, all rated retrocession pool participants followed by the A.M. Best Company were rated "A- (excellent)" or better. The Company verifies retrocession pool participants' ratings on a quarterly basis. For a majority of the retrocessionaires that were not rated, security in the form of letters of credit or

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

Table of Contents

The following table presents information for the Company's reinsurance ceded receivable assets, including the respective amount and A.M. Best rating for each reinsurer representing in excess of five percent of the total as of June 30, 2016 and December 31, 2015 (dollars in thousands):

		lune 30 2016		December 2015	r 31,	
Reinsurer	A.M. Best Rating	Amount	% of Total	Amount	% of Total	
Reinsurer A	A+	\$233,016	34.2 %	\$199,479	31.3 %	
Reinsurer B	A+	190,957	28.0	179,522	28.1	
Reinsurer C	A+	68,727	10.1	72,836	11.4	
Reinsurer D	A++	38,098	5.6	41,807	6.6	
Reinsurer E	A	36,847	5.4	37,138	5.8	
Other reinsurers		113,780	16.7	107,077	16.8	
Total		\$681,425	100.0%	\$637,859	100.0%	

Included in the total reinsurance ceded receivables balance were \$246.2 million and \$233.7 million of claims recoverable, of which \$4.7 million and \$2.0 million were in excess of 90 days past due, as of June 30, 2016 and December 31, 2015, respectively.

13. Financing Activities

On June 1, 2016, RGA issued 3.95% Senior Notes due September 15, 2026 with a face amount of \$400.0 million and 5.75% Fixed-To-Floating Rate Subordinated Debentures due June 15, 2056 with a face amount of \$400.0 million. These securities have been registered with the Securities and Exchange Commission. The net proceeds from these offerings were approximately \$791.0 million and will be used in part to repay upon maturity the Company's \$300.0 million 5.625% Senior Notes that mature in March 2017. The remainder will be used for general corporate purposes. Capitalized issue costs were approximately \$9.0 million.

14. New Accounting Standards

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

Adoption of New Accounting Standards

Transfers and Servicing

In June 2014, the FASB amended the general accounting principles for Transfers and Servicing as it relates to the accounting for repurchase-to-maturity transactions, repurchase financings, and disclosures. This amendment requires entities to account for repurchase-to-maturity transactions as secured borrowings, eliminates guidance on linked repurchase financing transactions, and expands disclosure requirements related to certain transfers of financial assets that are accounted for as sales and certain transfers accounted for as secured borrowings. These amendments are effective for annual years, and interim periods within those years, beginning after December 15, 2014. Certain interim period disclosures for repurchase agreements and securities lending transactions were not required until the second quarter of 2015. The adoption of this amendment did not have an impact on the Company's condensed consolidated financial statements other than the addition of the required disclosures. The Company adopted these amendments and the required disclosures are provided in Note 4 "Investments."

Business Combinations

In September 2015, the FASB amended the general accounting principles for Business Combinations as it relates to measurement period adjustments. This amendment requires that an acquirer recognize adjustments to provisional amounts that are identified during the measurement period in the reporting period in which the adjustment amounts are determined, including the cumulative effect of the change in provisional amount as if the accounting had been

completed at the acquisition date. The adjustments related to previous reporting periods since the acquisition date must be disclosed by income statement line item either on the face of the income statement or in the notes. The Company adopted this amendment during the three months ended September 30, 2015. Accordingly, the Company applied the amendments in this update to the measurement period adjustments made during the three months ended September 30, 2015 with no material effect on previous-period or current-period earnings.

Debt Issuance Costs

In April 2015, the FASB issued accounting guidance, "Simplifying the Presentation of Debt Issuance Costs" which requires capitalized debt issuance costs related to a recognized debt liability be presented in the statement of financial position as a direct deduction from the carrying amount of that debt. This standard is effective for fiscal years, and for interim periods within those

Table of Contents

fiscal years, beginning after December 15, 2015, with early adoption permitted for financial statements not yet issued. The Company elected to adopt this standard as of December 31, 2015, with retrospective application to all balance sheets presented.

Fair Value Measurement

In May 2015, the FASB issued amended guidance on the disclosures for investments in certain entities that calculate NAV per share (or its equivalent). The amendments remove the requirement to categorize within the fair value hierarchy all investments for which fair value is measured using the NAV per share practical expedient. The amendments also remove the requirement to make certain disclosures for all investments that are eligible to be measured at fair value using the NAV per share practical expedient. Rather, those disclosures are limited to investments for which the entity has elected to measure the fair value using that practical expedient. The guidance is effective for fiscal years beginning after December 15, 2015 and for interim periods within those years. Early application is permitted. The Company adopted the guidance for the year ended December 31, 2015 and applied the guidance retrospectively. Adoption of the guidance did not have a material impact on the Company's condensed consolidated financial statements.

Future Adoption of New Accounting Standards

Financial Services - Insurance

In May 2015, the FASB amended the general accounting principle for Financial Services - Insurance which expanded the breadth of disclosures that an insurance entity must provide about its short-duration insurance contracts. This amendment requires insurance entities to disclose for annual reporting periods information about the liability for unpaid claims and claim adjustment expenses. The amendment also requires insurance entities to disclose information about significant changes in methodologies and assumptions used to calculate the liability for unpaid claims and claim adjustment expenses, including reasons for the change and the effects on the financial statements. In addition, the amendment requires insurance entities to disclose for annual and interim reporting periods a roll-forward of the liability for unpaid claims and claim adjustment expenses. This amendment focuses only on disclosure; it does not change the accounting model for short-duration contracts. The update is effective for annual periods beginning after December 15, 2015, and interim periods within annual periods beginning after December 15, 2016. The new guidance should be applied retrospectively by providing comparative disclosures for each period presented, except for those requirements that apply only to the current period. The adoption of this amendment is not expected to have an impact on the Company's condensed consolidated financial statements other than the addition of the required disclosures. Financial Instruments

In January 2016, the FASB amended the general accounting principle for Financial Instruments, effective for fiscal years and interim periods within those fiscal years beginning after December 15, 2017. The amendment revises the accounting related to (1) the classification and measurement of investments in equity securities, (2) the presentation of certain fair value changes for financial liabilities measured at fair value, (3) certain disclosure requirements associated with the fair value of financial instruments. The new guidance should be applied by means of a cumulative-effect adjustment to the balance sheet as of the beginning of the fiscal year of adoption. The amendments related to equity securities without readily determinable fair values (including disclosure requirements) should be applied prospectively to equity investments that exist as of the date of adoption. The Company is currently evaluating the impact of this amendment on its condensed consolidated financial statements.

In June, 2016, the FASB amended the existing impairment guidance of Financial Instruments. The amendment adds to U.S. GAAP an impairment model (known as current expected credit loss ("CECL") model) that is based on expected losses rather than incurred losses. For traditional and other receivables, held-to-maturity debt securities, loans and other instruments entities will be required to use the new forward-looking "expected loss" model that generally will result in earlier recognition of allowance for losses. For available-for-sale debt securities with unrealized losses, entities will measure credit losses similar to what they do today, except the losses will be recognized as allowances rather than reduction to the amortized cost of the securities. This guidance is effective for fiscal years and interim periods within those fiscal years beginning after December 15, 2019, with early adoption permitted. The guidance will be adopted through a cumulative-effect adjustment to retained earnings as of the beginning of the first reporting period

in which the guidance is effective (that is, a modified-retrospective approach). The Company is currently evaluating the impact of this amendment on its condensed consolidated financial statements.

Leases

In February 2016, the FASB issued guidance which will replace most existing lease accounting guidance. The new standard, based on the principle that entities should recognize assets and liabilities arising from leases, does not significantly change the lessees' recognition, measurement and presentation of expenses and cash flows from the previous accounting standard. Leases are classified as finance or operating. The new standard's primary change is the requirement for entities to recognize a lease liability for payments and a right of use asset representing the right to use the leased asset during the term of operating lease arrangements. Lessees are permitted to make an accounting policy election to not recognize the asset and liability for leases with a term of twelve months or less. Lessors' accounting is largely unchanged from the previous accounting standard. In addition, the new standard expands

Table of Contents

the disclosure requirements of lease arrangements. Lessees and lessors will use a modified retrospective transition approach, which includes a number of practical expedients. This guidance is effective for fiscal years and interim periods within those fiscal years beginning after December 15, 2018, with early adoption permitted. The Company is currently evaluating the impact of this amendment on its condensed consolidated financial statements. Stock Compensation

In March 2016, the FASB updated the general accounting principal for Stock Compensation. This update was issued as part of the FASB's simplification initiative and affects all entities that issue share-based payment awards to their employees. The amendments in this update cover such areas as the recognition of excess tax benefits and deficiencies, the classification of those excess tax benefits on the statement of cash flows, an accounting policy election for forfeitures, the amount an employer can withhold to cover income taxes and still qualify for equity classification and the classification of those taxes paid on the statement of cash flows. This update is effective for annual and interim periods beginning after December 15, 2016. This guidance will be applied either prospectively, retrospectively or using a modified retrospective transition method, depending on the area covered in this update. Early adoption is permitted. The Company is currently evaluating the impact of this amendment on its condensed consolidated financial statements.

