Table of Contents

UNITED STATES SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

FORM 10-K

(Mark One)

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

For the fiscal year ended December 31, 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)

Securities registered pursuant to Section 12(b) of the Act: **None**

Securities registered pursuant to Section 12(g) of the Act: **None**

Indicate by check mark if the registrant is a well-known seasoned issuer, as defined in Rule 405 of the Securities Act. Yes ☐ No ☒

Indicate by check mark if the registrant is not required to file reports pursuant to Section 13 or 15(d) of the Act. Yes ☒ No ☐

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 if disclosure of delinquent filers pursuant to Item 405 of Regulation S-K (§229.405 of this chapter) is not contained herein, and will not be contained, to the best of registrant's knowledge, in definitive proxy or information statements incorporated by reference in Part III of this Form 10-K or any amendment to this Form 10-K. ☒

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 June 30, 2017, the aggregate market value of the registrant's voting stock held by non-affiliates of the registrant was $0.

As of February 1, 2018, 7,320,176 shares of the registrant's common stock were outstanding, all of which were owned by the registrant's parent company.

Table of Contents

		Page Number
	Part I	
Item 1	Business	3
Item 1A	Risk Factors	13
Item 1B	Unresolved Staff Comments	18
Item 2	Properties	18
Item 3	Legal Proceedings	18
Item 4	Mine Safety Disclosures	19
	Part II	
Item 5	Market for Registrant's Common Equity and Related Stockholder Matters	19
Item 6	Selected Financial Data	20
Item 7	Management's Discussion and Analysis of Financial Condition and Results of Operations	20
Item 7A	Quantitative and Qualitative Disclosure About Market Risk	40
Item 8	Financial Statements and Supplementary Data	43
Item 9	Changes in and Disagreements With Accountants on Accounting and Financial Disclosures	106
Item 9A	Controls and Procedures	106
Item 9B	Other Information	106
	Part III	
Item 10	Directors, Executive Officers and Corporate Governance	107
Item 11	Executive Compensation	114
Item 12	Security Ownership of Certain Owners and Management	126
Item 13	Transactions with Related Persons, Promoters, and Certain Control Persons	129
Item 14	Principal Accounting Fees and Services	129
	Part IV	
Item 15	Exhibits and Financial Statement Schedules	130
	Signatures	132

Part I

Item 1.

Business

As used in this Form 10-K, 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-K 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 this report. 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. This discussion should be read in conjunction with, and is qualified by reference to, the Company's "Management's Discussion and Analysis of Financial Condition and Results of Operations" in Item 7 of this report as well as the consolidated financial statements and notes thereto in Item 8, "Financial Statements and Supplementary Data."

1.1 Organization and Corporate Structure

The Company is a direct wholly-owned subsidiary of GWL&A Financial Inc. ("GWL&A Financial"), a Delaware holding company. 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. Lifeco operates in the United States primarily through the Company and through Putnam Investments, LLC ("Putnam"), and in Canada and Europe through The Great-West Life Assurance Company ("Great-West Life") and its subsidiaries, London Life Insurance Company ("London Life"), The Canada Life Assurance Company ("CLAC"), and Irish Life Group Limited. Lifeco is a subsidiary of Power Financial Corporation ("Power Financial"), a Canadian holding company with substantial interests in the financial services industry. Power Corporation of Canada ("Power Corporation"), a Canadian holding and management company, has voting control of Power Financial. The Desmarais Family Residuary Trust, through a group of private holding companies that it controls, has voting control of Power Corporation.

The shares of Lifeco, Power Financial, and Power Corporation are traded publicly in Canada on the Toronto Stock Exchange.

1.2 Business of the Company

The Company offers life insurance and retirement and investment products to individuals, businesses, and other private and public organizations throughout the United States, Puerto Rico, Guam, and the United States Virgin Islands. 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.

Through its Individual Markets segment, the Company offers various forms of life insurance, annuity, and retirement products. Through its Empower Retirement segment, the Company provides various retirement plan products and investment options as well as comprehensive administrative and recordkeeping 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.

No customer accounted for 10% or more of the Company's consolidated revenues during the years 2017, 2016, or 2015. In addition, no segment of the Company's business is dependent upon a single customer or a few customers, the loss of which would have a significant effect on it or its business segments' operations. The loss of business from any one, or a few, independent brokers or agents would not have a material adverse effect on the Company or its business segments.

