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

(Mark One)

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

For the quarterly period ended June 30, 2017

OR

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

For the transition period from to

Commission file number 333-1173

GREAT-WEST LIFE & ANNUITY INSURANCE COMPANY

(Exact name of registrant as specified in its charter)

COLORADO	**84-0467907**
(State or other jurisdiction of incorporation or organization)	(I.R.S. Employer Identification Number)

8515 EAST ORCHARD ROAD, GREENWOOD VILLAGE, CO 80111
(Address of principal executive offices)

(303) 737-3000
(Registrant's telephone number, including area code)

Indicate by check mark whether the registrant (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days.

Yes ☒ No ☐

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

Yes ☒ No ☐

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, or a smaller reporting company as defined in Rule 12b-2 of the Act.

Large accelerated filer	Accelerated filer	Non-accelerated filer	Smaller reporting company	Emerging growth company
☐	☐	☒	☐	☐

If an emerging growth company, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards provided pursuant to Section 13(a) of the Exchange Act. ☐

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

Yes ☐ No ☒

As of August 11, 2017, 7,292,708 shares of the registrant's common stock were outstanding, all of which were owned by the registrant's parent company.

Table of Contents

Part I Financial Information
Item1. Interim Financial Statements

GREAT-WEST LIFE & ANNUITY INSURANCE COMPANY
Condensed Consolidated Balance Sheets
June 30, 2017 and December 31, 2016
(In Thousands, Except Share Amounts)
(Unaudited)

	June 30, 2017	December 31, 2016
Assets		
Investments:		
Fixed maturities, available-for-sale, at fair value (amortized cost $21,392,504 and $21,672,727)	$ 22,242,518	$ 22,153,703
Fixed maturities, held-for-trading, at fair value (amortized cost $180,651 and $519,495)	182,554	514,738
Mortgage loans on real estate (net of allowances of $1,467 and $2,882)	3,924,598	3,558,826
Policy loans	4,066,620	4,019,648
Short-term investments (amortized cost $917,716 and $303,988)	917,716	303,988
Limited partnership and other corporation interests	37,876	34,895
Other investments	14,127	15,052
Total investments	31,386,009	30,600,850
Other assets:		
Cash and cash equivalents	16,839	18,321
Reinsurance recoverable	600,775	598,864
Deferred acquisition costs (“DAC”) and value of business acquired (“VOBA”)	456,545	486,690
Investment income due and accrued	277,979	287,681
Collateral under securities lending agreements	77,614	—
Due from parent and affiliates	104,237	81,995
Goodwill	137,683	137,683
Other intangible assets	18,531	20,087
Other assets	1,044,068	1,021,210
Assets of discontinued operations	17,088	17,652
Separate account assets	27,856,199	27,037,765
Total assets	$ 61,993,567	$ 60,308,798

See notes to condensed consolidated financial statements. (Continued)

GREAT-WEST LIFE & ANNUITY INSURANCE COMPANY
Condensed Consolidated Balance Sheets
June 30, 2017, and December 31, 2016
(In Thousands, Except Share Amounts)
(Unaudited)

	June 30, 2017	December 31, 2016
Liabilities and stockholder's equity		
Policy benefit liabilities:		
Future policy benefits	$ 29,394,266	$ 28,872,899
Policy and contract claims	385,991	372,259
Policyholders' funds	287,265	285,554
Provision for policyholders' dividends	48,581	49,521
Undistributed earnings on participating business	16,838	15,573
Total policy benefit liabilities	30,132,941	29,595,806
General liabilities:		
Due to parent and affiliates	538,844	537,990
Commercial paper	71,253	99,049
Payable under securities lending agreements	77,614	—
Deferred income tax liabilities, net	295,617	191,911
Other liabilities	796,721	816,304
Liabilities of discontinued operations	17,088	17,652
Separate account liabilities	27,856,199	27,037,765
Total liabilities	59,786,277	58,296,477
Commitments and contingencies (See Note 12)		
Stockholder's equity:		
Preferred stock, $1 par value, 50,000,000 shares authorized; none issued and outstanding	—	—
Common stock, $1 par value, 50,000,000 shares authorized; 7,292,708 shares issued and outstanding	7,293	7,293
Additional paid-in capital	940,385	863,031
Accumulated other comprehensive income	406,139	235,875
Retained earnings	853,473	906,122
Total stockholder's equity	2,207,290	2,012,321
Total liabilities and stockholder's equity	$ 61,993,567	$ 60,308,798

See notes to condensed consolidated financial statements. (Concluded)

GREAT-WEST LIFE & ANNUITY INSURANCE COMPANY
Condensed Consolidated Statements of Income
Three and Six Months Ended June 30, 2017, and 2016
(In Thousands)
(Unaudited)

	Three Months Ended June 30,		Six Months Ended June 30,	
	2017	**2016**	**2017**	**2016**
Revenues:				
Premium income	$ 67,663	$ 76,818	$ 219,904	$ 231,745
Fee income	267,338	238,364	522,453	463,429
Other revenue	3,661	3,370	6,045	6,519
Net investment income	297,221	355,755	610,691	687,540
Realized investment gains (losses), net:				
Total other-than-temporary gains (losses), net	(157)	—	(157)	(536)
Other realized investment gains (losses), net	22,221	42,013	10,467	73,819
Total realized investment gains (losses), net	22,064	42,013	10,310	73,283
Total revenues	657,947	716,320	1,369,403	1,462,516
Benefits and expenses:				
Life and other policy benefits	166,995	170,492	337,283	357,129
Decrease in future policy benefits	(63,978)	(68,746)	(63,852)	(82,761)
Interest credited or paid to contractholders	157,544	152,460	311,490	300,770
Provision for policyholders' share of losses on participating business	(62)	(249)	(64)	(418)
Dividends to policyholders	9,045	9,314	24,114	25,295
Total benefits	269,544	263,271	608,971	600,015
General insurance expenses	284,364	294,507	591,495	571,036
Amortization of DAC and VOBA	20,401	36,354	25,723	36,893
Interest expense	7,646	8,679	15,276	18,403
Total benefits and expenses	581,955	602,811	1,241,465	1,226,347
Income before income taxes	75,992	113,509	127,938	236,169
Income tax expense	26,168	39,710	43,286	63,748
Net income	$ 49,824	$ 73,799	$ 84,652	$ 172,421

See notes to condensed consolidated financial statements.

GREAT-WEST LIFE & ANNUITY INSURANCE COMPANY
Condensed Consolidated Statements of Comprehensive Income
Three and Six Months Ended June 30, 2017, and 2016
(In Thousands)
(Unaudited)

	Three Months Ended June 30,		Six Months Ended June 30,	
	2017	**2016**	**2017**	**2016**
Net income	$ 49,824	$ 73,799	$ 84,652	$ 172,421
Components of other comprehensive income				
Unrealized holding gains (losses), net, arising on available-for-sale fixed maturity investments	236,996	393,130	367,225	839,740
Unrealized holding gains (losses), net, arising on cash flow hedges	(18,245)	6,102	(25,200)	4,498
Reclassification adjustment for (gains) losses, net, realized in net income	(1,832)	(28,635)	(357)	(51,091)
Net unrealized gains (losses) related to investments	216,919	370,597	341,668	793,147
Future policy benefits, DAC and VOBA adjustments	(55,549)	(96,531)	(84,015)	(172,771)
Employee benefit plan adjustment	2,146	2,234	4,292	4,468
Other comprehensive income before income taxes	163,516	276,300	261,945	624,844
Income tax expense related to items of other comprehensive income	57,231	96,704	91,681	218,695
Other comprehensive income[1]	106,285	179,596	170,264	406,149
Total comprehensive income	$ 156,109	$ 253,395	$ 254,916	$ 578,570

[1] Other comprehensive income includes the non-credit component of impaired gains (losses), net, on fixed maturities available-for-sale in the amounts of $(520) and $(2,472) for the three months ended June 30, 2017, and 2016, respectively and $(1,609) and $(4,367) for the six months ended June 30, 2017, and 2016, respectively.

See notes to condensed consolidated financial statements.

GREAT-WEST LIFE & ANNUITY INSURANCE COMPANY
Condensed Consolidated Statements of Stockholder's Equity
Six Months Ended June 30, 2017, and 2016
(In Thousands)
(Unaudited)

	Six Months Ended June 30, 2017				
	Common stock	**Additional paid-in capital**	**Accumulated other comprehensive income**	**Retained earnings**	**Total**
Balances, January 1, 2017	$ 7,293	$ 863,031	$ 235,875	$ 906,122	$ 2,012,321
Net income	—	—	—	84,652	84,652
Other comprehensive income, net of income taxes	—	—	170,264	—	170,264
Dividends	—	—	—	(137,301)	(137,301)
Capital contribution[1]	—	76,429	—	—	76,429
Capital contribution - stock-based compensation	—	925	—	—	925
Balances, June 30, 2017	$ 7,293	$ 940,385	$ 406,139	$ 853,473	$ 2,207,290

[1] In May 2017, the Company received a capital contribution from its parent, GWL&A Financial, in the amount of $76,429. No additional shares of the Company were issued in relation to this contribution.

	Six Months Ended June 30, 2016				
	Common stock	**Additional paid-in capital**	**Accumulated other comprehensive income**	**Retained earnings**	**Total**
Balances, January 1, 2016	$ 7,233	$ 840,874	$ 233,438	$ 800,721	$ 1,882,266
Net income	—	—	—	172,421	172,421
Other comprehensive income, net of income taxes	—	—	406,149	—	406,149
Dividends	—	—	—	(104,831)	(104,831)
Capital contribution - stock-based compensation	—	1,059	—	—	1,059
Income tax benefit on stock-based compensation	—	405	—	—	405
Balances, June 30, 2016	$ 7,233	$ 842,338	$ 639,587	$ 868,311	$ 2,357,469

See notes to condensed consolidated financial statements.

GREAT-WEST LIFE & ANNUITY INSURANCE COMPANY
Condensed Consolidated Statements of Cash Flows
Six Months Ended June 30, 2017, and 2016
(In Thousands)
(Unaudited)

	Six Months Ended June 30,	
	2017	**2016**
Net cash provided by operating activities	$ 504,175	$ 457,941
Cash flows from investing activities:		
Proceeds from sales, maturities and redemptions of investments:		
Fixed maturities, available-for-sale	3,132,414	4,056,220
Mortgage loans on real estate	209,888	128,908
Limited partnership interests, other corporation interests and other investments	4,745	7,642
Purchases of investments:		
Fixed maturities, available-for-sale	(2,840,513)	(2,837,403)
Mortgage loans on real estate	(565,217)	(374,710)
Limited partnership interests, other corporation interests and other investments	(8,114)	(3,234)
Net change in short-term investments	(612,835)	(2,150,029)
Net change in policy loans	(9,037)	6,723
Purchases of furniture, equipment, and software	(21,710)	(20,652)
Net cash used in investing activities	(710,379)	(1,186,535)
Cash flows from financing activities:		
Contract deposits	1,405,204	1,766,662
Contract withdrawals	(1,087,940)	(978,575)
Net change in due to/from parent and affiliates	(21,388)	1,067
Dividends paid	(137,301)	(104,831)
Capital contribution	76,429	—
Payments for and interest paid on financing element derivatives, net	(3,461)	(5,111)
Net change in commercial paper borrowings	(27,796)	6,298
Net change in book overdrafts	1,623	17,613
Employee taxes paid for withheld shares	(648)	(484)
Income tax benefit on share-based compensation	—	405
Net cash provided by financing activities	204,722	703,044
Net decrease in cash and cash equivalents	(1,482)	(25,550)
Cash and cash equivalents, beginning of year	18,321	34,362
Cash and cash equivalents, end of period	$ 16,839	$ 8,812

See notes to condensed consolidated financial statements. (Continued)

GREAT-WEST LIFE & ANNUITY INSURANCE COMPANY
Condensed Consolidated Statements of Cash Flows
Six Months Ended June 30, 2017, and 2016
(In Thousands)
(Unaudited)

	Six Months Ended June 30,	
	2017	2016
Supplemental disclosures of cash flow information:		
Net cash paid during the year for:		
Income taxes	$ (10,449)	$ (16,391)
Interest	(12,931)	(18,798)
Non-cash investing and financing transactions during the years:		
Share-based compensation expense	$ 925	$ 1,059

See notes to condensed consolidated financial statements. (Concluded)

1. Organization and Basis of Presentation

Organization

Great-West Life & Annuity Insurance Company ("GWLA") and its subsidiaries (collectively, the "Company") is a direct wholly-owned subsidiary of GWL&A Financial Inc. ("GWL&A Financial"), a holding company formed in 1998. GWL&A Financial is a direct wholly-owned subsidiary of Great-West Lifeco U.S. LLC ("Lifeco U.S.") and an indirect wholly-owned subsidiary of Great-West Lifeco Inc. ("Lifeco"), a Canadian holding company. The Company offers a wide range of life insurance, retirement, and investment products to individuals, businesses, and other private and public organizations throughout the United States. The Company is an insurance company domiciled in the State of Colorado and is subject to regulation by the Colorado Division of Insurance.

Basis of Presentation

The condensed consolidated financial statements include the accounts of the Company and the accounts of its subsidiaries over which it exercises control and are prepared in accordance with accounting principles generally accepted in the United States of America ("U.S. GAAP"). Intercompany transactions and balances have been eliminated in consolidation.

The condensed consolidated balance sheet as of December 31, 2016, which was derived from the Company's audited consolidated financial statements, and the unaudited interim condensed consolidated financial statements as of and for the three and six months ended June 30, 2017, have been prepared in accordance with the instructions for Form 10-Q. In compliance with those instructions, certain information and footnote disclosures normally included in consolidated financial statements prepared in accordance with U.S. GAAP have been condensed or omitted. As such, these condensed consolidated financial statements should be read in conjunction with the audited consolidated financial statements and the notes thereto included in the Company's Annual Report on Form 10-K for the year ended December 31, 2016.

In the opinion of management, these statements include all normal recurring adjustments necessary to fairly present the Company's condensed consolidated results of operations, financial position, and cash flows as of June 30, 2017, and for all periods presented. The condensed consolidated results of operations and condensed consolidated statement of cash flows for the six months ended June 30, 2017, are not necessarily indicative of the results or cash flows expected for the full year.

Use of Estimates

The preparation of financial statements in conformity with U.S. GAAP requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities at the date of the financial statements and the reported amounts of revenues and expenses during the reporting period. Actual results could differ from those estimates.

2. Application of Recent Accounting Pronouncements

Recently adopted accounting pronouncements

In March 2016, the FASB issued ASU 2016-09, *Compensation-Stock Compensation: Improvements to Employee Share-Based Payment Accounting*. The new guidance is effective for the fiscal years beginning after December 15, 2016, including interim periods within those fiscal years, and requires a modified retrospective, a retrospective or a prospective transition approach depending upon the type of change. The new guidance changed several aspects of the accounting for share-based payment award transactions, including: (i) income tax consequences when awards vest or are settled; (ii) classification of awards as either equity or liabilities due to statutory tax withholding requirements; and (iii) classification on the statement of cash flows. The adoption of this ASU did not have a material effect on the Company's condensed consolidated financial statements.

Future adoption of new accounting pronouncements

In May 2014, the FASB issued ASU 2014-09, *Revenue from Contracts with Customers*, effective for fiscal years beginning after December 15, 2017 and interim periods within those years. Early adoption is permitted. The guidance may be applied retrospectively for all periods presented or retrospectively with a cumulative-effect adjustment at the date of adoption. The Company expects to utilize the modified retrospective adoption and recognize the cumulative effect of initially adopting the standard, if any, as an adjustment to the opening balance of retained earnings at the date of adoption. The new guidance will supersede nearly all existing revenue recognition guidance under U.S. GAAP; however, it will not impact the accounting for insurance and investment contracts within the scope of financial services insurance, leases, financial instruments and guarantees. The core principle of the model requires that an entity recognizes revenue for the transfer of goods or services equal to the amount that it expects to be entitled to receive for those goods or services. The update also requires increased disclosure about the nature, amount, timing, and uncertainty of revenue and cash flows arising from customer contracts.

The Company's implementation efforts are primarily focused on certain fee income earned from assets under management, assets under administration, shareholder servicing, administration and recordkeeping services, and investment advisory services as well as the evaluation of certain incremental costs to obtain a customer contract. The Company anticipates that the adoption of this update will primarily impact the accounting for certain contract cost and contract fulfillment costs, which are currently expensed as incurred. Under the new standard, these costs will be deferred and recognized as expenses over the expected customer life. While the Company continues to make progress in its assessment and implementation of this update, it has not yet determined a range of the potential quantitative impact on its condensed consolidated financial statements.