Table of Contents

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

Forward-Looking and Cautionary Statements

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

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

Forward-looking statements should be evaluated together with the many risks and uncertainties that affect the Company's business, including those mentioned in this document and the cautionary statements described in the periodic reports the Company files with the SEC. These forward-looking statements speak only as of the date on which they are made. The Company does not undertake any obligations to update these forward-looking statements,

even though the Company's situation may change in the future. The Company qualifies all of its forward-looking statements by these cautionary statements. For a discussion of these risks and uncertainties that could cause actual results to differ materially from those contained in the forward-looking statements, you are advised to see Item 1A – "Risk Factors" in the 2015 Annual Report.

Overview

RGA is an insurance holding company that was formed on December 31, 1992. The condensed consolidated financial statements include the assets, liabilities and results of operations of RGA and its subsidiaries, all of which are wholly owned (collectively, the Company).

The Company provides traditional and non-traditional reinsurance to its clients. Traditional reinsurance includes individual and group life and health, disability and critical illness reinsurance. Non-traditional reinsurance includes longevity reinsurance, asset-intensive reinsurance and financial reinsurance.

The Company derives revenues primarily from renewal premiums from existing reinsurance treaties, new business premiums from existing or new reinsurance treaties, fee income from non-traditional reinsurance business and income earned on invested assets.

Table of Contents

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

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

The Company's long-term profitability primarily depends on the volume and amount of death and health-related claims incurred and the ability to adequately price the risks it assumes. While death claims are reasonably predictable over a period of many years, claims become less predictable over shorter periods and are subject to significant fluctuation from quarter to quarter and year to year. The Company believes its sources of liquidity are sufficient to cover potential claims payments on both a short-term and long-term basis.

The Company has geographic-based and business-based operational segments: U.S. and Latin America; Canada; Europe, Middle East and Africa; Asia Pacific; and Corporate and Other. Geographic-based operations are further segmented into traditional and non-traditional businesses. The Company's segments primarily write reinsurance business that is wholly or partially retained in one or more of RGA's reinsurance subsidiaries.

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

Results of Operations

Consolidated

Consolidated income before income taxes increased \$139.4 million, or 65.2%, and \$62.9 million, or 15.8%, for the three and six months ended June 30, 2016, respectively, as compared to the same periods in 2015. The increase in income for the second quarter of 2016 was primarily due to improved mortality experience compared to the prior year, higher investment income and an increase in investment related gains. The increase in investment related gains for the second quarter was largely due to changes in the fair value of embedded derivatives on modeo or funds withheld treaties within the U.S. segment. The effect of the change in fair value of these embedded derivatives on income is discussed below. Results in 2016 also benefited from a \$15.4 million reduction in interest expense due to the effective settlement of uncertain tax positions. The increase in income for the first six months of 2016 was partially offset by an increase in impairments on fixed maturity and equity securities of \$28.0 million, compared to the same period in 2015. Foreign currency fluctuations relative to the prior year unfavorably affected income before income taxes by approximately \$5.7 million and \$14.9 million for the second quarter and first six months of 2016, as compared to the same periods in 2015.

The Company recognizes in consolidated income, any changes in the fair value of embedded derivatives on modeo or funds withheld treaties, equity-indexed annuity treaties ("EIAs") and variable annuity products. The combined changes in these three types of embedded derivatives, after adjustment for deferred acquisition costs and retrocession, resulted in an increase in consolidated income before income taxes of approximately \$53.9 million and \$124.1 million in the second quarter and first six months of 2016, respectively, as compared to the same periods in 2015. This fluctuation does not affect current cash flows, crediting rates or spread performance on the underlying treaties. Therefore, management believes it is helpful to distinguish between the effects of changes in these embedded derivatives, net of

related hedging activity and deferred acquisition costs, and the primary factors that drive profitability of the underlying treaties, namely investment income, fee income, and interest credited. The individual effect on income before income taxes for these three types of embedded derivatives is as follows:

The change in the value of embedded derivatives related to reinsurance treaties written on a mode or funds withheld basis are subject to the general accounting principles for derivatives and hedging related to embedded derivatives. The unrealized gains and losses associated with these embedded derivatives, after adjustment for deferred acquisition costs, resulted in an increase in income before income taxes of \$35.0 million in the second quarter of 2016 and a decrease of \$2.3 million in the first six months of 2016, as compared to the same periods in 2015.

Table of Contents

Changes in risk-free rates used in the fair value estimates of embedded derivatives associated with EIAs affect the amount of unrealized gains and losses the Company recognizes. The unrealized gains and losses associated with EIAs, after adjustment for deferred acquisition costs and retrocession, resulted in an increase in income before income taxes of \$3.1 million in the second quarter of 2016 and a decrease of \$4.6 million in the first six months of 2016, as compared to the same periods in 2015.

The change in the Company's liability for variable annuities associated with guaranteed minimum living benefits affects the amount of unrealized gains and losses the Company recognizes. The unrealized gains and losses associated with guaranteed minimum living benefits, after adjustment for deferred acquisition costs, decreased income before income taxes by \$92.0 million and \$117.2 million in the second quarter and first six months of 2016, respectively, as compared to the same periods in 2015.

Consolidated net premiums increased \$217.9 million, or 10.2%, and \$351.1 million, or 8.5%, for the three and six months ended June 30, 2016, as compared to the same periods in 2015, primarily due to growth in life reinsurance in force and large in force block transactions entered into during the latter part of 2015. Foreign currency fluctuations unfavorably affected net premiums by approximately \$45.7 million and \$115.9 million for the second quarter and first six months of 2016, as compared to the same periods in 2015. Consolidated assumed life insurance in force increased to \$3,090.3 billion as of June 30, 2016 from \$2,925.3 billion as of June 30, 2015 due to new business production and in force transactions, partially offset by adverse foreign currency fluctuations. The Company added new business production, measured by face amount of insurance in force, of \$107.3 billion and \$71.7 billion during the second quarter of 2016 and 2015, respectively, and \$215.1 billion and \$177.5 billion during the first six months of 2016 and 2015, respectively. Adverse foreign currency fluctuations offset the increase in assumed life insurance in force from June 30, 2015 by \$89.9 million. Management believes industry consolidation, regulatory changes and the established practice of reinsuring mortality and morbidity risks should continue to provide opportunities for growth, albeit at rates less than historically experienced in some markets.

Consolidated investment income, net of related expenses, increased \$57.1 million, or 12.7%, and \$47.5 million, or 5.4%, for the three and six months ended June 30, 2016, as compared to the same periods in 2015. The increases are primarily attributable to strong variable investment income on alternative investments and investment prepayments and fees. Also contributing to the increase in investment income is a larger average invested asset base, excluding spread related business, partially offset by a decrease in the average investment yield. Average invested assets at amortized cost, excluding spread related business, for the six months ended June 30, 2016 totaled \$22.7 billion, an 8.3% increase over June 30, 2015. The average yield earned on investments, excluding spread related business, was 4.71% and 4.88% for the second quarter of 2016 and 2015, respectively, and 4.59% and 4.83% for the six months ended June 30, 2016 and 2015, respectively. The average yield will vary from quarter to quarter and year to year depending on a number of variables, including the prevailing interest rate and credit spread environment, changes in the mix of the underlying investments and cash balances, prepayment fees recorded on the early payoff of certain investments and the timing of dividends and distributions on certain investments. A continued low interest rate environment is expected to put downward pressure on this yield in future reporting periods. A portion of investment income is allocated to the operating segments based upon average assets and related capital levels deemed appropriate to support the segment operations.

Total investment related gains (losses), net improved by \$134.4 million and \$6.0 million for the three and six months ended June 30, 2016, as compared to the same periods in 2015. The improvement in the second quarter of 2016 was primarily due to a favorable change in the value of embedded derivatives related to reinsurance treaties written on a modco or funds withheld basis of \$100.1 million, as compared to the same period in 2015. During the first six months of 2016, the favorable change in the value of these embedded derivatives was \$10.1 million, as compared to the same period in 2015. In addition, impairments on fixed maturity and equity securities increased by \$28.0 million in the first six months of 2016, as compared to the same period in 2015. See Note 4 - "Investments" and Note 5 - "Derivative Instruments" in the Notes to Condensed Consolidated Financial Statements for additional information on the impairment losses and derivatives.