Effective January 1, 2015, the retirement services businesses of the Company, the acquired J.P. Morgan Retirement Plan Services ("RPS") and Putnam merged under the Empower Retirement brand, creating the second largest recordkeeping provider in the U.S. The number of participant accounts has grown from 8.0 million at December 31, 2016, to over 8.3 million at December 31, 2017.

Individual Markets Segment Principal Products

The Company's Individual Markets segment distributes life insurance, annuity, and retirement 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.

Participating life insurance - Participating policyholders share in the financial results of the participating business in the form of policyholder dividends that reflect the difference between the assumptions used in the premium charged and the actual experience on those policies. The policyholder dividends can be distributed directly to the policyholders in the form of cash or through an increase in benefits such as paid-up additions. The Company no longer actively markets participating products. The participating policyholder earnings that cannot be distributed to the shareholder are not included in the Company's consolidated net income and are reflected in liabilities in undistributed earnings on participating business in the Company's consolidated balance sheets.

Term life - Term life insurance products provide coverage for a stated period and generally do not include the accumulation of cash values. Term life insurance products pay a guaranteed death benefit only if the insured dies within the coverage period. The Company's term life insurance earnings come from the difference between cumulative premiums collected and actual death claims.

Whole life - Whole life insurance products provide guaranteed death benefits in exchange for level premium payments for the life of the insured. Whole life insurance products include the accumulation of cash values. The policyholder can receive the accumulated cash value as a payment by surrendering the insurance policy before the death of the insured. The Company's whole life insurance earnings come from investment income earned on assets held as reserve in the General Account and the difference between premiums collected and actual death claims.

Universal life - Universal life insurance products include a cash value component that is credited with interest at regular intervals. The account balances for the universal life products are held in the Company's general account. The Company's universal life insurance earnings result from the difference between the investment income and interest credited on customer cash values and from differences between charges for mortality and actual death claims. Universal life cash values are charged for the cost of insurance coverage and for administrative expenses.

Variable universal life - Variable universal life products provide insurance coverage on the same basis as universal life, except that the account balance is directed by the policyholder into either separate account investment options or into the Company's general account as a fixed option within the variable product. In the separate account investment options, the policyholder bears the entire risk of the investment results. The Company's variable universal life insurance earnings result from asset-based fees, as well as from the difference between fees collected for mortality as compared to actual death claims paid.

Variable annuity products - The Company's variable annuity products provide the opportunity for clients to invest on a tax deferred basis with the ability to annuitize assets. Variable annuities can be made available with guaranteed minimum death benefit ("GMDB") which guarantees the client's beneficiaries will receive at least a return of premium (less the impact of withdrawals) upon death as well as a guaranteed lifetime withdrawal benefit ("GLWB") which guarantees that the client is able

to take contractually specified withdrawals from their assets that will continue for life regardless of market performance or longevity. The Company earns fees from the separate account for mortality and expense risks pertaining to the variable annuity contract and/or for providing administrative services. For variable annuity assets invested in mutual funds, the Company is reimbursed by the mutual funds for marketing, sales, and service costs under various revenue sharing agreements. There are additional fees charged for election of guaranteed minimum benefits. The guaranteed minimum benefits may be available in variable annuity products or as a stand-alone contract.

Retention is an important factor in profitability and is encouraged through product features. For example, the Company's life insurance and annuity contracts may impose a surrender charge on policyholder balances withdrawn within the first 10 years of the contract's inception. The period of time and level of the surrender charge vary by product.

One of the principal markets for the Individual Markets segment is the executive benefits market. The primary executive benefits products are single premium universal life insurance, registered variable universal life insurance, private placement variable universal life insurance ("PPVUL"), and PPVUL with a stable value guarantee feature. These executive benefits life insurance policies indirectly fund employee post-retirement benefits and non-qualified benefit plans for executives.

Community and regional / national banks are the primary purchasers of single premium universal life insurance utilizing the general account and hybrid products. Regional / national banks sometimes buy PPVUL with a stable value guarantee. Corporations indirectly funding executive benefits purchase the registered variable universal life insurance and PPVUL product. The PPVUL products offer a wide array of equity and bond fund investment options.

Another principal market for the Individual Markets segment is the financial institutions market, which is a partnership between the Company and retail financial institutions to distribute individual life and annuity products. Through its institutional partners, the Company has in excess of 109,000 advisors who sell its products. During 2017 and 2016, the Company focused on the needs of the retiree marketplace by providing wealth transfer solutions to its bank partner's customers via a single premium universal life product and meeting the retirement income needs via its variable annuity products including guaranteed benefits. Additionally, the Company continues its efforts to partner with large financial institutions to provide individual term life insurance.