In January 2016, the FASB issued ASU 2016-01, *Recognition and Measurement of Financial Assets and Financial Liabilities*, effective for fiscal years beginning after December 15, 2017, including interim periods within those fiscal years. Early adoption is permitted for the instrument-specific credit risk provision. The amendments in this update address certain aspects of recognition, measurement, presentation, and disclosure of financial instruments by requiring equity investments (except those accounted for under the equity method of accounting) to be measured at fair value with changes in fair value recognized in net income, eliminating certain disclosure requirements related to financial instruments measured at amortized cost and adding disclosures related to the measurement categories of financial assets and financial liabilities, requiring entities to present separately in other comprehensive income the total change in the fair value of a liability resulting from a change in the instrument-specific credit risk (i.e. "own credit") when the entity has elected the fair value option for financial instruments, and clarifying that an entity should evaluate the need for a valuation allowance on a deferred tax asset related to available-for-sale securities in combination with the entity's other deferred tax assets. The Company is currently evaluating the impact of this update on its condensed consolidated financial statements and anticipates the primary impact to be the requirement for equity investments such as limited partnership interests, that are currently accounted for under the cost method, to be measured at fair value with changes in the fair value recognized in net income.

In February 2016, the FASB issued ASU 2016-02, *Leases,* effective for annual reporting periods beginning on or after December 15, 2018, and interim periods within those annual periods. Earlier application is permitted as of the beginning of an interim or annual period. This update requires organizations to recognize lease assets and lease liabilities on the balance sheet with lease terms of more than 12 months and also disclose certain qualitative and quantitative information about leasing arrangements. The Company's implementation efforts are primarily focused on the review of its existing lease contracts and performing a completeness assessment over the lease population. The Company is currently evaluating the impact of this update on its condensed consolidated financial statements.

In June 2016, the FASB issued ASU 2016-13, *Financial Instruments: Credit Losses: Measurement of Credit Losses on Financial Instruments,* effective for fiscal years and interim periods within those beginning after December 15, 2019. Early adoption is permitted for fiscal years beginning after December 15, 2018. This update amends guidance on the impairment of financial instruments by adding an impairment model that is based on expected losses rather than incurred losses and is intended to result in more timely recognition of losses. The standard also simplifies the accounting by decreasing the number of credit impairment models that an entity can use to account for debt instruments. The Company is currently evaluating the impact of this update on its condensed consolidated financial statements.

In August 2016, the FASB issued ASU 2016-15, *Statement of Cash Flows: Classification of Certain Cash Receipts and Cash Payments (a consensus of the Emerging Issues Task Force),* effective for fiscal years and interim periods within those beginning after December 15, 2017. Early adoption is permitted. This ASU addresses diversity in how certain cash receipts and cash payments are presented and classified in the statement of cash flows. The Company is currently evaluating the impact of this update on its condensed consolidated financial statements.

(Dollars in Thousands)

In November 2016, the FASB issued ASU 2016-18, *Statement of Cash Flows: Restricted Cash (a consensus of the Emerging Issues Task Force*), effective for fiscal years and interim periods within those beginning after December 15, 2017. Early adoption is permitted. This update requires organizations to show the changes in the total of cash, cash equivalents, restricted cash and restricted cash equivalents in the statement of cash flows. The Company is currently evaluating the impact of this update on its condensed consolidated financial statements.

In January 2017, the FASB issued ASU 2017-04, *Intangibles - Goodwill and Other*, effective for annual or any interim goodwill impairment tests after December 15, 2019. Early adoption is permitted for interim or annual goodwill impairment tests performed on testing dates after January 1, 2017. The update eliminates Step 2 from the goodwill impairment test and will require management to perform its goodwill impairment test by comparing the fair value of a reporting unit with its carrying amount. Any amount by which the carrying amount exceeds the reporting unit's fair value (not to exceed the goodwill allocated to that reporting unit) is recognized as an impairment charge. The Company is currently evaluating the impact of this update on its condensed consolidated financial statements.

In March 2017, the FASB issued ASU 2017-07, *Compensation-Retirement Benefits: Improving the Presentation of Net Periodic Pension Cost and Net Periodic Postretirement Benefit Cost,* effective for annual reporting periods beginning on or after December 15, 2017, and interim periods within those annual periods. Earlier application is permitted for all entities as of the beginning of an interim or annual period. This update requires organizations to disaggregate the service cost component from the other components of net benefit costs in the income statement and present it with other current compensation costs for the related employees and present while providing guidance for capitalization eligibility for service costs. The Company is currently evaluating the impact of this update in its condensed consolidated financial statements.

3. Dividends

The maximum amount of dividends, which can be paid to stockholders by insurance companies domiciled in the State of Colorado, is subject to restrictions relating to statutory surplus and statutory net gain from operations. Prior to the payment of any dividends, the Company seeks approval from the Colorado Insurance Commissioner. During the six months ended June 30, 2017, and 2016, the Company paid dividends of $137,301 and $104,831, respectively, to its parent, GWL&A Financial.

4. Summary of Investments

The following tables summarize fixed maturity investments classified as available-for-sale and the non-credit-related component of other-than-temporary impairments ("OTTI") in accumulated other comprehensive income (loss) ("AOCI"):

	June 30, 2017				
Fixed maturities:	**Amortized cost**	**Gross unrealized gains**	**Gross unrealized losses**	**Estimated fair value and carrying value**	**OTTI (gain) loss included in AOCI [1]**
U.S. government direct obligations and U.S. agencies	$ 1,389,029	$ 51,604	$ 8,998	$ 1,431,635	$ —
Obligations of U.S. states and their subdivisions	1,879,906	230,856	2,195	2,108,567	—
Corporate debt securities [2]	14,559,716	617,225	150,546	15,026,395	(1,167)
Asset-backed securities	1,624,832	112,104	14,758	1,722,178	(69,573)
Residential mortgage-backed securities	73,038	2,849	797	75,090	(135)
Commercial mortgage-backed securities	1,286,766	22,924	12,003	1,297,687	—
Collateralized debt obligations	579,217	1,780	31	580,966	—
Total fixed maturities	$21,392,504	$ 1,039,342	$ 189,328	$ 22,242,518	$ (70,875)

(Dollars in Thousands)

(1) Indicates the amount of any OTTI (gain) loss included in AOCI that is included in gross unrealized gains and losses. OTTI (gain) loss included in AOCI, as presented above, includes both the initial recognition of non-credit losses and the effects of subsequent increases and decreases in estimated fair value for those fixed maturity securities with previous non-credit impairment. The non-credit loss component of OTTI (gain) loss was in an unrealized gain position due to increases in estimated fair value subsequent to initial recognition of non-credit losses on such securities.
(2) Includes perpetual debt investments with amortized cost of $115,037 and estimated fair value of $108,631.

	December 31, 2016				
Fixed maturities:	**Amortized cost**	**Gross unrealized gains**	**Gross unrealized losses**	**Estimated fair value and carrying value**	**OTTI (gain) loss included in AOCI [1]**
U.S. government direct obligations and U.S. agencies	$ 3,022,279	$ 47,791	$ 34,958	$ 3,035,112	$ —
Obligations of U.S. states and their subdivisions	1,890,568	214,411	6,317	2,098,662	—
Corporate debt securities [2]	13,811,597	477,316	309,164	13,979,749	(1,488)
Asset-backed securities	1,226,493	104,274	18,388	1,312,379	(72,464)
Residential mortgage-backed securities	138,292	3,867	1,167	140,992	23
Commercial mortgage-backed securities	1,222,257	23,207	20,182	1,225,282	—
Collateralized debt obligations	361,241	339	53	361,527	—
Total fixed maturities	$21,672,727	$ 871,205	$ 390,229	$ 22,153,703	$ (73,929)

(1) Indicates the amount of any OTTI (gain) loss included in AOCI that is included in gross unrealized gains and losses. OTTI (gain) loss included in AOCI, as presented above, includes both the initial recognition of non-credit losses and the effects of subsequent increases and decreases in estimated fair value for those fixed maturity securities with previous non-credit impairment. The non-credit loss component of OTTI (gain) loss was in an unrealized gain position due to increases in estimated fair value subsequent to initial recognition of non-credit losses on such securities.
(2) Includes perpetual debt investments with amortized cost of $135,187 and estimated fair value of $113,239.

See Note 7 for additional discussion regarding fair value measurements.

The amortized cost and estimated fair value of fixed maturity investments classified as available-for-sale, based on estimated cash flows, are shown in the table below. Actual maturities will likely differ from these projections because borrowers may have the right to call or prepay obligations with or without call or prepayment penalties.

	June 30, 2017	
	Amortized cost	**Estimated fair value**
Maturing in one year or less	$ 820,721	$ 836,028
Maturing after one year through five years	3,782,417	3,958,581
Maturing after five years through ten years	7,151,808	7,354,724
Maturing after ten years	5,035,008	5,366,623
Mortgage-backed and asset-backed securities	4,602,550	4,726,562
Total fixed maturities	$ 21,392,504	$ 22,242,518

Mortgage-backed (commercial and residential) and asset-backed securities include those issued by the U.S. government and U.S. agencies.

(Dollars in Thousands)

The following table summarizes information regarding the sales of securities classified as available-for-sale:

	Three Months Ended June 30,		Six Months Ended June 30,	
	2017	2016	2017	2016
Proceeds from sales	$ 891,026	$ 1,673,307	$ 2,471,548	$ 3,356,200
Gross realized gains from sales	8,488	26,810	20,921	46,667
Gross realized losses from sales	6,080	135	21,337	146

Mortgage loans on real estate — The following table summarizes the carrying value of the mortgage loan portfolio by component:

	June 30, 2017	December 31, 2016
Principal	$ 3,920,498	$ 3,558,863
Unamortized premium (discount) and fees, net	4,615	5,541
Foreign exchange translation	952	(2,696)
Mortgage provision allowance	(1,467)	(2,882)
Total mortgage loans	$ 3,924,598	$ 3,558,826

The following table summarizes the recorded investment of the mortgage loan portfolio by risk assessment category as of June 30, 2017, and December 31, 2016, respectively:

	June 30, 2017	December 31, 2016
Performing	$ 3,924,600	$ 3,560,243
Non-performing	1,465	1,465
Total	$ 3,926,065	$ 3,561,708

The following table summarizes activity in the mortgage provision allowance:

	Six Months Ended June 30, 2017	Year Ended December 31, 2016
	Commercial mortgages	Commercial mortgages
Beginning balance	$ 2,882	$ 2,890
Provision increases	158	536
Provision decreases	(1,573)	(544)
Ending balance	$ 1,467	$ 2,882
Allowance ending balance by basis of impairment method:		
Individually evaluated for impairment	$ 693	$ 536
Collectively evaluated for impairment	774	2,346
Recorded investment balance in the mortgage loan portfolio, gross of allowance, by basis of impairment method:	$ 3,926,065	$ 3,561,708
Individually evaluated for impairment	1,465	1,465
Collectively evaluated for impairment	3,924,600	3,560,243

Limited partnership and other corporation interests — At June 30, 2017 and December 31, 2016, the Company had $37,876 and $34,895, respectively, invested in limited partnership and other corporation interests. Limited partnership interests represent the Company’s minority ownership interests in pooled investment funds that primarily make private equity investments across diverse industries and geographical focuses. The Company has determined its interest in each limited partnership to be considered a variable interest entity (“VIE”). Consolidation is not required as the Company is not deemed to be the primary beneficiary of the VIEs.

(Dollars in Thousands)

The carrying value and maximum exposure to loss in relation to the activities of the VIEs was $35,492 and $32,444 at June 30, 2017, and December 31, 2016, respectively.

Securities lending — Securities with a cost or amortized cost of $124,185 and estimated fair values of $121,582 were on loan under the program at June 30, 2017. There were no securities on loan at December 31, 2016. The Company received cash of $77,614 and securities with a fair value of $48,214 as collateral at June 30, 2017. The Company bears the risk of any deficiency in the amount of collateral available for return to a borrower due to a loss in an approved investment.

Under the securities lending program the collateral pledged is, by definition, the securities loaned against the cash borrowed. The following table summarizes the cash collateral liability under the securities lending program, by class of securities loaned:

	June 30, 2017	December 31, 2016
Cash collateral liability by class of loaned security		
U.S. government direct obligations and U.S. agencies	$ 1,541	$ —
Corporate debt securities	76,073	—
Total	$ 77,614	$ —

The Company's securities lending agreements are open agreements meaning the borrower can return and the Company can recall the loaned securities at any time. The assets and liabilities associated with securities lending program are not subject to master netting arrangements and are not offset in the condensed consolidated balance sheets.

Unrealized losses on fixed maturity investments classified as available-for-sale — The following tables summarize unrealized investment losses, including the non-credit-related portion of OTTI losses reported in AOCI, by class of investment:

	June 30, 2017					
	Less than twelve months		Twelve months or longer		Total	
Fixed maturities:	Estimated fair value	Unrealized loss and OTTI	Estimated fair value	Unrealized loss and OTTI	Estimated fair value	Unrealized loss and OTTI
U.S. government direct obligations and U.S. agencies	$ 688,677	$ 8,806	$ 9,694	$ 192	$ 698,371	$ 8,998
Obligations of U.S. states and their subdivisions	59,432	1,633	10,316	562	69,748	2,195
Corporate debt securities	2,622,456	64,428	973,238	86,118	3,595,694	150,546
Asset-backed securities	480,642	4,383	261,342	10,375	741,984	14,758
Residential mortgage-backed securities	—	—	12,991	797	12,991	797
Commercial mortgage-backed securities	469,738	10,026	35,901	1,977	505,639	12,003
Collateralized debt obligations	65,205	31	—	—	65,205	31
Total fixed maturities	$ 4,386,150	$ 89,307	$ 1,303,482	$ 100,021	$ 5,689,632	$ 189,328
Total number of securities in an unrealized loss position		419		128		547

GREAT-WEST LIFE & ANNUITY INSURANCE COMPANY
Notes to Condensed Consolidated Financial Statements
(Dollars in Thousands)
(Unaudited)

	December 31, 2016					
	Less than twelve months		Twelve months or longer		Total	
Fixed maturities:	Estimated fair value	Unrealized loss and OTTI	Estimated fair value	Unrealized loss and OTTI	Estimated fair value	Unrealized loss and OTTI
U.S. government direct obligations and U.S. agencies	$ 2,006,588	$ 34,752	$ 10,526	$ 206	$2,017,114	$ 34,958
Obligations of U.S. states and their subdivisions	216,154	5,922	10,498	395	226,652	6,317
Corporate debt securities	4,119,630	170,453	860,153	138,711	4,979,783	309,164
Asset-backed securities	316,065	6,971	230,331	11,417	546,396	18,388
Residential mortgage-backed securities	16,962	102	14,297	1,065	31,259	1,167
Commercial mortgage-backed securities	592,508	17,535	26,068	2,647	618,576	20,182
Collateralized debt obligations	160,612	53	—	—	160,612	53
Total fixed maturities	$ 7,428,519	$ 235,788	$ 1,151,873	$ 154,441	$8,580,392	$ 390,229
Total number of securities in an unrealized loss position		610		128		738

Fixed maturity investments — Total unrealized losses and OTTI decreased by $200,901, or 52%, from December 31, 2016, to June 30, 2017. The majority, or $146,481, of the decrease was in the less than twelve months category. The overall decrease in unrealized losses was across all asset classes and reflects lower interest rates at June 30, 2017, compared to December 31, 2016, resulting in generally higher valuations of these fixed maturity securities.

Total unrealized losses greater than twelve months decreased by $54,420 from December 31, 2016, to June 30, 2017. Corporate debt securities account for 86%, or $86,118, of the unrealized losses and OTTI greater than twelve months at June 30, 2017. Non-investment grade corporate debt securities account for $7,871 of the unrealized losses and OTTI greater than twelve months, and $1,504 of the losses are on perpetual debt investments issued by investment grade rated banks in the United Kingdom. Management does not have the intent to sell these assets; therefore, an OTTI was not recognized in earnings.

Asset-backed securities account for 10% of the unrealized losses and OTTI greater than twelve months at June 30, 2017. The present value of the cash flows expected to be collected is not less than amortized cost and management does not have the intent to sell these assets; therefore, an OTTI was not recognized in earnings.

Other-than-temporary impairment recognition — The OTTI on fixed maturity securities where the loss portion is bifurcated and the credit related component is recognized in realized investment gains (losses) is summarized as follows:

	Three Months Ended June 30,		Six Months Ended June 30,	
	2017	2016	2017	2016
Beginning balance	$ 80,359	$ 98,416	$ 83,665	$ 102,343
Reductions due to increases in cash flows expected to be collected that are recognized over the remaining life of the security	(2,948)	(3,729)	(6,254)	(7,656)
Ending balance	$ 77,411	$ 94,687	$ 77,411	$ 94,687

5. Derivative Financial Instruments

Derivative transactions are generally entered into pursuant to International Swaps and Derivatives Association ("ISDA") Master Agreements or Master Securities Forward Transaction Agreements ("MSFTA") with approved counterparties that provide for a single net payment to be made by one party to the other on a daily basis, periodic payment dates, or at the due date, expiration, or termination of the agreement.