The effective tax rate on a consolidated basis was 33.2% and 39.0% for the second quarter of 2016 and 2015, respectively, and 32.2% and 35.8% for the first six months of 2016 and 2015, respectively. The second quarter and first six months of 2016 effective tax rates were lower than the U.S. Statutory rate of 35.0% primarily as a result of tax benefits from income in non-U.S. jurisdictions with lower tax rates than the U.S. and differences in tax bases in foreign jurisdictions. These benefits were partially offset by an accrual related to an uncertain tax position. The second quarter and first six months of 2015 effective tax rates were higher than the U.S. Statutory rate of 35.0% primarily as a result of a tax accrual related to the Active Financing Exception business extender provision that the U.S. Congress did not pass prior to the end of the quarter and a loss in Australia which has a lower tax rate than the U.S. The high tax rate was partially offset with income in other jurisdictions with rates lower than the U.S.

Table of Contents

Critical Accounting Policies

The preparation of financial statements in conformity with accounting principles generally accepted in the United States of America ("GAAP") requires the application of accounting policies that often involve a significant degree of judgment. Management, on an ongoing basis, reviews estimates and assumptions used in the preparation of financial statements. If management determines that modifications in assumptions and estimates are appropriate given current facts and circumstances, results of operations and financial position as reported in the condensed consolidated financial statements could change significantly.

Management believes the critical accounting policies relating to the following areas are most dependent on the application of estimates and assumptions:

Premiums receivable;

Deferred acquisition costs;

Liabilities for future policy benefits and incurred but not reported claims;

Valuation of investments and other-than-temporary impairments to specific investments;

Valuation of embedded derivatives; and

Income taxes.

A discussion of each of the critical accounting policies may be found in the Company's 2015 Annual Report under "Management's Discussion and Analysis of Financial Condition and Results of Operations – Critical Accounting Policies."

Further discussion and analysis of the results for 2016 compared to 2015 are presented by segment.

Table of Contents

U.S. and Latin America Operations

U.S. and Latin America operations consist of two major segments: Traditional and Non-Traditional. The Traditional segment primarily specializes in individual mortality-risk reinsurance and to a lesser extent, group, health and long-term care reinsurance. The Non-Traditional segment consists of Asset-Intensive and Financial Reinsurance. Asset-Intensive within the Non-Traditional segment provides coinsurance of annuities and corporate-owned life insurance policies and to a lesser extent also issues fee-based synthetic guaranteed investment contracts, which include investment-only, stable value contracts. Financial Reinsurance within the Non-Traditional segment primarily involves assisting ceding companies in meeting applicable regulatory requirements by enhancing the ceding companies' financial strength and regulatory surplus position through relatively low risk reinsurance transactions. Typically these transactions do not qualify as reinsurance under GAAP, due to the low-risk nature of the transactions, so only the related net fees are reflected in other revenues on the condensed consolidated statements of income. For the three months ended June 30, 2016:

Non-Traditional

For the three months ended June 30, 2016:		Non-1rac	muonai	
(dollars in thousands)	Traditional	Asset-Into	Financial ensive Reinsurance	Total U.S. and Latin America
Revenues:				
Net premiums	\$1,307,395	\$5,662	\$ —	\$1,313,057
Investment income, net of related expenses	182,238	177,681	2,386	362,305
Investment related gains (losses), net	(882)	76,830	_	75,948
Other revenues	5,252	24,555	17,963	47,770
Total revenues	1,494,003	284,728	20,349	1,799,080
Benefits and expenses:				
Claims and other policy benefits	1,149,665	19,507	_	1,169,172
Interest credited	20,845	68,436	_	89,281
Policy acquisition costs and other insurance expenses	182,285	97,078	3,085	282,448
Other operating expenses	29,778	5,728	2,389	37,895
Total benefits and expenses	1,382,573	190,749	5,474	1,578,796
Income before income taxes	\$111,430	\$93,979	\$ 14,875	\$220,284
For the three months ended June 30, 2015:		Non-Trac	litional	
For the three months ended June 30, 2015: (dollars in thousands)		Non-Trac		Total U.S.
	Traditional		litional Financial ensive Reinsurance	Total U.S. and Latin America
	Traditional		Financial	and Latin
(dollars in thousands)	Traditional \$1,170,931		Financial	and Latin
(dollars in thousands) Revenues:		Asset-Into	Financial ensive Reinsurance	and Latin America
(dollars in thousands) Revenues: Net premiums	\$1,170,931	Asset-Intersection \$5,941	Financial ensive Reinsurance \$ — 1,194	and Latin America \$1,176,872
(dollars in thousands) Revenues: Net premiums Investment income, net of related expenses	\$1,170,931 163,390	Asset-Into \$5,941 155,364	Financial ensive Reinsurance \$ — 1,194	and Latin America \$1,176,872 319,948
(dollars in thousands) Revenues: Net premiums Investment income, net of related expenses Investment related gains (losses), net	\$1,170,931 163,390 3,360	\$5,941 155,364 (15,075)	Financial ensive Reinsurance \$ — 1,194 —	and Latin America \$1,176,872 319,948 (11,715)
(dollars in thousands) Revenues: Net premiums Investment income, net of related expenses Investment related gains (losses), net Other revenues	\$1,170,931 163,390 3,360 4,567	\$5,941 155,364 (15,075) 26,634	Financial ensive Reinsurance \$ — 1,194 — 17,717	and Latin America \$1,176,872 319,948 (11,715) 48,918
(dollars in thousands) Revenues: Net premiums Investment income, net of related expenses Investment related gains (losses), net Other revenues Total revenues	\$1,170,931 163,390 3,360 4,567	\$5,941 155,364 (15,075) 26,634	Financial ensive Reinsurance \$ — 1,194 — 17,717	and Latin America \$1,176,872 319,948 (11,715) 48,918
(dollars in thousands) Revenues: Net premiums Investment income, net of related expenses Investment related gains (losses), net Other revenues Total revenues Benefits and expenses:	\$1,170,931 163,390 3,360 4,567 1,342,248	\$5,941 155,364 (15,075) 26,634 172,864	Financial ensive Reinsurance \$ — 1,194 — 17,717	and Latin America \$1,176,872 319,948 (11,715) 48,918 1,534,023
Revenues: Net premiums Investment income, net of related expenses Investment related gains (losses), net Other revenues Total revenues Benefits and expenses: Claims and other policy benefits	\$1,170,931 163,390 3,360 4,567 1,342,248 1,041,390	\$5,941 155,364 (15,075) 26,634 172,864	Financial ensive Reinsurance \$ — 1,194 — 17,717	and Latin America \$1,176,872 319,948 (11,715) 48,918 1,534,023 1,061,373
Revenues: Net premiums Investment income, net of related expenses Investment related gains (losses), net Other revenues Total revenues Benefits and expenses: Claims and other policy benefits Interest credited	\$1,170,931 163,390 3,360 4,567 1,342,248 1,041,390 21,875	\$5,941 155,364 (15,075) 26,634 172,864 19,983 59,042	Financial ensive Reinsurance \$ — 1,194 — 17,717 18,911 — — — —	and Latin America \$1,176,872 319,948 (11,715 48,918 1,534,023 1,061,373 80,917
Revenues: Net premiums Investment income, net of related expenses Investment related gains (losses), net Other revenues Total revenues Benefits and expenses: Claims and other policy benefits Interest credited Policy acquisition costs and other insurance expenses	\$1,170,931 163,390 3,360 4,567 1,342,248 1,041,390 21,875 169,035	\$5,941 155,364 (15,075) 26,634 172,864 19,983 59,042 32,976	Financial ensive Reinsurance \$ — 1,194 — 17,717 18,911 — — 2,522	and Latin America \$1,176,872 319,948 (11,715) 48,918 1,534,023 1,061,373 80,917 204,533
Revenues: Net premiums Investment income, net of related expenses Investment related gains (losses), net Other revenues Total revenues Benefits and expenses: Claims and other policy benefits Interest credited Policy acquisition costs and other insurance expenses Other operating expenses	\$1,170,931 163,390 3,360 4,567 1,342,248 1,041,390 21,875 169,035 27,155	\$5,941 155,364 (15,075) 26,634 172,864 19,983 59,042 32,976 5,113	Financial ensive Reinsurance \$ — 1,194 — 17,717 18,911 — 2,522 1,746	and Latin America \$1,176,872 319,948 (11,715) 48,918 1,534,023 1,061,373 80,917 204,533 34,014