The ISDA Master Agreements contain provisions that would allow the counterparties to require immediate settlement of all derivative instruments in a net liability position if the Company were to default on any debt obligations over a certain threshold. The MSFTA contain provisions which do not stipulate a threshold for default and only apply to debt obligations between the Company and the specific counterparty. The aggregate fair value, inclusive of accrued income and expense, of derivative instruments with credit-risk-related contingent features that were in a net liability position was $58,305 and $38,324 as of June 30, 2017, and December 31, 2016, respectively. The Company had pledged collateral related to these derivatives of $910 and zero as of June 30, 2017, and December 31, 2016, respectively, in the normal course of business. If the credit-risk-related contingent features were triggered on June 30, 2017, the fair value of assets that could be required to settle the derivatives in a net liability position was $57,395.

At June 30, 2017, and December 31, 2016, the Company had pledged $910 and zero of unrestricted cash collateral to counterparties in the normal course of business, while other counterparties had pledged $60,919 and $103,214 of unrestricted cash collateral to the Company to satisfy collateral netting agreements, respectively.

At June 30, 2017, the Company estimated $10,378 of net derivative gains related to cash flow hedges included in AOCI will be reclassified into net income within the next twelve months. Gains and losses included in AOCI are reclassified into net income when the hedged item affects earnings.

Types of derivative instruments and derivative strategies

Interest rate contracts

Cash flow hedges

Interest rate swap agreements are used to convert the interest rate on certain debt security investments and debt obligations from a floating rate to a fixed rate. Interest rate futures are used to manage the interest rate risks of forecasted acquisitions of fixed rate maturity investments and are primarily structured to hedge interest rate risk inherent in the assumptions used to price certain liabilities.

Not designated as hedging instruments

The Company enters into certain transactions in which derivatives are hedging an economic risk but hedge accounting is not elected. These derivative instruments include: exchange-traded interest rate swap futures, over-the-counter ("OTC") interest rate swaptions, OTC interest rate swaps, exchange-traded Eurodollar interest rate futures, and treasury interest rate futures. Certain of the Company's OTC derivatives are cleared and settled through a central clearing counterparty while others are bilateral contracts between the Company and a counterparty.

The derivative instruments mentioned above are economic hedges and used to manage risk. These transactions are used to offset changes in liabilities including those in variable annuity products, hedge the economic effect of a large increase in interest rates, manage the potential variability in future interest payments due to a change in credited interest rates and the related change in cash flows due to increased surrenders, and manage interest rate risks of forecasted acquisitions of fixed rate maturity investments and forecasted liability pricing.

Foreign currency contracts

Cross-currency swaps and foreign currency forwards are used to manage the foreign currency exchange rate risk associated with investments denominated in other than U.S. dollars. The Company uses cross-currency swaps to convert interest and principal payments on foreign denominated debt instruments into U.S. dollars. Cross-currency swaps may be designated as cash flow hedges; however, hedge accounting is not always elected. The Company uses foreign currency forwards to reduce the risk of foreign currency exchange rate changes on proceeds received on sales of foreign denominated debt instruments; however, hedge accounting is not elected.

(Dollars in Thousands)

Equity contracts

The Company uses futures on equity indices to offset changes in guaranteed lifetime withdrawal benefit liabilities; however, hedge accounting is not elected.

Other forward contracts

The Company uses forward settling to be announced ("TBA") securities to gain exposure to the investment risk and return of agency mortgage-backed securities (pass-throughs). These transactions enhance the return on the Company's investment portfolio and provide a more liquid and cost effective method of achieving these goals than purchasing or selling individual agency mortgage-backed pools. As the Company does not regularly accept delivery of such securities, they are accounted for as derivatives but hedge accounting is not elected.

The following tables summarize the notional amount and fair value of derivative financial instruments, excluding embedded derivatives:

	June 30, 2017			
		Net derivatives	Asset derivatives	Liability derivatives
	Notional amount	Fair value	Fair value [1]	Fair value [1]
Hedge designation/derivative type:				
Derivatives designated as hedges:				
Cash flow hedges:				
Interest rate swaps	$ 419,800	$ 29,929	$ 29,929	$ —
Cross-currency swaps	714,334	20,272	40,324	20,052
Total cash flow hedges	1,134,134	50,201	70,253	20,052
Total derivatives designated as hedges	1,134,134	50,201	70,253	20,052
Derivatives not designated as hedges:				
Interest rate swaps	494,100	(2,196)	10,296	12,492
Futures on equity indices	28,243	—	—	—
Interest rate futures	88,500	—	—	—
Interest rate swaptions	161,294	204	204	—
Other forward contracts	2,957,950	(2,580)	2,843	5,423
Cross-currency swaps	612,733	11,583	35,587	24,004
Total derivatives not designated as hedges	4,342,820	7,011	48,930	41,919
Total derivative financial instruments	$ 5,476,954	$ 57,212	$ 119,183	$ 61,971

[1] The estimated fair value excludes accrued income and expense. The estimated fair value of all derivatives in an asset position is reported within other assets and the estimated fair value of all derivatives in a liability position is reported within other liabilities in the condensed consolidated balance sheets.

(Dollars in Thousands)

	December 31, 2016			
		Net derivatives	Asset derivatives	Liability derivatives
	Notional amount	Fair value	Fair value (1)	Fair value (1)
Hedge designation/derivative type:				
Derivatives designated as hedges:				
Cash flow hedges:				
Interest rate swaps	$ 419,800	$ 33,390	$ 33,390	$ —
Cross-currency swaps	614,208	45,347	53,641	8,294
Total cash flow hedges	1,034,008	78,737	87,031	8,294
Total derivatives designated as hedges	1,034,008	78,737	87,031	8,294
Derivatives not designated as hedges:				
Interest rate swaps	468,100	(4,358)	8,982	13,340
Futures on equity indices	34,422	—	—	—
Interest rate futures	81,500	—	—	—
Interest rate swaptions	165,534	354	354	—
Cross-currency swaps	612,733	33,371	50,018	16,647
Total derivatives not designated as hedges	1,362,289	29,367	59,354	29,987
Total derivative financial instruments	$ 2,396,297	$ 108,104	$ 146,385	$ 38,281

(1) The estimated fair value excludes accrued income and expense. The estimated fair value of all derivatives in an asset position is reported within other assets and the estimated fair value of all derivatives in a liability position is reported within other liabilities in the condensed consolidated balance sheets.

Notional amounts are used to express the extent of the Company's involvement in derivative transactions and represent a standard measurement of the volume of its derivative activity. Notional amounts represent those amounts used to calculate contractual flows to be exchanged and are not paid or received. The average notional outstanding during the six months ended June 30, 2017, was $901,471, $1,274,171, $114,737, $162,401, and $2,102,629 for interest rate swaps, cross-currency swaps, futures, swaptions, and other forward contracts, respectively. The average notional outstanding during the year ended December 31, 2016, was $784,900, $1,141,967, $145,658, $156,632, and $2,230,167 for interest rate swaps, cross-currency swaps, futures, swaptions, and other forward contracts, respectively.

The following tables present the effect of derivative instruments in the condensed consolidated statements of income and comprehensive income reported by cash flow hedges and derivatives not designated as hedges, excluding embedded derivatives:

	Gain (loss) recognized in OCI on derivatives (Effective portion)		Gain (loss) reclassified from OCI into net income (Effective portion)		
	Three Months Ended June 30,		Three Months Ended June 30,		
	2017	2016	2017	2016	
Cash flow hedges:					
Interest rate swaps	$ 644	$ 3,974	$ 1,186	$ 1,337	(A)
Interest rate swaps	(8,193)	(24,733)	(787)	(583)	(B)
Cross-currency swaps	(10,696)	26,861	(973)	1,209	(A)
Total cash flow hedges	$ (18,245)	$ 6,102	$ (574)	$ 1,963	

(A) Net investment income.
(B) Interest expense.

(Dollars in Thousands)

	Gain (loss) recognized in OCI on derivatives (Effective portion)		Gain (loss) reclassified from OCI into net income (Effective portion)		
	Six Months Ended June 30,		Six Months Ended June 30,		
	2017	2016	2017	2016	
Cash flow hedges:					
Interest rate swaps	$ 496	$ 4,499	$ 2,406	$ 2,831	(A)
Interest rate swaps	(4,350)	(24,733)	(1,667)	(583)	(B)
Cross-currency swaps	(21,346)	24,732	129	2,201	(A)
Total cash flow hedges	$ (25,200)	$ 4,498	$ 868	$ 4,449	

(A) Net investment income.
(B) Interest expense.

	Gain (loss) on derivatives recognized in net income			
	Three Months Ended June 30,			
	2017		2016	
Derivatives not designated as hedging instruments:				
Futures on equity indices	$ 350	(A)	$ (177)	(A)
Futures on equity indices	(1,536)	(B)	(1,836)	(B)
Interest rate swaps	4,976	(A)	8,687	(A)
Interest rate futures	116	(A)	(7)	(A)
Interest rate futures	(206)	(B)	(34)	(B)
Interest rate swaptions	(4)	(A)	(61)	(A)
Interest rate swaptions	(77)	(B)	(22)	(B)
Other forward contracts	(9,363)	(A)	12,498	(A)
Other forward contracts	18,716	(B)	9,158	(B)
Cross-currency swaps	(8,083)	(A)	48,076	(A)
Total derivatives not designated as hedging instruments	$ 4,889		$ 76,282	

(A) Net investment income.
(B) Represents realized gains (losses) on closed positions recorded in realized investment gains (losses), net.

(Dollars in Thousands)

	Gain (loss) on derivatives recognized in net income			
	Six Months Ended June 30,			
	2017		2016	
Derivatives not designated as hedging instruments:				
Futures on equity indices	$ (334)	(A)	$ (407)	(A)
Futures on equity indices	(2,820)	(B)	(3,277)	(B)
Interest rate swaps	3,427	(A)	19,309	(A)
Interest rate futures	102	(A)	(211)	(A)
Interest rate futures	(201)	(B)	(66)	(B)
Interest rate swaptions	(31)	(A)	73	(A)
Interest rate swaptions	(151)	(B)	(217)	(B)
Other forward contracts	(2,580)	(A)	15,555	(A)
Other forward contracts	13,119	(B)	12,096	(B)
Cross-currency swaps	(22,251)	(A)	60,275	(A)
Total derivatives not designated as hedging instruments	$ (11,720)		$ 103,130	

(A) Net investment income.
(B) Represents realized gains (losses) on closed positions recorded in realized investment gains (losses), net.

Embedded derivative - Guaranteed Lifetime Withdrawal Benefit

The Company offers a guaranteed lifetime withdrawal benefit (“GLWB”) through a variable annuity or a contingent deferred annuity. The GLWB is deemed to be an embedded derivative. The GLWB is recorded at fair value within future policy benefits on the condensed consolidated balance sheets. Changes in fair value of GLWB are recorded in net investment income in the condensed consolidated statements of income.

The estimated fair value of the GLWB was $9,595 and $5,712 at June 30, 2017, and December 31, 2016, respectively. The changes in fair value of the GLWB were $(5,553) and $(8,980) for the three months ended June 30, 2017, and 2016, respectively, and $(3,883) and $(19,430) for the six months ended June 30, 2017, and 2016, respectively.

6. Summary of Offsetting Assets and Liabilities

The Company enters into derivative transactions with several approved counterparties. The Company’s derivative transactions are generally governed by MSFTA or ISDA Master Agreements which provide for legally enforceable set-off and close-out netting in the event of default or bankruptcy of the Company’s counterparties. The Company’s MSFTA and ISDA Master Agreements generally include provisions which require both the pledging and accepting of collateral in connection with its derivative transactions. These provisions have the effect of securing each party’s position to the extent of collateral held. The following tables summarize the effect of master netting arrangements on the Company’s financial position in the normal course of business and in the event of default or bankruptcy of the Company’s counterparties:

	June 30, 2017			
		Gross fair value not offset in balance sheets		
Financial instruments:	Gross fair value of recognized assets/liabilities (1)	Financial instruments	Cash collateral	Net fair value
Derivative instruments (assets) (2)	$ 93,334	$ (46,156)	$ (46,916)	$ 262
Derivative instruments (liabilities) (3)	47,939	(46,156)	(910)	873

(1) The gross fair value of derivative instrument assets is not netted against offsetting liabilities for presentation on the condensed consolidated balance sheets.

[2] The estimated fair value of derivative instrument assets is reported in other assets in the condensed consolidated balance sheets. Derivative transactions entered into under ISDA master agreements include income and expense accruals.
[3] The estimated fair value of derivative instrument liabilities is reported in other liabilities in the condensed consolidated balance sheets. Derivative transactions entered into under ISDA master agreements include income and expense accruals.

	December 31, 2016			
		Gross fair value not offset in balance sheets		
Financial instruments:	Gross fair value of recognized assets/liabilities [1]	Financial instruments	Cash collateral received/(pledged)	Net fair value
Derivative instruments (assets) [2]	$ 119,862	$ (26,254)	$ 92,756	$ 852
Derivative instruments (liabilities) [3]	26,254	(26,254)	—	—

[1] The gross fair value of derivative instrument assets is not netted against offsetting liabilities for presentation on the condensed consolidated balance sheets.
[2] The estimated fair value of derivative instrument assets is reported in other assets in the condensed consolidated balance sheets. Derivative transactions entered into under ISDA master agreements include income and expense accruals.
[3] The estimated fair value of derivative instrument liabilities is reported in other liabilities in the condensed consolidated balance sheets. Derivative transactions entered into under ISDA master agreements include income and expense accruals.

(Dollars in Thousands)

7. Fair Value Measurements

Recurring fair value measurements

The following tables present the Company’s financial assets and liabilities carried at fair value on a recurring basis by fair value hierarchy category:

	Assets and liabilities measured at fair value on a recurring basis			
	June 30, 2017			
	Quoted prices in active markets for identical assets (Level 1)	Significant other observable inputs (Level 2)	Significant unobservable inputs (Level 3)	Total
Assets				
Fixed maturities available-for-sale:				
U.S. government direct obligations and U.S. agencies	$ —	$ 1,431,635	$ —	$ 1,431,635
Obligations of U.S. states and their subdivisions	—	2,108,567	—	2,108,567
Corporate debt securities	—	15,015,692	10,703	15,026,395
Asset-backed securities	—	1,722,178	—	1,722,178
Residential mortgage-backed securities	—	75,090	—	75,090
Commercial mortgage-backed securities	—	1,297,687	—	1,297,687
Collateralized debt obligations	—	580,966	—	580,966
Total fixed maturities available-for-sale	—	22,231,815	10,703	22,242,518
Fixed maturities held-for-trading:				
U.S. government direct obligations and U.S. agencies	—	126,590	—	126,590
Corporate debt securities	—	54,889	—	54,889
Commercial mortgage-backed securities	—	1,075	—	1,075
Total fixed maturities held-for-trading	—	182,554	—	182,554
Short-term investments	406,459	511,257	—	917,716
Collateral under securities lending agreements	—	77,614	—	77,614
Collateral under derivative counterparty collateral agreements	61,829	—	—	61,829
Derivative instruments designated as hedges:				
Interest rate swaps	—	29,929	—	29,929
Cross-currency swaps	—	40,324	—	40,324
Derivative instruments not designated as hedges:				
Interest rate swaps	—	10,296	—	10,296
Interest rate swaptions	—	204	—	204
Other forward contracts	—	2,843	—	2,843
Cross-currency swaps	—	35,587	—	35,587
Total derivative instruments	—	119,183	—	119,183
Separate account assets [(1)]	16,057,719	11,366,695	—	27,856,199
Total assets	$ 16,526,007	$ 34,489,118	$ 10,703	$ 51,457,613
Liabilities				
Derivative instruments designated as hedges:				
Cross-currency swaps	$ —	$ 20,052	$ —	$ 20,052
Derivative instruments not designated as hedges:				
Interest rate swaps	—	12,492	—	12,492
Other forward contracts	—	5,423	—	5,423
Cross-currency swaps	—	24,004	—	24,004
Total derivative instruments	—	61,971	—	61,971
Embedded derivatives - GLWB	—	—	9,595	9,595
Separate account liabilities [(2)]	4	444,831	—	444,835
Total liabilities	$ 4	$ 506,802	$ 9,595	$ 516,401

[(1)] Included in the total fair value amount are $432 million of investments as of June 30, 2017 for which the fair value is estimated using net asset value per unit as a practical expedient which are excluded from the disclosure requirement to classify amounts in the fair value hierarchy in connection with the adoption of ASU 2015-07.
[(2)] Includes only separate account instruments which are carried at the fair value of the underlying liabilities owned by the separate accounts.

GREAT-WEST LIFE & ANNUITY INSURANCE COMPANY
Notes to Condensed Consolidated Financial Statements
(Dollars in Thousands)
(Unaudited)

	Assets and liabilities measured at fair value on a recurring basis			
	December 31, 2016			
	Quoted prices in active markets for identical assets (Level 1)	Significant other observable inputs (Level 2)	Significant unobservable inputs (Level 3)	Total
Assets				
Fixed maturities available-for-sale:				
U.S. government direct obligations and U.S. agencies	$ —	$ 3,035,112	$ —	$ 3,035,112
Obligations of U.S. states and their subdivisions	—	2,098,662	—	2,098,662
Corporate debt securities	—	13,968,110	11,639	13,979,749
Asset-backed securities	—	1,312,379	—	1,312,379
Residential mortgage-backed securities	—	140,992	—	140,992
Commercial mortgage-backed securities	—	1,225,282	—	1,225,282
Collateralized debt obligations	—	361,527	—	361,527
Total fixed maturities available-for-sale	—	22,142,064	11,639	22,153,703
Fixed maturities held-for-trading:				
U.S. government direct obligations and U.S. agencies	—	458,067	—	458,067
Corporate debt securities	—	55,591	—	55,591
Commercial mortgage-backed securities	—	1,080	—	1,080
Total fixed maturities held-for-trading	—	514,738	—	514,738
Short-term investments	267,851	36,137	—	303,988
Collateral under derivative counterparty collateral agreements	103,214	—	—	103,214
Derivative instruments designated as hedges:				
Interest rate swaps	—	33,390	—	33,390
Cross-currency swaps	—	53,641	—	53,641
Derivative instruments not designated as hedges:				
Interest rate swaps	—	8,982	—	8,982
Interest rate swaptions	—	354	—	354
Cross-currency swaps	—	50,018	—	50,018
Total derivative instruments	—	146,385	—	146,385
Separate account assets [1]	15,407,992	11,199,924	—	27,037,765
Total assets	$ 15,779,057	$ 34,039,248	$ 11,639	$ 50,259,793
Liabilities				
Collateral under derivative counterparty collateral agreements	$ 103,214	$ —	$ —	$ 103,214
Derivative instruments designated as hedges:				
Cross-currency swaps	—	8,294	—	8,294
Derivative instruments not designated as hedges:				
Interest rate swaps	—	13,340	—	13,340
Cross-currency swaps	—	16,647	—	16,647
Total derivative instruments	—	38,281	—	38,281
Embedded derivatives - GLWB	—	—	5,712	5,712
Separate account liabilities [2]	55	336,468	—	336,523
Total liabilities	$ 103,269	$ 374,749	$ 5,712	$ 483,730

[1] Included in the total fair value amount are $430 million of investments as of December 31, 2016 for which the fair value is estimated using net asset value per unit as a practical expedient which are excluded from the disclosure requirement to classify amounts in the fair value hierarchy in connection with the adoption of ASU 2015-07.
[2] Includes only separate account instruments which are carried at the fair value of the underlying liabilities owned by the separate accounts.

The methods and assumptions used to estimate the fair value of the Company’s financial assets and liabilities carried at fair value on a recurring basis are as follows:

Fixed maturity investments

The fair values for fixed maturity investments are generally based upon evaluated prices from independent pricing services. In cases where these prices are not readily available, fair values are estimated by the Company. To determine estimated fair value for these instruments, the Company generally utilizes discounted cash flows models with market observable pricing inputs such as spreads, average life, and credit quality. Fair value estimates are made at a specific point in time, based on available market information and judgments about financial instruments, including estimates of the timing and amounts of expected future cash flows and the credit standing of the issuer or counterparty.

Short-term investments and securities lending agreements

The amortized cost of short-term investments, collateral under securities lending agreements, and payable under securities lending agreements is a reasonable estimate of fair value due to their short-term nature and high credit quality of the issuers.

Derivative counterparty collateral agreements

Included in other assets is cash collateral received from or pledged to derivative counterparties and included in other liabilities is the obligation to return the cash collateral to the counterparties. The carrying value of the collateral is a reasonable estimate of fair value.

Derivative instruments

Included in other assets and other liabilities are derivative financial instruments. The estimated fair values of OTC derivatives, primarily consisting of cross-currency swaps, interest rate swaps, interest rate swaptions, and other forward contracts, are the estimated amounts the Company would receive or pay to terminate the agreements at the end of each reporting period, taking into consideration current interest rates and other relevant factors.

Embedded derivative - GLWB

Significant unobservable inputs used in the fair value measurements of GLWB include long-term equity and interest rate implied volatility, mortality, and policyholder behavior assumptions, such as benefit utilization, lapses, and partial withdrawals.

Separate account assets and liabilities

Separate account assets and liabilities primarily include investments in mutual fund, fixed maturity, and short-term securities. Mutual funds are recorded at net asset value, which approximates fair value, on a daily basis. The fixed maturity and short-term investments are valued in the same manner, and using the same pricing sources and inputs as the fixed maturity and short-term investments of the Company.

(Dollars in Thousands)

The following tables present additional information about assets and liabilities measured at fair value on a recurring basis and for which the Company has utilized Level 3 inputs to determine fair value:

	Recurring Level 3 financial assets and liabilities Three Months Ended June 30, 2017	
	Assets	Liabilities
	Fixed maturities available-for-sale Corporate debt securities	Embedded derivatives - GLWB
Balances, April 1, 2017	$ 10,931	$ 4,042
Realized and unrealized gains (losses) included in:		
Net income (loss)	—	(5,553)
Other comprehensive income (loss)	84	—
Settlements	(312)	—
Balances, June 30, 2017	$ 10,703	$ 9,595
Total gains (losses) for the period included in net income attributable to the change in unrealized gains and losses relating to assets and liabilities held at June 30, 2017	$ —	$ (5,553)

	Recurring Level 3 financial assets and liabilities Three Months Ended June 30, 2016	
	Assets	Liabilities
	Fixed maturities available-for-sale Corporate debt securities	Embedded derivatives - GLWB
Balances, April 1, 2016	$ 15,542	$ 21,707
Realized and unrealized gains (losses) included in:		
Net income (loss)	—	(8,980)
Other comprehensive income (loss)	109	—
Settlements	(595)	—
Balances, June 30, 2016	$ 15,056	$ 30,687
Total gains (losses) for the period included in net income attributable to the change in unrealized gains and losses relating to assets and liabilities held at June 30, 2016	$ —	$ (8,980)

GREAT-WEST LIFE & ANNUITY INSURANCE COMPANY
Notes to Condensed Consolidated Financial Statements
(Dollars in Thousands)
(Unaudited)

	Recurring Level 3 financial assets and liabilities — Six Months Ended June 30, 2017	
	Assets	Liabilities
	Fixed maturities available-for-sale Corporate debt securities	Embedded derivatives - GLWB
Balances, January 1, 2017	$ 11,639	$ 5,712
Realized and unrealized gains (losses) included in:		
Net income (loss)	—	(3,883)
Other comprehensive income (loss)	(280)	—
Settlements	(656)	—
Balances, June 30, 2017	$ 10,703	$ 9,595
Total gains (losses) for the period included in net income attributable to the change in unrealized gains and losses relating to assets and liabilities held at June 30, 2017	$ —	$ (3,883)

	Recurring Level 3 financial assets and liabilities — Six Months Ended June 30, 2016	
	Assets	Liabilities
	Fixed maturities available-for-sale Corporate debt securities	Embedded derivatives - GLWB
Balances, January 1, 2016	$ 4,538	$ 11,257
Realized and unrealized gains (losses) included in:		
Net income (loss)	—	(19,430)
Other comprehensive income (loss)	475	—
Settlements	(1,193)	—
Transfers into Level 3 [1]	11,236	—
Balances, June 30, 2016	$ 15,056	$ 30,687
Total gains (losses) for the period included in net income attributable to the change in unrealized gains and losses relating to assets and liabilities held at June 30, 2016	$ —	$ (19,430)

[1] Transfers into Level 3 are due primarily to decreased observability of inputs in valuation methodologies.

The following table presents significant unobservable inputs used during the valuation of certain liabilities categorized within Level 3 of the recurring fair value measurements table:

			Range	
	Valuation Technique	Unobservable Input	June 30, 2017	December 31, 2016
Embedded derivatives - GLWB	Risk neutral stochastic valuation methodology	Equity volatility	15% - 28%	15% - 30%
		Swap curve	1.30% - 2.52%	0.75% - 3.00%
		Mortality rate	Based on the Annuity 2000 Mortality Table	Based on the Annuity 2000 Mortality Table
		Base Lapse rate	1% - 15%	1% - 15%

(Dollars in Thousands)

Fair value of financial instruments

The following tables summarize the carrying amounts and estimated fair values of the Company's financial instruments and investments not carried at fair value on a recurring basis:

	June 30, 2017		December 31, 2016	
	Carrying amount	Estimated fair value	Carrying amount	Estimated fair value
Assets				
Mortgage loans on real estate	$ 3,924,598	$ 4,020,537	$ 3,558,826	$ 3,574,240
Policy loans	4,066,620	4,066,620	4,019,648	4,019,648
Limited partnership interests	32,991	31,944	29,345	29,822
Other investments	13,603	43,799	14,382	44,687
Liabilities				
Annuity contract benefits without life contingencies	$ 12,419,039	$ 12,314,755	$ 12,291,378	$ 12,129,631
Policyholders' funds	287,265	287,265	285,554	285,554
Commercial paper	71,253	71,253	99,049	99,049
Notes payable	531,220	563,615	531,092	495,004

The methods and assumptions used to estimate the fair value of financial instruments not carried at fair value on a recurring basis are summarized as follows:

Mortgage loans on real estate

Mortgage loan fair value estimates are generally based on discounted cash flows. A discount rate matrix is used where the discount rate valuing a specific mortgage generally corresponds to that mortgage's remaining term and credit quality. Management believes the discount rate used is comparable to the credit, interest rate, term, servicing costs, and risks of loans similar to the portfolio loans that the Company would make today given its internal pricing strategy. The estimated fair value is classified as Level 2.

Policy loans

Policy loans are funds provided to policy holders in return for a claim on the policy. The funds provided are limited to the cash surrender value of the underlying policy. The nature of policy loans is to have a negligible default risk as the loans are fully collateralized by the value of the policy. Policy loans do not have a stated maturity and the balances and accrued interest are repaid either by the policyholder or with proceeds from the policy. Due to the collateralized nature of policy loans and unpredictable timing of repayments, the Company believes the fair value of policy loans approximates carrying value. The estimated fair value is classified as Level 2.

Limited partnership interests

Limited partnership interests, accounted for using the cost method, represent the Company's minority ownership interests in pooled investment funds. These funds employ varying investment strategies that primarily make private equity investments across diverse industries and geographical focuses. The estimated fair value was determined using the partnership financial statement reported capital account or net asset value adjusted for other relevant information which may impact the exit value of the investments. Distributions by these investments are generated from investment gains, from operating income generated by the underlying investments of the funds, and from liquidation of the underlying assets of the funds which are estimated to be liquidated over the next one to 10 years. The estimated fair value is classified as Level 3.

(Dollars in Thousands)

Other investments

Other investments primarily include real estate held for investment. The estimated fair value for real estate is based on the unadjusted appraised value which includes factors such as comparable property sales, property income analysis, and capitalization rates. The estimated fair value is classified as Level 3.

Annuity contract benefits without life contingencies

The estimated fair value of annuity contract benefits without life contingencies is estimated by discounting the projected expected cash flows to the maturity of the contracts utilizing risk-free spot interest rates plus a provision for the Company's credit risk. The estimated fair value is classified as Level 2.

Policyholders' funds

The carrying amount of policyholders' funds approximates the fair value since the Company can change the interest credited rates with 30 days notice. The estimated fair value is classified as Level 2.

Commercial paper

The amortized cost of commercial paper is a reasonable estimate of fair value due to its short-term nature and the high credit quality of the obligor. The estimated fair value is classified as Level 2.

Notes payable

The estimated fair value of the notes payable to GWL&A Financial is based upon quoted market prices from independent pricing services of securities with characteristics similar to those of the notes payable. The estimated fair value is classified as Level 2.

8. Other Comprehensive Income

The following tables present the accumulated balances for each classification of other comprehensive income (loss):

	Three Months Ended June 30, 2017				
	Unrealized holding gains / losses arising on fixed maturities, available-for-sale	Unrealized holding gains / losses arising on cash flow hedges	Future policy benefits, DAC and VOBA adjustments	Employee benefit plan adjustment	Total
Balances, April 1, 2017	$ 398,293	$ 61,618	$ (77,149)	$ (82,908)	$ 299,854
Other comprehensive income (loss) before reclassifications	154,047	(11,859)	(36,107)	—	106,081
Amounts reclassified from AOCI	(1,564)	373	—	1,395	204
Net current period other comprehensive income (loss)	152,483	(11,486)	(36,107)	1,395	106,285
Balances, June 30, 2017	$ 550,776	$ 50,132	$ (113,256)	$ (81,513)	$ 406,139

GREAT-WEST LIFE & ANNUITY INSURANCE COMPANY
Notes to Condensed Consolidated Financial Statements
(Dollars in Thousands)
(Unaudited)

	Three Months Ended June 30, 2016				
	Unrealized holding gains / losses arising on fixed maturities, available-for-sale	Unrealized holding gains / losses arising on cash flow hedges	Future policy benefits, DAC and VOBA adjustments	Employee benefit plan adjustment	Total
Balances, April 1, 2016	$ 616,836	$ 42,625	$ (115,341)	$ (84,129)	$ 459,991
Other comprehensive income (loss) before reclassifications	255,535	3,967	(62,745)	—	196,757
Amounts reclassified from AOCI	(17,337)	(1,276)	—	1,452	(17,161)
Net current period other comprehensive income (loss)	238,198	2,691	(62,745)	1,452	179,596
Balances, June 30, 2016	$ 855,034	$ 45,316	$ (178,086)	$ (82,677)	$ 639,587

	Six Months Ended June 30, 2017				
	Unrealized holding gains / losses arising on fixed maturities, available-for-sale	Unrealized holding gains / losses arising on cash flow hedges	Future policy benefits, DAC and VOBA adjustments	Employee benefit plan adjustment	Total
Balances, January 1, 2017	$ 311,748	$ 67,076	$ (58,646)	$ (84,303)	$ 235,875
Other comprehensive income (loss) before reclassifications	238,696	(16,380)	(54,610)	—	167,706
Amounts reclassified from AOCI	332	(564)	—	2,790	2,558
Net current period other comprehensive income (loss)	239,028	(16,944)	(54,610)	2,790	170,264
Balances, June 30, 2017	$ 550,776	$ 50,132	$ (113,256)	$ (81,513)	$ 406,139

	Six Months Ended June 30, 2016				
	Unrealized holding gains / losses arising on fixed maturities, available-for-sale	Unrealized holding gains / losses arising on cash flow hedges	Future policy benefits, DAC and VOBA adjustments	Employee benefit plan adjustment	Total
Balances, January 1, 2016	$ 339,520	$ 45,284	$ (65,785)	$ (85,581)	$ 233,438
Other comprehensive income (loss) before reclassifications	545,831	2,924	(112,301)	—	436,454
Amounts reclassified from AOCI	(30,317)	(2,892)	—	2,904	(30,305)
Net current period other comprehensive income (loss)	515,514	32	(112,301)	2,904	406,149
Balances, June 30, 2016	$ 855,034	$ 45,316	$ (178,086)	$ (82,677)	$ 639,587

GREAT-WEST LIFE & ANNUITY INSURANCE COMPANY
Notes to Condensed Consolidated Financial Statements
(Dollars in Thousands)
(Unaudited)

The following tables present the composition of other comprehensive income (loss):

	Three Months Ended June 30, 2017		
	Before-tax amount	Tax (expense) benefit	Net-of-tax amount
Unrealized holding gains (losses), net, arising on fixed maturities, available-for-sale	$ 236,996	$ (82,949)	$ 154,047
Unrealized holding gains (losses), net, arising on cash flow hedges	(18,245)	6,386	(11,859)
Reclassification adjustment for (gains) losses, net, realized in net income	(1,832)	641	(1,191)
Net unrealized gains (losses) related to investments	216,919	(75,922)	140,997
Future policy benefits, DAC and VOBA adjustments	(55,549)	19,442	(36,107)
Net unrealized gains (losses)	161,370	(56,480)	104,890
Employee benefit plan adjustment	2,146	(751)	1,395
Other comprehensive income (loss)	$ 163,516	$ (57,231)	$ 106,285

	Three Months Ended June 30, 2016		
	Before-tax amount	Tax (expense) benefit	Net-of-tax amount
Unrealized holding gains (losses), net, arising on fixed maturities, available-for-sale	$ 393,130	$ (137,595)	$ 255,535
Unrealized holding gains (losses), net, arising on cash flow hedges	6,102	(2,135)	3,967
Reclassification adjustment for (gains) losses, net, realized in net income	(28,635)	10,022	(18,613)
Net unrealized gains (losses) related to investments	370,597	(129,708)	240,889
Future policy benefits, DAC and VOBA adjustments	(96,531)	33,786	(62,745)
Net unrealized gains (losses)	274,066	(95,922)	178,144
Employee benefit plan adjustment	2,234	(782)	1,452
Other comprehensive income (loss)	$ 276,300	$ (96,704)	$ 179,596

	Six Months Ended June 30, 2017		
	Before-tax amount	Tax (expense) benefit	Net-of-tax amount
Unrealized holding gains (losses), net, arising on fixed maturities, available-for-sale	$ 367,225	$ (128,529)	$ 238,696
Unrealized holding gains (losses), net, arising on cash flow hedges	(25,200)	8,820	(16,380)
Reclassification adjustment for (gains) losses, net, realized in net income	(357)	125	(232)
Net unrealized gains (losses) related to investments	341,668	(119,584)	222,084
Future policy benefits, DAC and VOBA adjustments	(84,015)	29,405	(54,610)
Net unrealized gains (losses)	257,653	(90,179)	167,474
Employee benefit plan adjustment	4,292	(1,502)	2,790
Other comprehensive income (loss)	$ 261,945	$ (91,681)	$ 170,264