Table of Contents

For the six months ended June 30, 2016:		Non-Trac	litional	
(dollars in thousands)	Traditional	Asset-Inte	Financial ensive Reinsurance	Total U.S. and Latin America
Revenues:				
Net premiums	\$2,541,789	\$11,881	\$ —	\$2,553,670
Investment income, net of related expenses	347,261	294,896	4,993	647,150
Investment related gains (losses), net	(2,982)	(51,721)		(54,703)
Other revenues	8,752	47,389	36,544	92,685
Total revenues	2,894,820	302,445	41,537	3,238,802
Benefits and expenses:				
Claims and other policy benefits	2,269,107	39,340	_	2,308,447
Interest credited	42,245	130,994	_	173,239
Policy acquisition costs and other insurance expenses	359,363	57,422	5,653	422,438
Other operating expenses	61,577	11,540	5,075	78,192
Total benefits and expenses	2,732,292	239,296	10,728	2,982,316
Income before income taxes	\$162,528	\$63,149	\$ 30,809	\$256,486
For the six months ended June 30, 2015:		Non-Trac	litional	
For the six months ended June 30, 2015: (dollars in thousands)		Non-Trac		Total II S
For the six months ended June 30, 2015: (dollars in thousands)	Traditional		litional Financial ensive Reinsurance	Total U.S. and Latin America
	Traditional			and Latin
(dollars in thousands)	Traditional \$2,285,025			and Latin
(dollars in thousands) Revenues:		Asset-Inte	Financial ensive Reinsurance	and Latin America
(dollars in thousands) Revenues: Net premiums	\$2,285,025	Asset-Intersection	Financial ensive Reinsurance \$ — 2,339	and Latin America \$2,296,007
(dollars in thousands) Revenues: Net premiums Investment income, net of related expenses	\$2,285,025 306,395	Asset-Into \$10,982 303,201	Financial ensive Reinsurance \$ — 2,339	and Latin America \$2,296,007 611,935
(dollars in thousands) Revenues: Net premiums Investment income, net of related expenses Investment related gains (losses), net	\$2,285,025 306,395 887	\$10,982 303,201 (18,274)	Financial ensive Reinsurance \$ — 2,339 —	and Latin America \$2,296,007 611,935 (17,387)
(dollars in thousands) Revenues: Net premiums Investment income, net of related expenses Investment related gains (losses), net Other revenues	\$2,285,025 306,395 887 5,231	\$10,982 303,201 (18,274) 53,178	Financial ensive Reinsurance \$ — 2,339 — 33,022	and Latin America \$2,296,007 611,935 (17,387) 91,431
(dollars in thousands) Revenues: Net premiums Investment income, net of related expenses Investment related gains (losses), net Other revenues Total revenues	\$2,285,025 306,395 887 5,231	\$10,982 303,201 (18,274) 53,178	Financial ensive Reinsurance \$ — 2,339 — 33,022	and Latin America \$2,296,007 611,935 (17,387) 91,431
(dollars in thousands) Revenues: Net premiums Investment income, net of related expenses Investment related gains (losses), net Other revenues Total revenues Benefits and expenses:	\$2,285,025 306,395 887 5,231 2,597,538	\$10,982 303,201 (18,274) 53,178 349,087	Financial ensive Reinsurance \$ — 2,339 — 33,022 35,361	and Latin America \$2,296,007 611,935 (17,387) 91,431 2,981,986
Revenues: Net premiums Investment income, net of related expenses Investment related gains (losses), net Other revenues Total revenues Benefits and expenses: Claims and other policy benefits	\$2,285,025 306,395 887 5,231 2,597,538 2,080,797	\$10,982 303,201 (18,274) 53,178 349,087 26,709	Financial ensive Reinsurance \$ — 2,339 — 33,022 35,361 —	and Latin America \$2,296,007 611,935 (17,387) 91,431 2,981,986 2,107,506
Revenues: Net premiums Investment income, net of related expenses Investment related gains (losses), net Other revenues Total revenues Benefits and expenses: Claims and other policy benefits Interest credited	\$2,285,025 306,395 887 5,231 2,597,538 2,080,797 34,819	\$10,982 303,201 (18,274) 53,178 349,087 26,709 154,027	Financial ensive Reinsurance \$ — 2,339 — 33,022 35,361 — —	and Latin America \$2,296,007 611,935 (17,387) 91,431 2,981,986 2,107,506 188,846
Revenues: Net premiums Investment income, net of related expenses Investment related gains (losses), net Other revenues Total revenues Benefits and expenses: Claims and other policy benefits Interest credited Policy acquisition costs and other insurance expenses	\$2,285,025 306,395 887 5,231 2,597,538 2,080,797 34,819 327,602	\$10,982 303,201 (18,274) 53,178 349,087 26,709 154,027 61,030	Financial ensive Reinsurance \$ — 2,339 — 33,022 35,361 — 4,938	and Latin America \$2,296,007 611,935 (17,387) 91,431 2,981,986 2,107,506 188,846 393,570
Revenues: Net premiums Investment income, net of related expenses Investment related gains (losses), net Other revenues Total revenues Benefits and expenses: Claims and other policy benefits Interest credited Policy acquisition costs and other insurance expenses Other operating expenses	\$2,285,025 306,395 887 5,231 2,597,538 2,080,797 34,819 327,602 53,684	\$10,982 303,201 (18,274) 53,178 349,087 26,709 154,027 61,030 9,431	Financial ensive Reinsurance \$ — 2,339 — 33,022 35,361 — 4,938 3,415	and Latin America \$2,296,007 611,935 (17,387) 91,431 2,981,986 2,107,506 188,846 393,570 66,530

Income before income taxes increased by \$67.1 million, or 43.8%, and \$31.0 million, or 13.7%, for the three and six months ended June 30, 2016, as compared to the same periods in 2015. For both the quarter and the year, as compared to same period prior year, the favorable increases were driven by changes in the value of the embedded derivatives associated with reinsurance treaties structured on a modeo or funds withheld basis, improved claims experience in the Traditional segment, and a higher asset base, driven largely by acquisitions of in force blocks late in 2015. Year over year, the increase was somewhat offset by other than temporary impairments in the energy sector of the investment portfolio.

Traditional Reinsurance

The U.S. and Latin America Traditional segment provides life and health reinsurance to clients for a variety of products through yearly renewable term, coinsurance and modified coinsurance agreements. These reinsurance arrangements may involve either facultative or automatic agreements.

Income before income taxes for the U.S. and Latin America Traditional segment increased by \$28.6 million, or 34.6%, and \$61.9 million, or 61.5%, for the three and six months ended June 30, 2016, as compared to the same

periods in 2015. The increases were primarily due to improved claims experience and an increase in the overall asset base primarily associated with large in force block transactions executed in the fourth quarter of 2015. Net premiums increased \$136.5 million, or 11.7%, and \$256.8 million, or 11.2%, for the three and six months ended June 30, 2016, as compared to the same periods in 2015. The increases were primarily due to large in force block transactions executed during the latter part of 2015, significant individual health and group life transactions executed in the first six months of 2016, and expected organic premium growth. The segment added new individual life business production, measured by face amount of insurance in force of \$32.0 billion and \$15.7 billion for the second quarter and \$73.3 billion and \$35.4 billion for the first six months of 2016 and 2015, respectively.

Table of Contents

Net investment income increased \$18.8 million, or 11.5%, and \$40.9 million, or 13.3%, for the three and six months ended June 30, 2016, as compared to the same periods in 2015. The increases were primarily due to an increase in the average invested asset base primarily associated with the aforementioned in force block transactions along with strong variable investment income during the six months ended June 30, 2016. Investment related gains (losses), net decreased \$4.2 million and \$3.9 million for the three and six months ended June 30, 2016, as compared to the same periods in 2015. A portion of investment income is allocated to the various operating segments based on average assets and related capital levels deemed appropriate to support segment operations. Investment performance varies with the composition of investments and the relative allocation of capital to the operating segments.

Claims and other policy benefits as a percentage of net premiums ("loss ratios") were 87.9% and 88.9% for the second quarter and 89.3% and 91.1%, for the six months ended June 30, 2016 and 2015, respectively. The decreases in the loss ratios were primarily due to higher than normal adverse volatility in the total count of individual mortality claims during the three and six months ended June 30, 2015. Although reasonably predictable over a period of years, claims can be volatile over short-term periods.