GREAT-WEST LIFE & ANNUITY INSURANCE COMPANY
Notes to Condensed Consolidated Financial Statements
(Dollars in Thousands)
(Unaudited)

	Six Months Ended June 30, 2016		
	Before-tax amount	Tax (expense) benefit	Net-of-tax amount
Unrealized holding gains (losses), net, arising on fixed maturities, available-for-sale	$ 839,740	$ (293,909)	$ 545,831
Unrealized holding gains (losses), net, arising on cash flow hedges	4,498	(1,574)	2,924
Reclassification adjustment for (gains) losses, net, realized in net income	(51,091)	17,882	(33,209)
Net unrealized gains (losses) related to investments	793,147	(277,601)	515,546
Future policy benefits, DAC and VOBA adjustments	(172,771)	60,470	(112,301)
Net unrealized gains (losses)	620,376	(217,131)	403,245
Employee benefit plan adjustment	4,468	(1,564)	2,904
Other comprehensive income (loss)	$ 624,844	$ (218,695)	$ 406,149

The following tables presents the reclassifications out of accumulated other comprehensive income (loss):

	Three Months Ended June 30,		
	2017	2016	
Details about accumulated other comprehensive income (loss) components	Amount reclassified from accumulated other comprehensive income (loss)		Affected line item in the statement where net income is presented
Unrealized holding (gains) losses, net, arising on fixed maturities, available-for-sale	$ (2,406)	$ (26,672)	Other realized investment (gains) losses, net
	(2,406)	(26,672)	Total before tax
	(842)	(9,335)	Tax expense or benefit
	$ (1,564)	$ (17,337)	Net of tax
Unrealized holding (gains) losses, net, arising on cash flow hedges	$ (213)	$ (2,546)	Net investment income
	787	583	Interest Expense
	574	(1,963)	Total before tax
	201	(687)	Tax expense or benefit
	$ 373	$ (1,276)	Net of tax
Amortization of employee benefit plan items			
Prior service (benefits)	$ 73 [1]	$ (151) [1]	
Actuarial losses	2,073 [1]	2,385 [1]	
	2,146	2,234	Total before tax
	751	782	Tax expense or benefit
	$ 1,395	$ 1,452	Net of tax
Total reclassification	$ 204	$ (17,161)	Net of tax

[1] These accumulated other comprehensive income components are included in the computation of net periodic (benefit) cost of employee benefit plans (see Note 9 for additional details).

(Dollars in Thousands)

Details about accumulated other comprehensive income (loss) components	Six Months Ended June 30, 2017	Six Months Ended June 30, 2016	Affected line item in the statement where net income is presented
	Amount reclassified from accumulated other comprehensive income (loss)		
Unrealized holding (gains) losses, net, arising on fixed maturities, available-for-sale	$ 511	$ (46,642)	Other realized investment (gains) losses, net
	511	(46,642)	Total before tax
	179	(16,325)	Tax expense or benefit
	$ 332	$ (30,317)	Net of tax
Unrealized holding (gains) losses, net, arising on cash flow hedges	$ (2,535)	$ (5,032)	Net investment income
	1,667	583	Interest Expense
	(868)	(4,449)	Total before tax
	(304)	(1,557)	Tax expense or benefit
	$ (564)	$ (2,892)	Net of tax
Amortization of employee benefit plan items			
Prior service costs (benefits)	$ 146 [1]	$ (302) [1]	
Actuarial losses	4,146 [1]	4,770 [1]	
	4,292	4,468	Total before tax
	1,502	1,564	Tax expense or benefit
	$ 2,790	$ 2,904	Net of tax
Total reclassification	$ 2,558	$ (30,305)	Net of tax

[1] These accumulated other comprehensive income components are included in the computation of net periodic (benefit) cost of employee benefit plans (see Note 9 for additional details).

9. Employee Benefit Plans

Net periodic cost (benefit) of the Defined Benefit Pension, Post-Retirement Medical, and Supplemental Executive Retirement plans included in general insurance expenses in the accompanying condensed consolidated statements of income includes the following components:

	Three Months Ended June 30,							
	Defined Benefit Pension Plan		Post-Retirement Medical Plan		Supplemental Executive Retirement Plan		Total	
	2017	2016	2017	2016	2017	2016	2017	2016
Components of net periodic cost (benefit):								
Service cost	$ 1,333	$ 1,335	$ 357	$ 293	$ (4)	$ 73	$ 1,686	$ 1,701
Interest cost	6,121	6,282	188	175	405	444	6,714	6,901
Expected return on plan assets	(5,118)	(6,278)	—	—	—	—	(5,118)	(6,278)
Amortization of unrecognized prior service costs (benefits)	—	—	(52)	(276)	125	125	73	(151)
Amortization of losses (gains) from earlier periods	2,199	2,485	(113)	(85)	(13)	(15)	2,073	2,385
Net periodic cost (benefit)	$ 4,535	$ 3,824	$ 380	$ 107	$ 513	$ 627	$ 5,428	$ 4,558

GREAT-WEST LIFE & ANNUITY INSURANCE COMPANY
Notes to Condensed Consolidated Financial Statements
(Dollars in Thousands)
(Unaudited)

	Six Months Ended June 30,							
	Defined Benefit Pension Plan		Post-Retirement Medical Plan		Supplemental Executive Retirement Plan		Total	
	2017	2016	2017	2016	2017	2016	2017	2016
Components of net periodic cost (benefit):								
Service cost	$ (734)	$ 2,670	$ 714	$ 586	$ (8)	$ 146	$ (28)	$ 3,402
Interest cost	12,242	12,564	376	350	810	888	13,428	13,802
Expected return on plan assets	(10,236)	(12,556)	—	—	—	—	(10,236)	(12,556)
Amortization of unrecognized prior service costs (benefits)	—	—	(104)	(552)	250	250	146	(302)
Amortization of losses (gains) from earlier periods	4,398	4,970	(226)	(170)	(26)	(30)	4,146	4,770
Net periodic cost (benefit)	$ 5,670	$ 7,648	$ 760	$ 214	$ 1,026	$ 1,254	$ 7,456	$ 9,116

The Company expects to make payments of approximately $753 with respect to its Post-Retirement Medical Plan and $3,336 with respect to its Supplemental Executive Retirement Plan during the year ended December 31, 2017. The Company expects to make contributions of zero to its Defined Benefit Pension Plan during the year ended December 31, 2017. A December 31 measurement date is used for the employee benefit plans.

The following table summarizes payments made to the Post-Retirement Medical Plan and the Supplemental Executive Retirement Plan:

	Three Months Ended June 30,		Six Months Ended June 30,	
	2017	2016	2017	2016
Payments to the Post-Retirement Medical Plan	207	187	376	391
Payments to the Supplemental Executive Retirement Plan	834	834	1,668	1,668

10. Income Taxes

The provision for income taxes is comprised of the following:

	Three Months Ended June 30,		Six Months Ended June 30,	
	2017	2016	2017	2016
Current expense	$ 18,300	$ 32,483	$ 31,260	$ 43,124
Deferred expense	7,868	7,227	12,026	20,624
Total income tax provision	$ 26,168	$ 39,710	$ 43,286	$ 63,748

The following table presents a reconciliation between the statutory federal income tax rate and the Company's effective income tax rate:

	Six Months Ended June 30,	
	2017	2016
Statutory federal income tax rate	35.0 %	35.0 %
Income tax effect of:		
Investment income not subject to federal tax	(3.4)%	(2.7)%
Tax credits	(0.6)%	(8.8)%
State income taxes, net of federal benefit	2.5 %	2.8 %
Other, net	0.3 %	0.7 %
Effective income tax rate	33.8 %	27.0 %

During the six months ended June 30, 2017, and 2016, the Company recorded an increase in unrecognized tax benefits in the amount of $3,714 and $2,477 respectively. The Company anticipates additional increases to its unrecognized tax benefits of $7,000 to $9,000 in the next twelve months. The Company expects that the majority of the increase in its unrecognized tax benefits will not impact the effective tax rate.

The Company files income tax returns in the U.S. federal jurisdiction and various states. With few exceptions, the Company is no longer subject to U.S. federal income tax examinations by tax authorities for years 2012 and prior. Tax years 2013 through 2015 are open to federal examination by the Internal Revenue Service ("IRS"). The Company does not expect significant increases or decreases to unrecognized tax benefits relating to federal, state, or local audits.

11. Segment Information

The Chief Operating Decision Maker ("CODM") of the Company is also the Chief Executive Officer ("CEO") of the Company and Lifeco U.S. The CODM reviews the financial information for the purposes of assessing performance and allocating resources based upon the results of Lifeco U.S. and other U.S. affiliates prepared in accordance with International Financial Reporting Standards. The CODM, in his capacity as CEO of the Company, reviews the Company's financial information only in connection with the quarterly and annual reports that are filed with the Securities and Exchange Commission ("SEC"). Consequently, the Company does not provide its discrete financial information to the CODM to be regularly reviewed to make decisions about resources to be allocated or to assess performance. For purposes of SEC reporting requirements, the Company has chosen to present its financial information in three segments, notwithstanding the above. The three segments are: Individual Markets, Empower Retirement, and Other.

Individual Markets

The Individual Markets reporting and operating segment distributes life insurance and individual annuity products to both individuals and businesses through various distribution channels. Life insurance products in-force include participating and non-participating term life, whole life, universal life, and variable universal life.

Empower Retirement

The Empower Retirement reporting and operating segment provides various retirement plan products and investment options as well as comprehensive administrative and record-keeping services for financial institutions and employers, which include educational, advisory, enrollment, and communication services for employer-sponsored defined contribution plans and associated defined benefit plans.

Other

The Company's Other reporting segment is substantially comprised of activity under the assumption of reinsurance between Great-West Life & Annuity Insurance Company of South Carolina ("GWSC"), a wholly owned subsidiary, and The Canada Life Assurance Company ("CLAC") ("the GWSC operating segment"), corporate items not directly allocated to the other operating segments, and interest expense on long-term debt.

The accounting principles used to determine segment results are the same as those used in the consolidated financial statements. The Company evaluates performance of its reportable segments based on their profitability from operations after income taxes. Inter-segment transactions and balances have been eliminated in consolidation. The Company's operations are not materially dependent on one or a few customers, brokers, or agents. The following tables summarize segment financial information:

(Dollars in Thousands)

	Three Months Ended June 30, 2017			
	Individual Markets	Empower Retirement	Other	Total
Revenue:				
Premium income	$ 44,701	$ 1,052	$ 21,910	$ 67,663
Fee income	29,199	236,573	1,566	267,338
Other revenue	—	3,661	—	3,661
Net investment income	192,788	92,756	11,677	297,221
Realized investment gains (losses), net	4,037	18,011	16	22,064
Total revenues	270,725	352,053	35,169	657,947
Benefits and expenses:				
Policyholder benefits	198,171	50,702	20,671	269,544
Operating expenses	47,420	249,178	15,813	312,411
Total benefits and expenses	245,591	299,880	36,484	581,955
Income (loss) before income taxes	25,134	52,173	(1,315)	75,992
Income tax expense (benefit)	8,531	17,996	(359)	26,168
Net income (loss)	$ 16,603	$ 34,177	$ (956)	$ 49,824

	Three Months Ended June 30, 2016			
	Individual Markets	Empower Retirement	Other	Total
Revenue:				
Premium income	$ 51,053	$ 362	$ 25,403	$ 76,818
Fee income	25,546	211,414	1,404	238,364
Other revenue	—	3,370	—	3,370
Net investment income	226,193	117,055	12,507	355,755
Realized investment gains (losses), net	14,771	27,242	—	42,013
Total revenues	317,563	359,443	39,314	716,320
Benefits and expenses:				
Policyholder benefits	201,472	51,939	9,860	263,271
Operating expenses	54,010	266,857	18,673	339,540
Total benefits and expenses	255,482	318,796	28,533	602,811
Income (loss) before income taxes	62,081	40,647	10,781	113,509
Income tax expense (benefit)	21,247	14,486	3,977	39,710
Net income (loss)	$ 40,834	$ 26,161	$ 6,804	$ 73,799

GREAT-WEST LIFE & ANNUITY INSURANCE COMPANY
Notes to Condensed Consolidated Financial Statements
(Dollars in Thousands)
(Unaudited)

	Six Months Ended June 30, 2017			
	Individual Markets	Empower Retirement	Other	Total
Revenue:				
Premium income	$ 176,260	$ 1,143	$ 42,501	$ 219,904
Fee income	55,180	463,892	3,381	522,453
Other revenue	—	6,045	—	6,045
Net investment income	376,993	210,375	23,323	610,691
Realized investment gains (losses), net	4,622	5,695	(7)	10,310
Total revenues	613,055	687,150	69,198	1,369,403
Benefits and expenses:				
Policyholder benefits	468,259	98,330	42,382	608,971
Operating expenses	85,807	504,941	41,746	632,494
Total benefits and expenses	554,066	603,271	84,128	1,241,465
Income (loss) before income taxes	58,989	83,879	(14,930)	127,938
Income tax expense (benefit)	20,182	28,421	(5,317)	43,286
Net income (loss)	$ 38,807	$ 55,458	$ (9,613)	$ 84,652

	Six Months Ended June 30, 2016			
	Individual Markets	Empower Retirement	Other	Total
Revenue:				
Premium income	$ 184,339	$ 707	$ 46,699	$ 231,745
Fee income	48,269	412,336	2,824	463,429
Other revenue	—	6,519	—	6,519
Net investment income	433,886	227,589	26,065	687,540
Realized investment gains (losses), net	26,577	46,713	(7)	73,283
Total revenues	693,071	693,864	75,581	1,462,516
Benefits and expenses:				
Policyholder benefits	468,969	101,856	29,190	600,015
Operating expenses	91,231	498,500	36,601	626,332
Total benefits and expenses	560,200	600,356	65,791	1,226,347
Income (loss) before income taxes	132,871	93,508	9,790	236,169
Income tax expense (benefit)	45,081	15,137	3,530	63,748
Net income (loss)	$ 87,790	$ 78,371	$ 6,260	$ 172,421

12. Commitments and Contingencies

Commitments

The Company has a revolving credit facility agreement in the amount of $50,000 for general corporate purposes. The credit facility expires on March 1, 2018. Interest accrues at a rate dependent on various conditions and terms of borrowings. The agreement requires, among other things, the Company to maintain a minimum adjusted net worth of $1,100,000, as defined in the credit facility agreement (compiled on the statutory accounting basis prescribed by the National Association of Insurance

(Dollars in Thousands)

Commissioners), at anytime. The Company was in compliance with all covenants at June 30, 2017, and December 31, 2016. At June 30, 2017, and December 31, 2016, there were no outstanding amounts related to the credit facility.

GWSC and CLAC are parties to a reinsurance agreement pursuant to which GWSC assumes term life insurance from CLAC. GWL&A Financial obtained two letters of credit for the benefit of the Company as collateral under the GWSC and CLAC reinsurance agreement for policy liabilities and capital support. The first letter of credit is for $1,154,210 and renews annually until it expires on July 3, 2027. The second letter of credit is for $70,000 and renews annually until it expires on December 31, 2017. At June 30, 2017, and December 31, 2016, there were no outstanding amounts related to the letters of credit.

In addition, the Company has other letters of credit with a total amount of $9,095, renewable annually for an indefinite period of time. At June 30, 2017, and December 31, 2016, there were no outstanding amounts related to those letters of credit.

The Company makes commitments to fund partnership interests, mortgage loans on real estate, and other investments in the normal course of its business. The amounts of these unfunded commitments at June 30, 2017, and December 31, 2016, were as follows:

	June 30, 2017	December 31, 2016
Due in less than one year	$ 422,919	$ 438,458
Due within one to three years	3,496	—
Total	$ 426,415	$ 438,458

Included in the total unfunded commitments at June 30, 2017, and December 31, 2016, is $86,398 and $93,440, respectively, related to cost basis limited partnership interests, all of which is due within one year from the dates indicated.

Contingencies

From time to time, the Company may be threatened with, or named as a defendant in, lawsuits, arbitrations, and administrative claims. Any such claims that are decided against the Company could harm the Company's business. The Company is also subject to periodic regulatory audits and inspections which could result in fines or other disciplinary actions. Unfavorable outcomes in such matters may result in a material impact on the Company's financial position, results of operations, or cash flows.

The Company is defending lawsuits relating to the costs and features of certain of its retirement or fund products. These actions have not reached the trial stage. Management believes the claims are without merit and will defend these actions. Based on the information known, these actions will not have a material adverse effect on the consolidated financial position of the Company.

The Company is involved in other various legal proceedings that arise in the ordinary course of its business. In the opinion of management, after consultation with counsel, the likelihood of loss from the resolution of these proceedings is remote and/or the estimated loss is not expected to have a material effect on the Company's consolidated financial position, results of its operations, or cash flows.