Interest credited expense decreased \$1.0 million, or 4.7%, and increased \$7.4 million, or 21.3%, for the three and six months ended June 30, 2016, as compared to the same periods in 2015. Interest credited in this segment relates to amounts credited on cash value products which also have a significant mortality component. The increase in the first six months relates primarily to the interest sensitive whole life products acquired in the acquisition of Aurora National Life Assurance Company ("Aurora") in the second quarter of 2015. Income before income taxes is affected by the spread between the investment income and the interest credited on the underlying products.

Policy acquisition costs and other insurance expenses as a percentage of net premiums were 13.9% and 14.4% for the second quarter and 14.1% and 14.3% for the six months ended June 30, 2016 and 2015, respectively. Overall, while these ratios are expected to remain in a predictable range, they may fluctuate from period to period due to varying allowance levels within coinsurance-type arrangements. In addition, the amortization pattern of previously capitalized amounts, which are subject to the form of the reinsurance agreement and the underlying insurance policies, may vary. Also, the mix of first year coinsurance business versus yearly renewable term business can cause the percentage to fluctuate from period to period.

Other operating expenses increased \$2.6 million, or 9.7%, and \$7.9 million, or 14.7%, for the three and six months ended June 30, 2016, as compared to the same periods in 2015. Contributing to the increase was an expansion in underwriting personnel to support clients. Other operating expenses, as a percentage of net premiums were 2.3% and 2.3% for the second quarter and 2.4% and 2.3% for the six month periods ended June 30, 2016 and 2015, respectively. The expense ratio tends to fluctuate only slightly from period to period due to the maturity and scale of this segment. Non-Traditional - Asset-Intensive Reinsurance

Asset-Intensive reinsurance within the U.S. and Latin America Non-Traditional segment primarily involves assuming investment risk within underlying annuities and corporate-owned life insurance policies. Most of these agreements are coinsurance, coinsurance with funds withheld or modco. The Company recognizes profits or losses primarily from the spread between the investment income earned and the interest credited on the underlying deposit liabilities, income associated with longevity risk, and fees associated with variable annuity account values and guaranteed investment contracts.

Impact of certain derivatives:

Income from the asset-intensive business tends to be volatile due to changes in the fair value of certain derivatives, including embedded derivatives associated with reinsurance treaties structured on a mode or funds withheld basis, as well as embedded derivatives associated with the Company's reinsurance of equity-indexed annuities and variable annuities with guaranteed minimum benefit riders. Fluctuations occur period to period primarily due to changing investment conditions including, but not limited to, interest rate movements (including risk-free rates and credit spreads), implied volatility and equity market performance, all of which are factors in the calculations of fair value. Therefore, management believes it is helpful to distinguish between the effects of changes in these derivatives, net of related hedging activity, and the primary factors that drive profitability of the underlying treaties, namely investment income, fee income (included in other revenues), and interest credited. These fluctuations are considered unrealized by

management and do not affect current cash flows, crediting rates or spread performance on the underlying treaties. The following table summarizes the asset-intensive results and quantifies the impact of these embedded derivatives for the periods presented. Revenues before certain derivatives, benefits and expenses before certain derivatives, and income before income taxes and certain derivatives, should not be viewed as substitutes for GAAP revenues, GAAP benefits and expenses, and GAAP income before income taxes.

Table of Contents

(dollars in thousands)	Three mor June 30,	ths ended	Six month June 30,	s ended
	2016	2015	2016	2015
Revenues:				
Total revenues	\$284,728	\$172,864	\$302,445	\$349,087
Less:				
Embedded derivatives – modco/funds withheld treaties	77,848	(26,456)	(12,366)	(26,309)
Guaranteed minimum benefit riders and related free standing	2,923	10,619	(12,063)	6.052
derivatives	2,923	10,019	(12,003)	6,052
Revenues before certain derivatives	203,957	188,701	326,874	369,344
Benefits and expenses:				
Total benefits and expenses	190,749	117,114	239,296	251,197
Less:				
Embedded derivatives – modco/funds withheld treaties	48,033	(17,072)	(3,021)	(15,416)
Guaranteed minimum benefit riders and related free standing	2.545	2 240	(204	2 100
derivatives	2,545	3,340	(304)	2,190
Equity-indexed annuities	(7,359)	(4,305)	5,901	1,296
Benefits and expenses before certain derivatives	147,530	135,151	236,720	263,127
Income before income taxes:				
Income before income taxes	93,979	55,750	63,149	97,890
Less:				
Embedded derivatives – modco/funds withheld treaties	29,815	(9,384)	(9,345)	(10,893)
Guaranteed minimum benefit riders and related free standing	270	7 270	(11.750	2 962
derivatives	378	7,279	(11,759)	3,862
Equity-indexed annuities	7,359	4,305	(5,901)	(1,296)
Income before income taxes and certain derivatives	\$56,427	\$53,550	\$90,154	\$106,217
Embedded Derivatives - Modco/Funds Withheld Treaties - Represents	the change i	n the fair va	lue of embe	dded

Embedded Derivatives - Modco/Funds Withheld Treaties - Represents the change in the fair value of embedded derivatives on funds withheld at interest associated with treaties written on a modco or funds withheld basis. The fair value changes of embedded derivatives on funds withheld at interest associated with treaties written on a modco or funds withheld basis are reflected in revenues, while the related impact on deferred acquisition expenses is reflected in benefits and expenses. The Company's utilization of a credit valuation adjustment did not have a material effect on the change in fair value of these embedded derivatives for the six months ended June 30, 2016 and 2015.

The change in fair value of the embedded derivatives - modco/funds withheld treaties increased (decreased) income before income taxes by \$29.8 million and \$(9.4) million for the second quarter and \$(9.3) million and \$(10.9) million for the six months ended June 30, 2016 and 2015, respectively. The increase in income for the three months ended June 30, 2016 was primarily due to tightening credit spreads, while the decrease in income for the three months ended June 30, 2015 was due to a combination of widening credit spreads and increased risk free rates. The decreases in income for the six months ended June 30, 2016 and 2015 were primarily due to widening credit spreads.

Guaranteed Minimum Benefit Riders - Represents the impact related to guaranteed minimum benefits associated with the Company's reinsurance of variable annuities. The fair value changes of the guaranteed minimum benefits along with the changes in fair value of the free standing derivatives (interest rate swaps, financial futures and equity options), purchased by the Company to substantially hedge the liability are reflected in revenues, while the related impact on deferred acquisition expenses is reflected in benefits and expenses. The Company's utilization of a credit valuation adjustment did not have a material effect on the change in fair value of these embedded derivatives for the six months ended June 30, 2016 and 2015.

The change in fair value of the guaranteed minimum benefits, after allowing for changes in the associated free standing derivatives, increased (decreased) income before income taxes by \$0.4 million and \$7.3 million for the second quarter and \$(11.8) million and \$3.9 million for the six months ended June 30, 2016 and 2015, respectively.

The increase in income for the three months ended June 30, 2016 was primarily due to rising equity markets, while the increase in income for the three months ended June 30, 2015 was due to rising equity markets and declining volatility. The decrease in income for the six months ended June 30, 2016 was primarily due to policyholder experience, while the increase in income for the six months ended June 30, 2015 was due to rising equity markets and declining volatility.

Table of Contents

Equity-Indexed Annuities - Represents changes in the liability for equity-indexed annuities in excess of changes in account value, after adjustments for related deferred acquisition expenses. The change in fair value of embedded derivative liabilities associated with equity-indexed annuities increased (decreased) income before income taxes by \$7.4 million and \$4.3 million for the second quarter and \$(5.9) million and \$(1.3) million for the six months ended June 30, 2016 and 2015, respectively. The increase in income for the three months ended June 30, 2016 was primarily due to decreasing interest rates, while the increase in income for the three months ended June 30, 2015 was primarily due to increasing interest rates. The decrease in income for the three and six months ended June 30, 2016 and 2015 was primarily due increasing interest rates.

The changes in derivatives discussed above are considered unrealized by management and do not affect current cash flows, crediting rates or spread performance on the underlying treaties. Fluctuations occur period to period primarily due to changing investment conditions including, but not limited to, interest rate movements (including benchmark rates and credit spreads), credit valuation adjustments, implied volatility and equity market performance, all of which are factors in the calculations of fair value. Therefore, management believes it is helpful to distinguish between the effects of changes in these derivatives and the primary factors that drive profitability of the underlying treaties, namely investment income, fee income (included in other revenues) and interest credited.

Discussion and analysis before certain derivatives:

Income before income taxes and certain derivatives increased by \$2.9 million and decreased by \$16.1 million for the three and six months ended June 30, 2016, as compared to the same periods in 2015. The increase in the second quarter was primarily due to higher investment related gains (losses), net of the corresponding impact to deferred acquisition costs, associated with funds withheld portfolios. Funds withheld capital gains (losses) are reflected in investment income. The decrease in the first six months was primarily due to an increase of \$21.4 million in other-than-temporary impairments on investments in the first quarter, partially offset by the inclusion of Aurora in the 2016 results.