13. Subsequent Events

On July 26, 2017, the Company's Board of Directors declared a dividend of $8,000 payable on September 29, 2017, to its sole shareholder, GWL&A Financial.

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

General

As used in this Form 10-Q, the "Company" refers to Great-West Life & Annuity Insurance Company, a stock life insurance company originally organized on March 28, 1907 and domiciled in the state of Colorado, and its subsidiaries.

This Form 10-Q contains forward-looking statements. Forward-looking statements are statements not based on historical information and that relate to future operations, strategies, financial results, or other developments. In particular, statements using words such as "may," "would," "could," "should," "estimates," "expected," "anticipate," "believe," or words of similar import generally involve forward-looking statements. Without limiting the foregoing, forward-looking statements include statements that represent the Company's beliefs concerning future or projected levels of sales of its products, investment spreads or yields, or the earnings or profitability of the Company's activities.

Forward-looking statements are necessarily based upon estimates and assumptions that are inherently subject to significant business, economic, and competitive uncertainties and contingencies, many of which are beyond the Company's control and many of which, with respect to future business decisions, are subject to change. Some of these risks are described in "Risk Factors" in Item 1A of the Company's Annual Report on Form 10-K for the year ended December 31, 2016. These uncertainties and contingencies can affect actual results and could cause actual results to differ materially from those expressed in any forward-looking statements made by, or on behalf of, the Company. Whether or not actual results differ materially from forward-looking statements may depend on numerous foreseeable and unforeseeable events or developments, some of which may be global or national in scope, such as general economic conditions and interest rates, some of which may be related to the insurance industry generally, such as pricing competition, regulatory developments and industry consolidation, and others of which may relate to the Company specifically, such as credit, volatility, and other risks associated with its investment portfolio and other factors.

Readers should also consider other matters, including any risks and uncertainties, discussed in documents filed by the Company and certain of its subsidiaries with the Securities and Exchange Commission. The following discussion addresses the Company's results of operations for the three and six months ended June 30, 2017, compared with the same period in 2016. This discussion should be read in conjunction with the Company's Annual Report on Form 10-K for the year ended December 31, 2016, under Item 7, "Management's Discussion and Analysis of Financial Condition and Results of Operations," to which the reader is directed for additional information.

Recent Events

On April 6, 2016, the U.S. Department of Labor ("DOL") issued a new rule redefining and expanding who is a fiduciary by reason of providing investment advice to a retirement plan or holder of an individual retirement account. The Company has analyzed the rule against current business practices, particularly in its Empower Retirement and Individual Markets businesses. The rule requires changes to certain aspects of product and service delivery but management does not expect that it will prevent Great-West Financial from executing on their overall business strategy and growth objectives. The Company is in compliance with the components of the rule that were effective June 9, 2017 and is executing on a plan for required full compliance by January 1, 2018.

Current Market Conditions

The S&P 500 index at June 30, 2017 was up by 3% compared to March 31, 2017 and up by 8% compared to January 1, 2017. The S&P 500 index at June 30, 2016 was up by 2% compared to March 31, 2016 and was up by 3% compared to January 1, 2016. The average of the S&P 500 index was up by 16% and 17% during the three and six months ended June 30, 2017, respectively, when compared to the same period in 2016.

	2017			2016		
S&P 500 Index	**Close**	**Average in Quarter**	**Average for Year to Date**	**Close**	**Average in Quarter**	**Average for Year to Date**
June 30	2,423	2,396	2,360	2,099	2,074	2,013
March 31	2,363	2,324	2,324	2,060	1,952	1,952
January 1	2,239			2,044		

Variable asset-based fees earned by the Company fluctuate with changes in participant account balances. Participant account balances change due to cash flow and unrealized market gains and losses, which are primarily associated with changes in the U.S. equities market. Fee income increased for the three and six months ended June 30, 2017, when compared to the same period in 2016. For the three and six months ended June 30, 2017, the variance was primarily due to higher asset-based fees, driven by growth in these assets, due to positive net cash flows and higher average equity market levels.

The 10-year U.S. Treasury rate at June 30, 2017, was down by 4 basis points as compared to March 31, 2017 and was down by 14 basis points as compared to January 1, 2017. The rate at June 30, 2016 was down by 29 basis points as compared to March 31, 2016 and was down by 78 basis points as compared to January 1, 2016. The average of the 10-year U.S. Treasury rate during the three months ended June 30, 2017, was up by 51 basis points when compared to 2016 and the rate during the six months ended June 30, 2017 was up by 46 basis points when compared to 2016.

	2017			2016		
10-Year Treasury Rate	**Close**	**Average in Quarter**	**Average for Year to Date**	**Close**	**Average in Quarter**	**Average for Year to Date**
June 30	2.31%	2.26%	2.35%	1.49%	1.75%	1.89%
March 31	2.35%	2.45%	2.45%	1.78%	1.91%	1.91%
January 1	2.45%			2.27%		

Unrealized gains on fixed maturity investments fluctuate with changes in the prevailing interest rates. When interest rates decrease, market values of fixed maturity investments generally increase. The Company has recorded in other comprehensive income favorable changes in unrealized gains (losses), net, on fixed maturity investments, of $235 million and $369 million for the three and six months ended June 30, 2017, compared to favorable changes of $369 million and $798 million for the three and six months ended June 30, 2016. This resulted in an increase in accumulated other comprehensive income (loss), net of policy holder related amounts, and deferred taxes.

The Company employs hedging strategies for the purpose of managing the interest rate, foreign currency exchange rate, and equity market risks impacting the Company's business. For some derivative instruments, hedge accounting is not elected; therefore all gains or losses from these transactions are recorded in the condensed consolidated statement of income. As a result, fluctuations in interest rates, foreign currencies, or equity markets may cause the Company to experience volatility in net income. For the three and six months ended June 30, 2017, the Company recorded realized gains on forward settling to be announced ("TBA") securities of $19 million and $13 million, respectively, compared to gains of $9 million and $12 million, respectively in 2016. For the three and six months ended June 30, 2017, the Company recorded losses in net investment income on cross-currency swaps of $8 million and $22 million, compared to gains of $48 million and $60 million, respectively, in 2016.

Reconciliation of Net Income to Adjusted Operating Income

The Company uses the same accounting policies and procedures to measure adjusted operating income as it uses to measure consolidated net income. The Company employs hedging strategies for the purpose of managing the interest rate, foreign currency exchange rate, and equity market risks impacting the Company's business. For some derivative instruments, hedge accounting is not elected; therefore, all gains or losses from these transactions are recorded in the consolidated statement of income. As a result, fluctuations in interest rates, foreign currencies, or equity markets may cause the Company to experience volatility in net income. As such, the Company has defined adjusted operating income as net income, excluding realized and unrealized gains and losses on investments and derivatives and their related tax effect. Adjusted operating income should not be viewed as a substitute for net income prepared in accordance with accounting principles generally accepted in the United States of America ("U.S. GAAP"). In addition, the Company's adjusted operating income measures may not be comparable to similarly titled measures reported by other companies.

Three months ended June 30, 2017 compared with the three months ended June 30, 2016

The Company believes that the presentation of adjusted operating income enhances the understanding of the Company's performance by highlighting the results of operations and the underlying profitability drivers of the business. Adjusted operating income should not be viewed as a substitute for U.S. GAAP net income. The following is a summary of the contributions of each segment to net income and a reconciliation of net income to adjusted operating income:

Income statement data (In millions)	Three Months Ended June 30, 2017	2016	Increase (decrease)	Percentage change
Net income (loss)				
Individual Markets segment	$ 17	$ 41	$ (24)	(59)%
Empower Retirement segment	34	26	8	31 %
Other segment	(1)	7	(8)	(114)%
Total net income (loss)	50	74	(24)	(32)%
Adjustments to net income (loss)				
Unrealized investment gains (losses), net	(19)	55	(74)	(135)%
Realized investment gains (losses), net	22	42	(20)	(48)%
Pro-rata tax (expense) benefit[1]	(1)	(33)	32	(97)%
Adjusted operating income (loss)	$ 48	$ 10	$ 38	380 %

[1] Calculated utilizing estimated tax rate of 35%.

Unrealized investment gains (losses), net, had an unfavorable change of $74 million, or 135%, from a gain of $55 million in 2016 to a loss of $19 million in 2017. The change was due to a $57 million unfavorable change from derivatives and an unfavorable change of $22 million from forward settling TBA securities, partially offset by a favorable change of $5 million from unrealized bond held-for-trading gains.

Realized investment gains (losses), net, had an unfavorable change of $20 million, or 48%, from a gain of $42 million in 2016 to a gain of $22 million in 2017. The change was primarily due to a $32 million unfavorable change from bonds, partially offset by a $10 million favorable change from forward settling TBA securities.

Pro-rata tax expense changed by $32 million, or 97%, from an expense of $33 million in 2016 to an expense of $1 million in 2017, due to the unfavorable change in total unrealized and realized investment gains (losses), net.

Six months ended June 30, 2017 compared with the six months ended June 30, 2016

The following is a summary of the contributions of each segment to the net income and a reconciliation of net income to operating income:

Income statement data (In millions)	Six Months Ended June 30, 2017	Six Months Ended June 30, 2016	Increase (decrease)	Percentage change
Net income (loss)				
Individual Markets segment	$ 39	$ 88	$ (49)	(56)%
Empower Retirement segment	56	78	(22)	(28)%
Other segment	(10)	6	(16)	(267)%
Total net income (loss)	85	172	(87)	(51)%
Adjustments to net income (loss)				
Unrealized investment gains (losses), net	(21)	84	(105)	(125)%
Realized investment gains (losses), net	10	73	(63)	(86)%
Pro-rata tax (expense) benefit [1]	4	(55)	59	107 %
Adjusted operating income (loss)	$ 92	$ 70	$ 22	31 %

[1] Calculated utilizing estimated tax rate of 35%.

Unrealized investment gains (losses), net, had an unfavorable change of $105 million, or 125%, from a gain of $84 million in 2016 to a loss of $21 million in 2017. The primary drivers of the change was a $91 million unfavorable change in unrealized gains on derivatives and an $18 million unfavorable change in unrealized gains on forward settling TBA securities.

Realized investment gains (losses), net, had an unfavorable change of $63 million, or 86%, to $10 million during the six months ended June 30, 2017, when compared to the same period in 2016. The change was primarily driven by an unfavorable change of $69 million from losses on bonds, partially offset by a $5 million favorable change in gains on mortgage securities.

Pro-rata tax expense (benefit) had a change of $59 million, or 107%, from a $55 million expense to a $4 million benefit during the six months ended June 30, 2017, when compared to the same period in 2016, resulting from the unfavorable change in total unrealized and realized investment gains (losses), net.

Company Results of Operations

Three months ended June 30, 2017 compared with the three months ended June 30, 2016

The following is a summary of certain financial data of the Company:

Income statement data (In millions)	Three Months Ended June 30, 2017	Three Months Ended June 30, 2016	Increase (decrease)	Percentage change
Premium income	$ 68	$ 77	$ (9)	(12)%
Fee income	268	238	30	13 %
Other revenue	4	3	1	33 %
Adjusted net investment income	316	301	15	5 %
Total adjusted operating revenues	656	619	37	6 %
Policyholder benefits	269	263	6	2 %
Operating expenses	313	340	(27)	(8)%
Total benefits and expenses	582	603	(21)	(3)%
Adjusted operating income (loss) before income taxes	74	16	58	363 %
Adjusted income tax expense (benefit)	26	6	20	333 %
Adjusted operating income (loss)	$ 48	$ 10	$ 38	380 %

The Company's consolidated adjusted operating income had a favorable change of $38 million, or 380%, to $48 million for the three months ended June 30, 2017, when compared to the same period in 2016. The increase was primarily due to increased fee income, decreased operating expenses and increased adjusted net investment income, partially offset by increased tax expense and decreased premium income.

Premium income decreased by $9 million, or 12%, to $68 million for the three months ended June 30, 2017, when compared to the same period in 2016. This was primarily due to lower net premiums on group health and disability policies in Individual Markets.

Fee income had a favorable change of $30 million, or 13%, to $268 million for the three months ended June 30, 2017, when compared to the same period in 2016. This increase was primarily related to an increase in asset-based variable fee income resulting from increased average asset levels driven by sales and higher average equity market levels.

Adjusted net investment income had a favorable change of $15 million, or 5%, to $316 million. The increase was primarily related to higher investment income earned on bonds, mortgages, and policy loans as a result of higher invested asset balances, partially offset by lower yields.

Operating expenses decreased by $27 million, or 8%, to $313 million for the three months ended June 30, 2017, when compared to the same period in 2016 primarily due to lower deferred acquisition costs ("DAC") amortization, salaries and benefits and higher DAC deferrals.

Adjusted income tax expense increased by $20 million, from an expense of $6 million in 2016 to $26 million in 2017 primarily due to increased adjusted operating income before income taxes.

Six months ended June 30, 2017 compared with the six months ended June 30, 2016

The following is a summary of certain financial data of the Company:

Income statement data (In millions)	Six Months Ended June 30, 2017	2016	Increase (decrease)	Percentage change
Premium income	$ 220	$ 232	$ (12)	(5)%
Fee income	522	463	59	13 %
Other revenue	6	7	(1)	(14)%
Adjusted net investment income	632	604	28	5 %
Total adjusted operating revenues	1,380	1,306	74	6 %
Policyholder benefits	609	600	9	2 %
Operating expenses	632	627	5	1 %
Total benefits and expenses	1,241	1,227	14	1 %
Adjusted operating income (loss) before income taxes	139	79	60	76 %
Adjusted income tax expense (benefit)	47	9	38	422 %
Adjusted operating income (loss)	$ 92	$ 70	$ 22	31 %

The Company’s consolidated adjusted operating income had a favorable change of $22 million or 31%, to $92 million for the six months ended June 30, 2017, when compared to the same period in 2016. The change was primarily due to higher fee income, partially offset by higher adjusted income tax expense.

Fee income had a favorable change of $59 million, or 13% to $522 million during the six months ended June 30, 2017, when compared to the same period in 2016. This was primarily related to an increase in asset-based variable fee income resulting from increased average asset levels driven by sales and higher average equity market levels.

Adjusted income tax expense had an unfavorable change of $38 million or 422%, to $47 million for the six months ended June 30, 2017, when compared to the same period in 2016 primarily due to an increase in adjusted operating income before income taxes in addition to a management election to claim foreign tax credits in the prior year.

Individual Markets Segment Results of Operations

Three months ended June 30, 2017 compared with the three months ended June 30, 2016

The following is a summary of certain financial data of the Individual Markets segment:

Income statement data (In millions)	Three Months Ended June 30, 2017	Three Months Ended June 30, 2016	Increase (decrease)	Percentage change
Premium income	$ 45	$ 52	$ (7)	(13)%
Fee income	30	26	4	15 %
Adjusted net investment income	195	192	3	2 %
Total adjusted operating revenues	270	270	—	— %
Policyholder benefits	198	202	(4)	(2)%
Operating expenses	48	54	(6)	(11)%
Total benefits and expenses	246	256	(10)	(4)%
Adjusted operating income (loss) before income taxes	24	14	10	71 %
Adjusted income tax expense (benefit)	8	4	4	100 %
Adjusted operating income (loss)	$ 16	$ 10	$ 6	60 %

Adjusted operating income for the Individual Markets segment had a favorable change of $6 million, or 60%, to $16 million during the six months ended June 30, 2017, when compared to the same period in 2016. The increase was primarily due to lower operating expenses, and higher fee income. These were partially offset by lower premium income and higher adjusted income tax expense.

Premium income decreased by $7 million, or 13%, to $45 million for the three months ended June 30, 2017, when compared to the same period in 2016. This was primarily due to lower net premiums on group health and disability policies.

Fee income increased by $4 million, or 15%, to $30 million for the three months ended June 30, 2017, when compared to the same period in 2016. This was primarily related to an increase in asset-based variable fee income resulting from increased average asset levels driven by sales and higher average equity market levels.

Operating expenses had a favorable change of $6 million, or 11%, to $48 million for the three months ended June 30, 2017, when compared to the same period in 2016. The primary driver of this decrease is lower DAC amortization.

Adjusted income tax expense increased by $4 million, from an expense of $4 million in 2016 to $8 million in 2017 primarily due to an increase in adjusted operating income before income taxes.

Six months ended June 30, 2017 compared with the six months ended June 30, 2016

The following is a summary of certain financial data of the Individual Markets segment:

Income statement data (In millions)	Six Months Ended June 30, 2017	Six Months Ended June 30, 2016	Increase (decrease)	Percentage change
Premium income	$ 176	$ 185	$ (9)	(5)%
Fee income	55	48	7	15 %
Adjusted net investment income	385	378	7	2 %
Total revenues	616	611	5	1 %
Policyholder benefits	468	470	(2)	— %
Operating expenses	86	91	(5)	(5)%
Total benefits and expenses	554	561	(7)	(1)%
Adjusted operating income (loss) before income taxes	62	50	12	24 %
Adjusted income tax expense (benefit)	21	16	5	31 %
Adjusted operating income (loss)	$ 41	$ 34	$ 7	21 %

Adjusted operating income for the Individual Markets segment had a favorable change of $7 million, or 21%, to $41 million during the six months ended June 30, 2017, when compared to the same period in 2016. The change was primarily due to higher fee income and adjusted net investment income, partially offset by lower premium income.