Revenue before certain derivatives increased by \$15.3 million and decreased by \$42.5 million for the three and six months ended June 30, 2016, as compared to the same periods in 2015. The increase in the second quarter was primarily due to the change in fair value of equity options associated with the reinsurance of certain EIAs. The decrease in the first six months was primarily due to the decline in fair value of equity options associated with the reinsurance of certain EIAs and other-than-temporary impairments on investments, which offset the increase in investment income associated with the acquisition of Aurora. The effect on investment income related to equity options is substantially offset by a corresponding change in interest credited.

Benefits and expenses before certain derivatives increased by \$12.4 million and decreased by \$26.4 million for the three and six months ended June 30, 2016, as compared to the same period in 2015. The increase in the second quarter was primarily due to higher interest credited associated with the reinsurance of certain EIAs. The decrease in the first six months of 2016 was primarily due to lower interest credited associated with the reinsurance of EIAs which was partially offset by the benefits and expenses associated with the acquisition of Aurora. The effect on interest credited related to equity options is substantially offset by a corresponding change in investment income.

The invested asset base supporting this segment decreased to \$13.1 billion as of June 30, 2016 from \$14.1 billion as of June 30, 2015. The decrease in the asset base was due primarily to the expected run-off from closed block transactions. As of June 30, 2016, \$4.0 billion of the invested assets were funds withheld at interest, of which greater than 90% is associated with one client.

Non-Traditional - Financial Reinsurance

Financial Reinsurance within the U.S. and Latin America Non-Traditional segment income before income taxes consists primarily of net fees earned on financial reinsurance transactions. Additionally, a portion of the business is brokered business in which the Company does not participate in the assumption of risk. The fees earned from financial reinsurance contracts and brokered business are reflected in other revenues, and the fees paid to retrocessionaires are reflected in policy acquisition costs and other insurance expenses.

Income before income taxes increased \$0.2 million, or 1.6%, and \$3.8 million, or 14.1%, for the three and six months ended June 30, 2016, as compared to the same periods in 2015. The increase was primarily due to growth in new

transactions and organic growth on existing transactions which was partially offset by the termination of certain agreements.

At June 30, 2016 and 2015, the amount of reinsurance assumed from client companies, as measured by pre-tax statutory surplus, risk based capital and other financial structures was \$7.7 billion and \$6.4 billion, respectively. The increase was primarily due to a number of new transactions, as well as organic growth on existing transactions. Fees earned from this business can vary significantly depending on the size of the transactions and the timing of their completion and therefore can fluctuate from period to period.

Table of Contents

Canada Operations

(dollars in thousands)

The Company conducts reinsurance business in Canada primarily through RGA Canada, which assists clients with capital management activity, and mortality and morbidity risk management. The Canada operations are primarily engaged in Traditional reinsurance, which consists mainly of traditional individual life reinsurance, as well as creditor, group life and health and living benefits (disability and critical illness) reinsurance. Creditor insurance covers the outstanding balance on personal, mortgage or commercial loans in the event of death, disability or critical illness and is generally shorter in duration than traditional individual life insurance. The Canada operations are also engaged in Non-Traditional reinsurance which consists of longevity and financial reinsurance.

Three months ended June 30

(dollars in thousands)	2016	ths ended June	30,	2015		
Revenues:	Traditional	Non-Tradition	Total a Canada	Traditional	Non-Tradition	Total a Canada
Net premiums	\$240,107	\$ 10,192	\$250,299	\$224,960	\$ 9,725	\$234,685
Investment income, net of related expenses	46,859	228	47,087	45,751	328	46,079
Investment related gains (losses), net	2,285	_	2,285	(167)		(167)
Other revenues	(339)	1,434	1,095	(454)	1,405	951
Total revenues	288,912	11,854	300,766	270,090	11,458	281,548
Benefits and expenses:						
Claims and other policy benefits	176,478	8,834	185,312	185,742	7,904	193,646
Interest credited	7		7	5	_	5
Policy acquisition costs and other	60,021	513	60,534	53,371	148	53,519
insurance expenses	00,021	313	00,554	33,371	140	33,319
Other operating expenses	9,097	379	9,476	8,236	312	8,548
Total benefits and expenses	245,603	9,726	255,329	247,354	8,364	255,718
Income before income taxes	\$43,309	\$ 2,128	\$45,437	\$22,736	\$ 3,094	\$25,830
(dollars in thousands)	Six month	ns ended June 3	0,			
	2016			2015		
Revenues:	Traditiona	al Non-Traditio	na Total Canada	Tradition	aNon-Tradition	Total ^{na} Canada
Net premiums	\$455,570	\$ 19,143	\$474,71	3 \$437,510	\$ 19,692	\$457,202
Investment income, net of related expenses	88,882	612	89,494	95,191	878	96,069
Investment related gains (losses), net	3,925		3,925	1,291	_	1,291
Other revenues	(1,465) 2,783	1,318	1,102	2,762	3,864
Total revenues	546,912	22,538	569,450	535,094	23,332	558,426
Benefits and expenses:						
Claims and other policy benefits	348,879	18,438	367,317	369,276	15,203	384,479
Interest credited	9		9	9		9
Policy acquisition costs and other insurance expenses	117,159	717	117,876	102,922	255	103,177
Other operating expenses	17,461	663	18,124	17,424	649	18,073
Other operating expenses Total benefits and expenses	17,461 483,508	663 19,818	18,124 503,326	17,424 489,631	649 16,107	18,073 505,738
	•		•	489,631		•
Total benefits and expenses	483,508 \$63,404	19,818 \$ 2,720	503,326 \$66,124	489,631 \$45,463	16,107 \$ 7,225	505,738 \$52,688

Income before income taxes increased by \$19.6 million, or 75.9%, and \$13.4 million, or 25.5%, for the three and six months ended June 30, 2016, as compared to the same periods in 2015. The increase in income for the second quarter is primarily due to improved traditional individual life mortality experience, as compared to the same period in 2015. The increase in income for the first six months is primarily due to improved traditional individual life mortality experience partially offset by a decrease in investment income and unfavorable experience on longevity business, as compared to the same period in 2015. A weaker Canadian dollar resulted in a decrease in income before income taxes

of \$2.4 million and \$6.1 million for the three and six months ended June 30, 2016, as compared to the same periods in 2015.

Table of Contents

Traditional Reinsurance

Income before income taxes for the Canada Traditional segment increased by \$20.6 million, or 90.5%, and \$17.9 million, or 39.5%, for the three and six months ended June 30, 2016, as compared to the same periods in 2015. The increase in income before income taxes for the second quarter is primarily due to favorable traditional individual life mortality experience and a \$2.5 million increase in investment related gains (losses), net. The increase in income before income taxes for the first six months, is primarily due to favorable traditional individual life mortality experience and a \$2.6 million increase in investment related gains (losses), net, partially offset by a decrease in investment income. Additionally, a weaker Canadian dollar resulted in a decrease in income before income taxes of \$2.2 million and \$5.4 million for the three and six months ended June 30, 2016, as compared to the same periods in 2015

Net premiums increased \$15.1 million, or 6.7%, and \$18.1 million, or 4.1%, for the three and six months ended June 30, 2016, as compared to the same periods in 2015. The increases in net premiums were primarily due to an increase from creditor business of \$16.6 million and \$32.1 million, as compared to the same periods in 2015. Also contributing to the increase in net premiums for the second quarter and first six months is the underlying yearly renewable term structure on a significant portion of the block of business, which generally increases over time. These increases were partially offset by foreign currency exchange fluctuation in the Canadian dollar resulted in a decrease in net premiums of approximately \$11.6 million and \$33.6 million for the three and six months ended June 30, 2016, as compared to the same periods in 2015. Premium levels can be significantly influenced by currency fluctuations, large transactions, mix of business and reporting practices of ceding companies and therefore may fluctuate from period to period.

Net investment income increased \$1.1 million, or 2.4%, and decreased \$6.3 million, or 6.6%, for the three and six months ended June 30, 2016, as compared to the same periods in 2015. The increase in the second quarter was primarily due to growth in the invested asset base partially offset by adverse currency fluctuations of approximately \$2.3 million. The decrease in net investment income for the first six months ended June 30, 2016, was primarily due to adverse foreign currency fluctuations of approximately \$6.7 million. A portion of investment income is allocated to the segments based upon average assets and related capital levels deemed appropriate to support the segment business volumes. Investment performance varies with the composition of investments and the relative allocation of capital to the operating segments.