Premium income decreased by $9 million, or 5%, to $176 million during the six months ended June 30, 2017, when compared to the same period in 2016. This was primarily due to lower net premiums on group health and disability policies.

Fee income increased by $7 million, or 15%, to $55 million during the six months ended June 30, 2017, when compared to the same period in 2016. This was primarily related to an increase in asset-based variable fee income resulting from increased average asset levels driven by sales and higher average equity market levels.

Adjusted net investment income had a favorable change of $7 million, or 2%, to $385 million for the six months ended June 30, 2017, when compared to the same period in 2016. This was due to higher investment income earned on bonds, mortgages, and policy loans as a result of higher invested asset balances, partially offset by lower yields.

Empower Retirement Segment Results of Operations

Three months ended June 30, 2017 compared with the three months ended June 30, 2016

The following is a summary of certain financial data of the Empower Retirement segment:

Income statement data (In millions)	Three Months Ended June 30, 2017	Three Months Ended June 30, 2016	Increase (decrease)	Percentage change
Premium income	$ 1	$ —	$ 1	100 %
Fee income	236	$ 211	25	12 %
Other revenue	4	3	1	33 %
Adjusted net investment income	110	96	14	15 %
Total adjusted operating revenues	351	310	41	13 %
Policyholder benefits	51	52	(1)	(2)%
Operating expenses	249	267	(18)	(7)%
Total benefits and expenses	300	319	(19)	(6)%
Adjusted operating income (loss) before income taxes	51	(9)	60	(667)%
Adjusted income tax expense (benefit)	18	(3)	21	(700)%
Adjusted operating income (loss)	$ 33	$ (6)	$ 39	(650)%

Adjusted operating income for the Empower Retirement segment increased by $39 million, or 650%, to $33 million for the three months ended June 30, 2017, when compared to the same period in 2016. The change was primarily due to higher fee income, lower operating expenses and higher adjusted net investment income, partially offset by higher adjusted income tax expense.

Fee income increased by $25 million, or 12%, to $236 million for the three months ended June 30, 2017, when compared to the same period in 2016. This increase was primarily related to an increase in asset-based variable fee income resulting from increased average asset levels driven by sales and higher average equity market levels.

Adjusted net investment income had a favorable change of $14 million, or 15%, to $110 million for the three months ended June 30, 2017, when compared to the same period in 2016. The primary driver of the change was higher investment income on bonds and mortgages as a result of higher invested asset balances in addition to higher earned yields.

Operating expenses decreased by $18 million, or 7%, to $249 million for the three months ended June 30, 2017, when compared to the same period in 2016. The decrease was primarily due to lower DAC amortization and higher DAC deferrals.

Adjusted income tax expense had an unfavorable change of $21 million, or 700%, to $18 million for the three months ended June 30, 2017, when compared to the same period in 2016. The increased tax expense is primarily due to higher adjusted operating income before income taxes.

Six months ended June 30, 2017 compared with the six months ended June 30, 2016

The following is a summary of certain financial data of the Empower Retirement segment:

Income statement data (In millions)	Six Months Ended June 30, 2017	Six Months Ended June 30, 2016	Increase (decrease)	Percentage change
Premium income	$ 1	$ 1	$ —	— %
Fee income	464	412	52	13 %
Other revenue	6	7	(1)	(14)%
Adjusted net investment income	224	200	24	12 %
Total adjusted operating revenues	695	620	75	12 %
Policyholder benefits	99	102	(3)	(3)%
Operating expenses	504	499	5	1 %
Total benefits and expenses	603	601	2	— %
Adjusted operating income (loss) before income taxes	92	19	73	384 %
Adjusted income tax expense (benefit)	31	(11)	42	(382)%
Adjusted operating income (loss)	$ 61	$ 30	$ 31	103 %

Adjusted operating income for the Empower Retirement segment had an favorable change of $31 million, or 103%, to $61 million for the six months ended June 30, 2017, when compared to the same period in 2016. The change was primarily due to higher fee income and adjusted net investment income, partially offset by higher adjusted income tax expense.

Fee income increased by $52 million, or 13%, to $464 million for the six months ended June 30, 2017, when compared to the same period in 2016. This was primarily related to an increase in asset-based variable fee income resulting from increased average asset levels driven by sales and higher average equity market levels.

Adjusted net investment income had a favorable change of $24 million, or 12%, to $224 million for the six months ended June 30, 2017, when compared to the same period in 2016. The primary driver of the change was higher investment income on bonds, mortgages, and policy loans as a result of higher invested asset balances, partially offset by lower yields.

Adjusted income tax expense had an increase of $42 million, or 382%, to $31 million during the six months ended June 30, 2017, when compared to the same period in 2016. The change was primarily as a result of a management election to claim foreign tax credits in prior year in addition to higher adjusted operating income before income taxes.

Other Segment Results of Operations

Three months ended June 30, 2017 compared with the three months ended June 30, 2016

The following is a summary of certain financial data of the Company's Other segment:

Income statement data (In millions)	Three Months Ended June 30, 2017	Three Months Ended June 30, 2016	Increase (decrease)	Percentage change
Premium income	$ 22	$ 25	$ (3)	(12)%
Fee income	2	1	1	100 %
Adjusted net investment income	11	13	(2)	(15)%
Total adjusted operating revenues	35	39	(4)	(10)%
Policyholder benefits	20	10	10	100 %
Operating expenses	16	19	(3)	(16)%
Total benefits and expenses	36	29	7	24 %
Adjusted operating income (loss) before income taxes	(1)	10	(11)	(110)%
Adjusted income tax expense (benefit)	—	4	(4)	(100)%
Adjusted operating income (loss)	$ (1)	$ 6	$ (7)	(117)%

Adjusted operating income for the Company's Other segment decreased by $7 million, or 117%, to a loss of $1 million for the three months ended June 30, 2017 compared to income of $6 million in 2016. The decrease in adjusted operating income was primarily due to an increase in policyholder benefits expense, partially offset by lower adjusted income tax expense.

Policyholder benefits expense increased by $10 million, or 100%, to $20 million for the three months ended June 30, 2017 primarily due to lower surrenders than expected on a closed block of business.

Adjusted income tax expense decreased by $4 million, or 100%, to zero for the three months ended June 30, 2017 primarily due to an adjusted operating loss before income taxes compared to an adjusted operating income before income taxes in the prior period.

Six months ended June 30, 2017 compared with the six months ended June 30, 2016

The following is a summary of certain financial data of the Company's Other segment:

Income statement data (In millions)	Six Months Ended June 30, 2017	Six Months Ended June 30, 2016	Increase (decrease)	Percentage change
Premium income	$ 43	$ 47	$ (4)	(9)%
Fee income	3	3	—	— %
Adjusted net investment income	23	26	(3)	(12)%
Total adjusted operating revenues	69	76	(7)	(9)%
Policyholder benefits	42	29	13	45 %
Operating expenses	42	37	5	14 %
Total benefits and expenses	84	66	18	27 %
Adjusted operating income (loss) before income taxes	(15)	10	(25)	(250)%
Adjusted income tax expense (benefit)	(5)	4	(9)	(225)%
Adjusted operating income (loss)	$ (10)	$ 6	$ (16)	(267)%

Adjusted operating income for the Company's Other segment had an unfavorable change of $16 million or 267%, to a loss of $10 million for the six months ended June 30, 2017, when compared to a income of $6 million in the same period in 2016. The change in adjusted operating income is primarily due to higher policyholder benefits expense, lower adjusted income tax expense and higher operating expenses.

Policyholder benefits increased by $13 million, or 45%, to $42 million for the six months ended June 30, 2017 primarily due to lower surrenders than expected on a closed block of business.

Operating expenses increased by $5 million, or 14%, to $42 million for the six months ended June 30, 2017 primarily due to restructuring costs.

Adjusted income tax expense (benefit) had a favorable change of $9 million or 225%, to a benefit of $5 million for the six months ended June 30, 2017 primarily due to an adjusted operating loss before income taxes as compared to an adjusted operating income before income taxes in the prior period.

Investment Operations

The Company's primary investment objective is to acquire assets with duration and cash flow characteristics reflective of its liabilities, while meeting industry, size, issuer, and geographic diversification standards. Formal liquidity and credit quality parameters have also been established.

The Company follows rigorous procedures to control interest rate risk and observes strict asset and liability matching guidelines. These guidelines ensure that even under changing market conditions, the Company's assets should meet the cash flow and income requirements of its liabilities. Using dynamic modeling to analyze the effects of a range of possible market changes upon investments and policyholder benefits, the Company works to ensure that its investment portfolio is appropriately structured to fulfill financial obligations to its policyholders.

The following table presents the percentage distribution of the carrying values of the Company's general account investment portfolio:

(In millions)	June 30, 2017		December 31, 2016	
Fixed maturities, available-for-sale	$ 22,243	70.8%	$ 22,154	72.4%
Fixed maturities, held-for-trading	182	0.6%	515	1.7%
Mortgage loans on real estate	3,925	12.5%	3,559	11.6%
Policy loans	4,067	13.0%	4,020	13.1%
Short-term investments	917	2.9%	303	1.0%
Limited partnership and other corporation interests	38	0.1%	35	0.1%
Other investments	14	0.1%	15	0.1%
Total investments	$ 31,386	100.0%	$ 30,601	100.0%

Fixed Maturity Investments

Fixed maturity investments include public and privately placed corporate bonds, government bonds, and mortgage-backed and asset-backed securities. Included in available-for-sale fixed maturities are perpetual debt investments which primarily consist of junior subordinated debt instruments that have no stated maturity date but pay fixed or floating interest in perpetuity. The Company's strategy related to mortgage-backed and asset-backed securities is to focus on those investments with low prepayment risk and minimal credit risk.

Private placement investments are generally less marketable than publicly traded assets, yet they typically offer enhanced covenant protection that allows the Company, if necessary, to take appropriate action to protect its investment. The Company believes that the cost of the additional monitoring and analysis required by private placement investments is more than offset by their enhanced yield.

One of the Company's primary objectives is to ensure that its fixed maturity portfolio is maintained at a high average credit quality to limit credit risk. All securities are internally rated by the Company on a basis intended to be similar to that of independent external rating agencies and the Company generally considers ratings from several of these major ratings agencies to develop its internal rating. In addition, the National Association of Insurance Commissioners ("NAIC") implemented a ratings methodology for residential mortgage-backed securities ("RMBS"), commercial mortgage-backed securities ("CMBS"), and other structured securities. The Company may also utilize inputs from this ratings process to develop its internal rating.

The percentage distribution of the estimated fair value of the Company's fixed maturity portfolio by the Company's internal credit rating is summarized as follows:

Credit Rating	June 30, 2017	December 31, 2016
AAA	22.0%	27.3%
AA	14.7%	13.9%
A	33.8%	30.8%
BBB	28.3%	26.8%
BB and below (Non-investment grade)	1.2%	1.2%
Total	100.0%	100.0%

The June 30, 2017, AAA rating percentage decreased as compared to December 31, 2016, as the Company sold AAA-rated government agency MBS pools to enter into forward settling TBA contracts which are treated as derivatives.

The percentage distribution of the estimated fair value of the corporate sector fixed maturity portfolio, calculated as a percentage of fixed maturities, is summarized as follows:

Sector	June 30, 2017	December 31, 2016
Utility	18.7%	18.1%
Finance	13.0%	10.8%
Consumer	10.7%	9.7%
Natural resources	6.6%	6.3%
Transportation	4.2%	3.6%
Other	14.1%	13.3%

Mortgage Loans on Real Estate

The Company's mortgage loans on real estate are comprised primarily of domestic commercial collateralized real estate loans. The mortgage loan portfolio is diversified with regard to geographical markets and commercial real estate property types. The Company originates, directly or through correspondents, real estate mortgages with the intent to hold to maturity. The Company's portfolio includes loans which are fully amortizing, amortizing with a balloon balance at maturity, interest only to maturity, and interest only for a number of years followed by an amortizing period.

Derivatives

The Company uses certain derivatives, such as futures, swaps, forwards, and interest rate swaptions, for purposes of managing the interest rate, foreign currency exchange rate, and equity market risks impacting the Company's business. These derivatives, when taken alone, may subject the Company to varying degrees of market and credit risk; however, since used for hedging purposes, these instruments are intended to reduce risk. For derivative instruments where hedge accounting is not elected, changes in interest rates, foreign currencies, or equity markets may generate derivative gains or losses which may cause the Company to experience volatility in net income. The Company also uses forward settling TBA securities to gain exposure to the investment risk and return of agency mortgage-backed securities (pass-throughs). These transactions enhance the return on the Company's investment portfolio and provide a more liquid and cost effective method of achieving these goals than purchasing or selling individual agency mortgage-backed pools. The Company controls the credit risk of its over-the-counter derivative contracts through credit approvals, limits, monitoring procedures, and in most cases, requiring collateral. Risk of loss is generally limited to the portion of the fair value of derivative instruments that exceeds the value of the collateral held and not to the notional or contractual amounts of the derivatives.

Summary of Critical Accounting Estimates

The preparation of financial statements in conformity with U.S. GAAP requires the Company's management to adopt accounting policies to enable them to make a significant variety of accounting and actuarial estimates and assumptions. These estimates and assumptions are evaluated on an ongoing basis based on historical developments, market conditions, industry trends, and other information that is reasonable given the facts and circumstances for the Company. These critical estimates and assumptions affect, among other things, the reported amounts of assets and liabilities, the disclosure of contingent liabilities, and the reported amounts of revenues and expenses. Actual results can differ from the amounts previously estimated, which were based on information available at the time the estimates were made.

The Company has identified the following accounting policies, judgments, and estimates as critical in that they involve a higher degree of judgment and are subject to a significant degree of variability:

- Valuation of investments;
- Impairment of investments;
- Valuation of derivatives and related hedge accounting;
- Valuation of DAC and related amortization (including unlocking of assumptions); and
- Valuation of policy benefit liabilities

A discussion of each of these critical accounting policies may be found in the Company's Annual Report on Form 10-K for the year ended December 31, 2016, under Item 7, "Management's Discussion and Analysis of Financial Condition and Results of Operations."

Application of Recent Accounting Pronouncements

See Note 2 to the accompanying condensed consolidated financial statements for a discussion of the application of recent accounting pronouncements.

Liquidity and Capital Resources

Liquidity refers to a company's ability to generate sufficient cash flows to meet the short-term needs of its operations. The Company manages its operations to create stable, reliable, and cost-effective sources of cash flows to meet all of its obligations.

The principal sources of the Company's liquidity are premiums and contract deposits, fees, investment income, and investment maturities and sales. Funds provided from these sources are reasonably predictable and normally exceed liquidity requirements for payment of policy benefits, payments to policy and contractholders in connection with surrenders and withdrawals, and general expenses. However, since the timing of available funds cannot always be matched precisely to commitments, imbalances may arise when demands for funds exceed those on hand. A primary liquidity concern regarding cash flows from operations is the risk of early policyholder and contractholder withdrawals. A primary liquidity concern regarding investment activity is the risk of defaults and market volatility.

In addition, a demand for funds may arise as a result of the Company taking advantage of current investment opportunities. The sources of the funds that may be required in such situations include the issuance of commercial paper or other debt instruments.

Management believes that the liquidity profile of its assets is sufficient to satisfy the short-term liquidity requirements of reasonably foreseeable scenarios.

Generally, the Company has met its operating requirements by utilizing cash flows from operations and maintaining appropriate levels of liquidity in its investment portfolio. Liquidity for the Company has remained strong, as evidenced by the amounts of short-term investments and cash and cash equivalents that totaled $471 million and $322 million as of June 30, 2017, and December 31, 2016, respectively. The June 30, 2017, and December 31, 2016, short-term investments included above exclude any amounts held to settle TBA forward contracts. In addition, 99% of the fixed maturity portfolio carried an investment grade rating at June 30, 2017, and December 31, 2016, which provides significant liquidity to the Company's overall investment portfolio.

The Company continues to be well capitalized, with sufficient borrowing capacity. Additionally, the Company anticipates that cash on hand and expected net cash generated by operating activities will exceed the forecasted needs of the business over the next 12 months. The Company's financial strength provides the capacity and flexibility to enable it to raise funds in the capital markets through the issuance of commercial paper. The Company had $71 million and $99 million of commercial paper outstanding as of June 30, 2017, and December 31, 2016, respectively. The commercial paper has been given a rating of A-1+ by Standard & Poor's Ratings Services and a rating of P-1 by Moody's Investors Service, each being the highest rating available. The Company's issuance of commercial paper is not used to fund daily operations and does not have a significant impact on the Company's liquidity.