Other revenues increased by \$0.1 million, or 25.3%, and decreased by \$2.6 million, or 232.9%, for the three and six months ended June 30, 2016, as compared to the same periods in 2015. The decrease in other revenues in the first six months of 2016 was due to unfavorable foreign currency exchange fluctuations.

Loss ratios for this segment were 73.5% and 82.6% for the second quarter and 76.6% and 84.4% for the six months ended June 30, 2016 and 2015, respectively. The decreases in the loss ratios for the second quarter and first six months of 2016, as compared to the same periods in 2015, are due to improved traditional life mortality experience. Loss ratios for the traditional individual life mortality business were 87.2% and 96.2% for the second quarter and 92.9% and 99.2% for the first six months ended June 30, 2016 and 2015, respectively. Excluding creditor business, claims as a percentage of net premiums for this segment were 67.6% and 73.4% for the second quarter and 72.7% and 78.8% for the six months ended June 30, 2016 and 2015, respectively. Historically, the loss ratio increased primarily as the result of several large permanent level premium in force blocks assumed in 1997 and 1998. These blocks are mature blocks of long-term permanent level premium business in which mortality as a percentage of net premiums is expected to be higher than historical ratios. The nature of permanent level premium policies requires the Company to set up actuarial liabilities and invest the amounts received in excess of early-year claims costs to fund claims in later years when premiums, by design, continue to be level as compared to expected increasing mortality or claim costs. Excluding creditor business, claims and other policy benefits, as a percentage of net premiums and investment income were 69.3% and 76.3% for the second quarter and 73.5% and 77.2% for the six months ended June 30, 2016 and 2015, respectively.

Policy acquisition costs and other insurance expenses as a percentage of net premiums were 25.0% and 23.7% for the second quarter and 25.7% and 23.5% for the six months ended June 30, 2016 and 2015, respectively. Overall, while

these ratios are expected to remain in a predictable range, they may fluctuate from period to period due to varying allowance levels and product mix. In addition, the amortization patterns of previously capitalized amounts, which are subject to the form of the reinsurance agreement and the underlying insurance policies, may vary. Other operating expenses increased by \$0.9 million, or 10.5%, for the three months ended June 30, 2016, as compared to the same period in 2015. Other operating expenses were essentially flat for the comparable six month periods. Foreign currency exchange fluctuation in the Canadian dollar resulted in a decrease in operating expenses of approximately \$0.4 million and \$1.2 million for the three and six months ended June 30, 2016, as compared to the same periods in 2015. Other operating expenses as a percentage of net premiums were 3.8% and 3.7% for the second quarter and 3.8% and 4.0% for the first six months ended June 30, 2016 and 2015, respectively.

Table of Contents

Non-Traditional Reinsurance

Income before income taxes decreased by \$1.0 million, or 31.2%, and \$4.5 million, or 62.4%, for the three and six months ended June 30, 2016, as compared to the same periods in 2015. The decrease in income for the three months ended June 30, 2016, as compared to the same period in 2015, is primarily due to favorable experience on longevity business for the three months ended June 30, 2015. The decrease in income for the six months ended June 30, 2016, as compared to the same period in 2015 was primarily due to unfavorable experience on longevity business. A weaker Canadian dollar resulted in a decrease in income before income taxes of \$0.1 million and \$0.7 million for the three and six months ended June 30, 2016, as compared to the same periods in 2015.

Net premiums increased \$0.5 million, or 4.8%, and decreased by \$0.5 million, or 2.8%, for the three and six months ended June 30, 2016, as compared to the same periods in 2015. A weaker Canadian dollar resulted in a decrease in net premiums of approximately \$0.5 million and \$1.4 million for the three and six months ended June 30, 2016, as compared to the same periods in 2015. Premium levels can be significantly influenced by currency fluctuations, large transactions, mix of business and reporting practices of ceding companies and therefore may fluctuate from period to period.

Claims and other policy benefits increased \$0.9 million, or 11.8%, and \$3.2 million, or 21.3%, for the three and six months ended June 30, 2016 as compared to the same periods in 2015. The increase for the second quarter is commensurate with business growth. The increase for the first six months was a result of unfavorable experience on longevity business, in addition to growth of the underlying business. Although reasonably predictable over a period of years, claims can be volatile over shorter periods. Management views recent experience as normal short-term volatility that is inherent in the business.

Europe, Middle East and Africa Operations

The Europe, Middle East and Africa ("EMEA") segment includes business generated by its offices principally in the United Kingdom ("UK"), South Africa, France, Germany, Ireland, Italy, the Netherlands, Poland, Spain and the United Arab Emirates. EMEA consists of two major segments: Traditional and Non-Traditional. The Traditional segment primarily provides reinsurance through yearly renewable term and coinsurance agreements on a variety of life, health and critical illness products. Reinsurance agreements may be facultative or automatic agreements covering primarily individual risks and, in some markets, group risks. The Non-Traditional segment consists of reinsurance and other transactions associated with longevity closed blocks, payout annuities, capital management solutions and financial reinsurance.

(dollars in thousands)	Three mon	nths ended June	e 30,			
	2016			2015		
Revenues:	Traditiona	Non-Tradition	Total EMEA	Traditional	Non-Tradition	Total aEMEA
Net premiums	\$286,861	\$ 43,484	\$330,345	\$275,745	\$ 50,234	\$325,979
Investment income, net of related expenses	13,321	33,417	46,738	13,092	15,782	28,874
Investment related gains (losses), net	_	1,468	1,468	(4,509)	50	(4,459)
Other revenues	1,460	2,608	4,068	(136)	9,242	9,106
Total revenues	301,642	80,977	382,619	284,192	75,308	359,500
Benefits and expenses:						
Claims and other policy benefits	252,336	44,004	296,340	240,942	39,849	280,791
Interest credited	_	2,966	2,966	(4,048)	_	(4,048)
Policy acquisition costs and other insurance expenses	2 17,550	723	18,273	14,183	266	14,449
Other operating expenses	24,922	5,815	30,737	23,956	3,761	27,717
Total benefits and expenses	294,808	53,508	348,316	275,033	43,876	318,909
Income before income taxes	\$6,834	\$ 27,469	\$34,303	\$9,159	\$ 31,432	\$40,591

Table of Contents

(dollars in thousands)	Six months ended June 30,							
	2016			2015				
Revenues:	Traditiona	aNon-Tradition	Total aEMEA	Traditiona	aNon-Traditio	Total nal EMEA		
Net premiums	\$563,296	\$ 79,090	\$642,386	\$545,491	\$ 80,094	\$625,585		
Investment income, net of related expenses	25,489	62,101	87,590	25,181	32,659	57,840		
Investment related gains (losses), net	5	464	469	7,748	901	8,649		
Other revenues	2,486	7,078	9,564	1,004	17,030	18,034		
Total revenues	591,276	148,733	740,009	579,424	130,684	710,108		
Benefits and expenses:								
Claims and other policy benefits	503,579	80,447	584,026	476,249	71,930	548,179		
Interest credited		3,374	3,374	8,301		8,301		
Policy acquisition costs and other insurance expenses	32,332	530	32,862	26,191	(264) 25,927		
Other operating expenses	49,647	11,489	61,136	49,042	7,952	56,994		
Total benefits and expenses	585,558	95,840	681,398	559,783	79,618	639,401		
Income before income taxes	\$5,718	\$ 52,893	\$58,611	\$19,641	\$ 51,066	\$70,707		

Income before income taxes decreased by \$6.3 million, or 15.5%, and \$12.1 million, or 17.1%, for the three and six months ended June 30, 2016, as compared to the same periods in 2015. The decreases in income before income taxes were primarily due to reduced fee income business and poor mortality and morbidity experience partially offset by increased payout annuity business. In addition, foreign currency exchange fluctuations resulted in a decrease in income before income taxes totaling \$1.9 million and \$4.1 million for the three and six months ended June 30, 2016, as compared to the same periods in 2015, due primarily to weakness in the British pound.

Traditional Reinsurance

Income before income taxes decreased by \$2.3 million, or 25.4%, and \$13.9 million, or 70.9%, for the three and six months ended June 30, 2016, as compared to the same periods in 2015. The decreases in income before income taxes were primarily due to unfavorable mortality and morbidity experience. Foreign currency exchange fluctuations resulted in an increase in income before income taxes totaling \$0.1 million and a decrease in \$0.1 million for the three and six months ended June 30, 2016, as compared to the same periods in 2015.