The Company also has available a revolving credit facility agreement with U.S. Bank, which expires on March 1, 2018, in the amount of $50 million for general corporate purposes. The Company had no borrowings under this credit facility as of or during the six months ended June 30, 2017. The Company does not anticipate the need for borrowings under this facility and the loss of its availability would not significantly impact its liquidity.

Capital resources provide protection for policyholders and financial strength to support the underwriting of insurance risks and allow for continued business growth. The amount of capital resources that may be needed is determined by the Company's senior management and Board of Directors, as well as by regulatory requirements. The allocation of resources to new long-term business commitments is designed to achieve an attractive return, tempered by considerations of risk and the need to support the Company's existing business.

Off-Balance Sheet Arrangements

The Company makes commitments to fund partnership interests, mortgage loans on real estate, and other investments in the normal course of its business. The amounts of these unfunded commitments at June 30, 2017, and December 31, 2016, were $426 million and $438 million, respectively. The precise timing of the fulfillment of the commitment cannot be predicted; however, $423 million of the June 30, 2017 balance, and all $438 million of the December 31, 2016 balance are due within one year of the dates indicated. The remaining $3 million of the June 30, 2017 balance is due within one to 3 years. There are no other obligations or liabilities arising from such arrangements that are reasonably likely to become material.

The Company participates in a securities lending program in which the Company lends securities that are held as part of its general account investment portfolio to third parties for the purpose of enhancing the total return on its investment portfolio. The Company generally requires initial collateral in an amount greater than or equal to 102% of the fair value of domestic securities loaned and 105% of foreign securities loaned. The Company received securities with a fair value of $48 million as collateral at June 30, 2017, which have not been recorded on the condensed consolidated balance sheets as the Company does not have effective control. There were no securities on loan and therefore no securities were received as collateral at December 31, 2016.

Item 3. Quantitative and Qualitative Disclosures about Market Risk

The Company has established processes and procedures to effectively identify, monitor, measure, and manage the risks associated with its invested assets and its interest rate sensitive insurance and annuity products. Management has identified investment portfolio management, including the use of derivative instruments, insurance and annuity product design, and asset/liability management as three critical means to accomplish a successful risk management program.

The major risks to which the Company is exposed include the following:

- Market risk - the potential of loss arising from adverse fluctuations in interest rates and equity market prices and the levels of their volatility.
- Insurance risk - the potential of loss resulting from claims, persistency, and expense experience exceeding that assumed in the liabilities held.
- Credit risk - the potential of loss arising from an obligator's inability or unwillingness to meet its obligations to the Company.
- Operational and corporate risk - the potential of direct or indirect loss resulting from inadequate or failed internal processes, people and systems, or from other external events.

A discussion of each of these risk factors may be found in the Company's Annual Report on Form 10-K for the year ended December 31, 2016, under Item 7A, "Quantitative and Qualitative Disclosures About Market Risk."

Item 4. Controls and Procedures

Disclosure Controls and Procedures

The Company's management, with the participation of its President and Chief Executive Officer and its Principal Financial Officer, has evaluated the effectiveness of the Company's disclosure controls and procedures, as required by Rule 13a-15 (b) under the Securities Exchange Act of 1934 ("Exchange Act"). The Company's disclosure controls and procedures are designed to ensure that information required to be disclosed by the Company in reports it files or submits under the Exchange Act is recorded, processed, summarized, and reported within the time periods specified in the rules and forms of the Securities and Exchange Commission, and to ensure that the information required to be disclosed by the Company in reports that it files under the Exchange Act is accumulated and communicated to the Company's management, including the principal executive officer and principal financial officer, as appropriate, to allow timely decisions regarding required disclosure. Based on this evaluation, the President and Chief Executive Officer and Principal Financial Officer have concluded that the Company's disclosure controls and procedures are effective as of June 30, 2017.

Changes in Internal Control over Financial Reporting

As disclosed in Item 9A, "Controls and Procedures," of the Company's Annual Report on Form 10-K for the year ended December 31, 2016, management concluded that the Company maintained effective internal control over financial reporting. There has been no significant change in the control environment for the three and six months ended June 30, 2017. Management is committed to continuing to improve its internal control processes and will continue to review its financial reporting controls and procedures.

Part II Other Information

Item 1. Legal Proceedings

From time to time, the Company may be threatened with, or named as a defendant in, lawsuits, arbitrations, and administrative claims. Any such claims that are decided against the Company could harm the Company's business. The Company is also subject to periodic regulatory audits and inspections which could result in fines or other disciplinary actions. Unfavorable outcomes in such matters may result in a material impact on the Company's financial position, results of operations, or cash flows.

The Company is defending lawsuits relating to the costs and features of certain of its retirement or fund products. These actions have not reached the trial stage. Management believes the claims are without merit and will defend these actions. Based on the information known, these actions will not have a material adverse effect on the consolidated financial position of the Company.

The Company is involved in other various legal proceedings that arise in the ordinary course of its business. In the opinion of management, after consultation with counsel, the likelihood of loss from the resolution of these proceedings is remote and/or the estimated loss is not expected to have a material effect on the Company's consolidated financial position, results of its operations or cash flows.

Item 1A. Risk Factors

In the normal course of its business, the Company is exposed to certain operational, regulatory, and financial risks and uncertainties. The most significant risks include the following:

- Competition could negatively affect the ability of the Company to maintain or increase market share or profitability.
- The insurance and financial services industries are heavily regulated and changes in regulation may reduce profitability.
- A downgrade or potential downgrade in the Company's financial strength or claims paying ratings could result in a loss of business and negatively affect results of operations and financial condition.
- Deviations from assumptions regarding future persistency, mortality, and interest rates used in calculating liabilities for future policyholder benefits and claims could adversely affect the Company's results of operations and financial condition.
- The Company may be required to accelerate the amortization of DAC or VOBA, or recognize impairment in the value of goodwill or other intangible assets, which could adversely affect its results of operations and financial condition.
- If the companies that provide reinsurance default or fail to perform or the Company is unable to obtain adequate reinsurance for some of the risks underwritten, the Company could incur significant losses adversely affecting results of operations and financial condition.
- Interest rate fluctuations could have a negative impact on results of operations and financial condition.
- Market fluctuations and general economic conditions may adversely affect results of operations and financial condition.
- Changes in U.S. federal income tax law could make some of the Company's products less attractive to consumers and increase its tax costs.
- The Company may be subject to litigation resulting in substantial awards or settlements and this may adversely affect its reputation and results of operations.
- The Company's risk management policies and procedures may leave it exposed to unidentified or unanticipated risk, which could adversely affect its business, results of operations, and financial condition.

- The Company may experience difficulty in marketing and distributing products through its current and future distribution channels.

- A failure in cyber or information security systems could result in a loss or disclosure of confidential information, damage the Company’s reputation, and could impair its ability to conduct business effectively.

- The Company could face difficulties, unforeseen liabilities, or asset impairments arising from business acquisitions or integrations and managing growth of such businesses.

- Counterparties with whom the Company transfers risk may be unable or unwilling to do business with the Company.

- The Company may not be able to secure financing to meet the liquidity or capital needs of the Company.

Item 6. Exhibits

The documents identified below are filed as a part of this report:

Index to Exhibits

Exhibit Number	Title
3(ii)	Bylaws of Great-West Life & Annuity Insurance Company
31.1	Rule 13a-14(a)/15-d14(a) Certification
31.2	Rule 13a-14(a)/15-d14(a) Certification
32	18 U.S.C. 1350 Certification
101.INS	XBRL Instance Document
101.SCH	XBRL Taxonomy Extension Schema Document
101.CAL	XBRL Taxonomy Extension Calculation Linkbase Document
101.LAB	XBRL Taxonomy Extension Label Linkbase Document
101.PRE	XBRL Taxonomy Extension Presentation Linkbase Document
101.DEF	XBRL Taxonomy Extension Definition Linkbase Document

Pursuant to the requirements of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned, thereunto duly authorized.

Great-West Life & Annuity Insurance Company

By: /s/ Kara Roe Date: August 11, 2017

Kara Roe

Vice President, Controller, and Principal Accounting Officer

BYLAWS OF GREAT-WEST LIFE & ANNUITY INSURANCE COMPANY

ARTICLE I
MEETING OF SHAREHOLDERS

SECTION 1. The Annual Meeting of Shareholders shall be held at such time, on such date and at such place within or without the State of Colorado as the Board of Directors may determine from time to time.

SECTION 2. Special Meetings of Shareholders may be called by the Chairman or a majority of the Board of Directors at any time upon written notice given pursuant to law (which notice may be waived in accordance with law).

ARTICLE II
BOARD OF DIRECTORS

SECTION 1. The number of directors may be fixed by the Board of Directors from time to time to such number, not less than seven (7) nor more than twenty-five (25), as the Board may determine.

SECTION 2. Any vacancy on the Board of Directors, whether resulting from an increase in the number of directors or otherwise, may be filled by the affirmative vote of a majority of directors then in office, even though less than a quorum, or by a sole remaining director. Directors shall be elected by the Board of Directors to serve until the next annual meeting of the Shareholders.

SECTION 3. A meeting of the Board may be called by the Chairman of the Board, by the Chairman of the Executive Committee, by such other Director as may from time to time be authorized by the Chairman of the Board, or by a majority of the Directors, on not less than 48 hours notice to the members of the Board specifying the place, date and time of the meeting. Meetings may be held at any time without notice if all members of the Board waive notice. If a meeting of the Board is called by anyone other than the Chairman of the Board, the person[s] calling such a meeting shall so advise the Chairman of the Board. A meeting of a Committee of the Board may be called by the Chairman of the Committee, by the Chairman of the Board, by such other Director(s) as may from time to time be authorized by the Chairman of the Committee, or by a majority of the Committee members, on not less than 48 hours notice to the members of the Committee specifying the place, date and time of the meeting. Meetings may be held at any time without notice if all members of the Committee waive notice. If a meeting of the Committee is called by anyone other than the Chairman of the Board, the person[s] calling the meeting shall so inform the Chairman of the Board and the Chairman of the Committee.

SECTION 4. A quorum at any meeting of the Board shall be a majority of the number of Board members fixed by the Board from time to time. A quorum at any meeting of a Committee of the Board shall be a majority of the Committee members.

SECTION 5. The Board shall establish an Executive Committee, an Audit Committee, a Conduct Review Committee, a Governance and Nominating Committee and a Compensation Committee, and may establish such other Committees as it deems advisable to assist it in discharging its duties, and may establish Committee charters and otherwise delegate to those Committees such duties and responsibilities as may be permitted by law and as it deems necessary or advisable.

ARTICLE III
OFFICERS

The Chairman of the Board and the President and Chief Executive Officer shall be initially appointed by the Board of Directors. Officers at the level of Senior Vice President and above shall be initially appointed by the Chairman of the Board. The Board of Directors shall annually reappoint all officers at the level of Senior Vice President and above. Officers at a level below Senior Vice President may be appointed by the President and Chief Executive Officer. Any number of offices may be held by the same person. Such officers shall have such authority and perform such duties as normally pertain to their offices or as may from time to time be determined by the Board of Directors.

ARTICLE IV
INDEMNIFICATION

SECTION 1. In this Article, the following terms shall have the following meanings:

(a) "expenses" means reasonable expenses incurred in a proceeding, including expenses of investigation and preparation, expenses in connection with an appearance as a witness, and fees and disbursement of counsel, accountants or other experts;

(b) "liability" means an obligation incurred with respect to a proceeding to pay a judgment, settlement, penalty or fine;

(c) "party" includes a person who was, is, or is threatened to be made a named defendant or respondent in a proceeding;

(d) "proceeding" means any threatened, pending or completed action, suit, or proceeding whether civil, criminal, administrative or investigative, and whether formal or informal.

SECTION 2. Subject to applicable law, if any person who is or was a director, officer or employee of the corporation is made a party to a proceeding because the person is or was a director, officer or employee of the corporation, the corporation shall indemnify the person, or the estate or personal representative of the person, from and against all liability and expenses incurred by the person in the proceeding (and advance to the person expenses incurred in the proceeding) if, with respect to the matter(s) giving rise to the proceeding:

(a) the person conducted himself or herself in good faith; and

(b) the person reasonably believed that his or her conduct was in the corporation's best interests; and

(c) in the case of any criminal proceeding, the person had no reasonable cause to believe that his or her conduct was unlawful; and

(d) if the person is or was an employee of the corporation, the person acted in the ordinary course of the person's employment with the corporation.

SECTION 3. Subject to applicable law, if any person who is or was serving as a director, officer, trustee, plan administrator or employee of another company or entity at the request of the corporation is made a party to a proceeding because the person is or was serving as a director, officer, trustee or employee of the other company or entity, the corporation shall indemnify the person, or the estate or personal representative of the person, from and against all liability and expenses incurred by the person in the proceeding (and advance to the person expenses incurred in the proceeding) if:

(a) the person is or was appointed to serve at the request of the corporation as a director, officer, trustee or employee of the other company or entity in accordance with Indemnification Procedures approved by the Board of Directors of the corporation; and

(b) with respect to the matter(s) giving rise to the proceeding:

(i) the person conducted himself or herself in good faith; and

(ii) the person reasonably believed that his or her conduct was at least not opposed to the corporation's best interests (in the case of a trustee or plan administrator of one of the corporation's staff benefits plans, this means that the person's conduct was for a purpose the person reasonably believed to be in the interests of the plan participants); and

(iii) in the case of any criminal proceeding, the person had no reasonable cause to believe that his or her conduct was unlawful; and

(iv) if the person is or was an employee of the other company or entity, the person acted in the ordinary course of the person's employment with the other company or entity.

****

Exhibit 31.1

CERTIFICATION

I, Robert L. Reynolds, certify that:

1. I have reviewed this quarterly report on Form 10-Q of Great-West Life & Annuity Insurance Company (the "registrant");

2. Based on my knowledge, this quarterly report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this quarterly report;

3. Based on my knowledge, the financial statements and other financial information included in this quarterly report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this quarterly report;

4. The registrant's other certifying officers and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15(d)-15(f) for the registrant and we have:

a) designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this quarterly report is being prepared;

b) designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;

c) evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this quarterly report our conclusion about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this quarterly report based on such evaluation; and

d) disclosed in this quarterly report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and

5. The registrant's other certifying officers and I have disclosed, based on our most recent evaluation of internal control of financial reporting, to the registrant's auditors and the audit committee of registrant's board of directors (or persons performing the equivalent function):

a) all significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and

b) any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: August 11, 2017

/s/ Robert L. Reynolds

Robert L. Reynolds
President and Chief Executive Officer

Exhibit 31.2

CERTIFICATION

I, Andra Bolotin, certify that:

1. I have reviewed this quarterly report on Form 10-Q of Great-West Life & Annuity Insurance Company (the “registrant”);

2. Based on my knowledge, this quarterly report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this quarterly report;

3. Based on my knowledge, the financial statements and other financial information included in this quarterly report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this quarterly report;

4. The registrant’s other certifying officers and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15(d)-15(f) for the registrant and we have:

a) designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this quarterly report is being prepared;

b) designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;

c) evaluated the effectiveness of the registrant’s disclosure controls and procedures and presented in this quarterly report our conclusion about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this quarterly report based on such evaluation; and

d) disclosed in this quarterly report any change in the registrant’s internal control over financial reporting that occurred during the registrant’s most recent fiscal quarter (the registrant’s fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant’s internal control over financial reporting; and

5. The registrant’s other certifying officers and I have disclosed, based on our most recent evaluation of internal control of financial reporting, to the registrant’s auditors and the audit committee of registrant’s board of directors (or persons performing the equivalent function):

a) all significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant’s ability to record, process, summarize and report financial information; and

b) any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant’s internal control over financial reporting.

Date: August 11, 2017

/s/ Andra Bolotin

Andra Bolotin
Executive Vice President, Chief Financial Officer, and Principal Financial Officer

Exhibit 32

CERTIFICATION

Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002

(Subsections (a) and (b) of Section 1350, Chapter 63 of Title 18, United States Code)

Pursuant to section 906 of the Sarbanes-Oxley Act of 2002 (subsections (a) and (b) of section 1350, chapter 63 of title 18, United States Code), each of the undersigned officers of Great-West Life & Annuity Insurance Company, a Colorado corporation (the "Company"), does hereby certify, to such officer's knowledge, that:

The Quarterly Report on Form 10-Q for the quarter ended June 30, 2017 (the "Form 10-Q") of the Company fully complies with the requirements of section 13(a) or 15(d) of the Securities Exchange Act of 1934 and information contained in the Form 10-Q fairly presents, in all material respects, the financial condition and results of operations of the Company.

Dated: August 11, 2017

/s/ Robert L. Reynolds

Robert L. Reynolds
President and Chief Executive Officer

Dated: August 11, 2017

/s/ Andra Bolotin

Andra Bolotin
Executive Vice President, Chief Financial Officer, and Principal Financial Officer

The foregoing certification is being furnished solely pursuant to section 906 of the Sarbanes-Oxley Act of 2002 (subsections (a) and (b) of section 1350, chapter 63 of title 18, United States Code) and is not being filed as part of the Form 10-Q or as a separate disclosure document.