Net premiums increased \$11.1 million, or 4.0%, and \$17.8 million, or 3.3%, for the three and six months ended June 30, 2016, as compared to the same periods in 2015. The increases are primarily due to increased individual life and health premiums. Unfavorable foreign currency exchange fluctuations, primarily due to the British pound and the South African rand weakening against the U.S. dollar, decreased net premiums by approximately \$20.2 million and \$43.2 million for the three and six months of 2016, as compared to the same periods in 2015. Premiums from new business and growth in existing business offset the negative currency effect.

A portion of the net premiums for the segment, in each period presented, relates to reinsurance of critical illness coverage, primarily in the UK. This coverage provides a benefit in the event of the diagnosis of a pre-defined critical illness. Net premiums earned from this coverage totaled \$53.8 million and \$58.3 million for the second quarter and \$107.5 million and \$116.5 million for the first six months of 2016 and 2015, respectively. Premium levels can be significantly influenced by currency fluctuations, large transactions and reporting practices of ceding companies and therefore can fluctuate from period to period.

Net investment income increased \$0.2 million, or 1.7%, and \$0.3 million, or 1.2%, for the three and six months ended June 30, 2016, as compared to the same periods in 2015. The increases were primarily due to an increase in the invested asset base related to increased business volumes. Foreign currency exchange fluctuations resulted in a decrease in net investment income of approximately \$0.8 million and \$1.9 million for the three and six months ended June 30, 2016, as compared to the same periods in 2015. A portion of investment income is allocated to the various operating segments based on average assets and related capital levels deemed appropriate to support the segment business volumes. Investment performance varies with the composition of investments and the relative allocation of

capital to the operating segments.

Loss ratios for this segment were 88.0% and 87.4% for the second quarter and 89.4% and 87.3% for the first six months ended June 30, 2016 and 2015, respectively. The increases in the loss ratios reflect unfavorable mortality and morbidity experience compared to the same periods in 2015. Although reasonably predictable over a period of years, claims can be volatile over shorter periods. Management views recent experience as normal short-term volatility that is inherent in the business.

Interest credited expense increased by \$4.0 million, or 100.0%, and decreased by \$8.3 million, or 100.0%, for the three and six months ended June 30, 2016, as compared to the same periods in 2015. Interest credited in 2015 relates to amounts credited to

Table of Contents

the contractholders of unit-linked products. In 2016, interest credited related to unit-linked products and the related investment income is reflected in Non-Traditional Reinsurance.

Policy acquisition costs and other insurance expenses as a percentage of net premiums were 6.1% and 5.1% for the second quarter and 5.7% and 4.8% for the first six months ended June 30, 2016 and 2015, respectively. These percentages fluctuate due to timing of client company reporting, variations in the mixture of business and the relative maturity of the business.

Other operating expenses increased \$1.0 million, or 4.0%, and \$0.6 million, or 1.2%, for the three and six months ended June 30, 2016, as compared to the same periods in 2015. The increases were in line with expected expense levels to support business growth. Foreign currency exchange fluctuations resulted in a decrease in operating expenses of approximately \$1.6 million and \$4.0 million for the three and six months ended June 30, 2016, as compared to the same periods in 2015. Other operating expenses as a percentage of net premiums totaled 8.7% and 8.7% for the second quarter and 8.8% and 9.0% for the first six months ended June 30, 2016 and 2015, respectively. Non-Traditional Reinsurance

Income before income taxes decreased by \$4.0 million, or 12.6%, and increased by \$1.8 million, or 3.6%, for the three and six months ended June 30, 2016, as compared to the same periods in 2015. The decrease in the second quarter is primarily due to decreased fee income business and strong closed block longevity experience in the prior period partially offset by increased payout annuity reinsurance (longevity) business. The increase in income before income taxes for the first six months was primarily related to a payout annuity reinsurance transaction executed after the third quarter of 2015 partially offset by a decrease in fee income. Unfavorable foreign currency exchange fluctuations resulted in a decrease in income before income taxes totaling \$2.0 million and \$3.9 million for the three and six months ended June 30, 2016, as compared to the same periods in 2015.

Net premiums decreased \$6.8 million, or 13.4%, and \$1.0 million, or 1.3%, for the three and six months ended June 30, 2016, as compared to the same periods in 2015. The decrease in the second quarter is primarily due to currency fluctuations and the recognition of premiums in the second quarter of 2015 related to a new closed block (longevity) transaction. The decrease in the first six months was primarily related to currency fluctuations largely offset by new closed block (longevity) business. Unfavorable foreign currency exchange fluctuations, primarily in the British pound, decreased net premiums by approximately \$3.1 million and \$5.1 million for the three and six months ended June 30, 2016, as compared to the same periods in 2015. Premium levels can be significantly influenced by currency fluctuations, large transactions and reporting practices of ceding companies and therefore can fluctuate from period to period.

Net investment income increased \$17.6 million, or 111.7%, and \$29.4 million, or 90.1%, for the three and six months ended June 30, 2016, as compared to the same periods in 2015. These increases were primarily due to an increase in the invested asset base related to closed block (longevity) transactions executed in the fourth quarter of 2015. A portion of investment income is allocated to the various operating segments based on average assets and related capital levels deemed appropriate to support the segment business volumes. Investment performance varies with the composition of investments and the relative allocation of capital to the operating segments.

Other revenues decreased by \$6.6 million, or 71.8%, and \$10.0 million, or 58.4%, for the three and six months ended June 30, 2016, as compared to the same periods in 2015. The decreases in other revenues relate to reduced fee income associated with treaties terminated at the end of 2015. Fees earned from this business can vary significantly depending on the size of the transactions and the timing of their completion and, therefore, can fluctuate from period to period. Claims and other policy benefits increased \$4.2 million, or 10.4%, and \$8.5 million, or 11.8%, for the three and six months ended June 30, 2016, as compared to the same periods in 2015. Claims and other policy benefits increased due to increased benefits associated with payout annuity reinsurance transactions executed in the fourth quarter of 2015. Although reasonably predictable over a period of years, claims can vary over shorter periods and will vary with large transactions. Management views recent experience as normal.

Interest credited expense increased by \$3.0 million and \$3.4 million for the three and six months ended June 30, 2016, as compared to the same periods in 2015. Interest credited in 2016 relates to amounts credited to the contractholders of unit-linked products. In 2015, interest credited related to unit-linked products was reflected in Traditional

Reinsurance.

Other operating expenses increased \$2.1 million, or 54.6%, and \$3.5 million, or 44.5%, for the three and six months ended June 30, 2016, as compared to the same periods in 2015. The increases are primarily due to increased administration costs related to increased longevity business and an increase in expenses related to an acquisition in the Netherlands completed in the fourth quarter of 2015. Foreign currency exchange fluctuations resulted in a decrease in operating expenses of approximately \$0.2 million and \$0.4 million for the three and six months ended June 30, 2016, as compared to the same periods in 2015.

Table of Contents

Asia Pacific Operations

The Asia Pacific operations include business generated by its offices principally in Australia, China, Hong Kong, India, Japan, Malaysia, New Zealand, Singapore, South Korea and Taiwan. The principal types of reinsurance include life, critical illness, disability, superannuation, which are reported within the Traditional segment. Superannuation is the Australian government mandated compulsory retirement savings program. Superannuation funds accumulate retirement funds for employees, and, in addition, typically offer life and disability insurance coverage. The Non-Traditional segment includes financial reinsurance, asset-intensive and certain disability and life blocks sourced by the Global Financial Solutions unit. Reinsurance agreements may be facultative or automatic agreements covering primarily individual risks and in some markets, group risks.

(dollars in thousands)	Three months ended June 30,							
	2016			2015				
Revenues:	Traditiona	aNon-Tradition	Total aAsia Pacific	Traditiona	aNon-Tradition	Total Asia Pacific		
Net premiums	\$454,629	\$ (1,493)	\$453,136	\$390,456	\$ 898	\$391,354		
Investment income, net of related expenses	20,461	5,885	26,346	20,043	3,888	23,931		
Investment related gains (losses), net	_	6,527	6,527		(1,549)	(1,549)		
Other revenues	2,481	6,126	8,607	815	3,839	4,654		
Total revenues	477,571	17,045	494,616	411,314	7,076	418,390		
Benefits and expenses:								
Claims and other policy benefits	338,447	8,237	346,684	325,667	4,706	330,373		
Interest credited	_	3,136	3,136		169	169		
Policy acquisition costs and other insurance expenses	67,908	1,667	69,575	49,335	419	49,754		
Other operating expenses	36,734	4,078	40,812	31,997	3,187	35,184		
Total benefits and expenses	443,089	17,118	460,207	406,999	8,481	415,480		
Income (loss) before income taxes	\$34,482	\$ (73)	\$34,409	\$4,315	\$ (1,405)	\$2,910		