Empower Retirement Segment Principal Products

Through its Empower Retirement segment, the Company provides various retirement plan products (including individual retirement accounts ("IRAs")) and investment options, as well as comprehensive administrative and recordkeeping 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. Defined contribution plans provide for benefits based upon the value of contributions to, and investment returns on, an individual's account. This has been a rapidly growing portion of the retirement marketplace in recent years.

The retirement plan products and investment options offered by the Company include mutual funds and collective trusts, guaranteed interest rate investment products, and variable annuity products designed to meet the specific needs of the customer. In addition, the Company offers both customized annuity and non-annuity products.

IRAs — The Company offers an IRA product as a distribution option for employees terminated from employer-sponsored defined contribution plans. The Company earns asset-based fees and per account fees for providing administrative and recordkeeping services for IRA accounts. For those IRAs invested in mutual funds, the Company can be reimbursed by the mutual funds for marketing, sales, and service costs under various revenue sharing agreements.

Mutual funds and collective trusts - The Company earns administration fees under various revenue sharing agreements from mutual funds and collective trusts for marketing, sales, and service costs incurred while providing services to individuals and institutional clients on behalf of the funds. On proprietary collective trusts, the Company, through its wholly-owned subsidiary Great-West Trust Company, LLC ("Great-West Trust Company"), earns an asset-based management fee.

Guaranteed interest rate investment products - On its guaranteed interest rate investment products, the Company earns investment margins on the difference between the income earned on investments in its general account and the interest credited to the participant's account balance. The Company's general account assets support the guaranteed investment products. The Company also manages fixed interest rate products known as stable value funds that may be structured as separate accounts, pooled collective trusts, and custom collective trusts for which it is paid a management fee that is earned by the Company either directly or through its wholly-owned subsidiaries Great-West Capital Management, LLC ("Great-West Capital Management") or Great-West Trust Company.

Variable annuity products - The Company's variable annuity products provide the opportunity for clients to invest on a tax deferred basis with the ability to annuitize assets. Variable annuities can be made available with GLWB which guarantees that the client is able to take contractually specified withdrawals from their assets that will continue for life regardless of market performance or longevity. The Company earns fees from the separate account for mortality and expense risks pertaining to the variable annuity contract and/or for providing administrative services. For variable annuity assets invested in mutual funds, the Company is reimbursed by the mutual funds for marketing, sales, and service costs under various revenue sharing agreements. There are additional fees charged for election of guaranteed minimum benefits. The GLWB products may be available in variable annuity products or as a stand-alone contract.

Administrative and recordkeeping services - The Company receives asset-based and/or participant-based fees for providing third-party administrative and recordkeeping services to financial institutions and employer-sponsored retirement plans.

The Company's marketing focus is directed toward providing investment management, advisory services, and recordkeeping services under Internal Revenue Code Sections 401(a), 401(k), 403(b), 408, and 457 to private corporations, state and local governments, hospitals, non-profit organizations, and public school districts. Through the Company's wholly-owned, registered subsidiaries, Great-West Capital Management, and Advised Assets Group, LLC ("Advised Assets Group"), the Company provides investment management and advisory services. Through the Company's wholly-owned subsidiary FASCore, LLC, the Company targets and partners with other large financial institutions to provide third-party recordkeeping and administration services.

Future Policy Benefit Liabilities and Life Insurance In-Force

The amount of fixed annuity products in-force is measured by future policy benefits. The following table shows group and individual annuity policy benefits supported by the Company's general account as well as the annuity balances in Empower Retirement and Individual Markets separate accounts for the years indicated:

	(In millions)		
Year Ended December 31,	**General Account Annuity Benefits Liabilities**	**Empower Retirement Annuity Separate Accounts**	**Individual Markets Annuity Separate Accounts**
2017	$ 13,754	$ 19,166	$ 2,725
2016	13,415	19,516	2,027
2015	12,309	19,600	1,744
2014	11,859	20,471	1,660
2013	11,648	20,310	1,502

For most of the general account annuities, and for all of the Empower Retirement and Individual Markets separate account annuities, policy benefit liabilities are established at the contract holder's account value, which is equal to cumulative deposits and credited interest, less withdrawals, mortality and certain other charges.

The general account also has immediate annuities. The policy benefit liabilities for the immediate annuities are computed on the basis of assumed investment yield, mortality (where payouts are contingent on survivorship), and expenses. These assumptions generally vary by plan, year of issue, and policy duration. Policy benefit liabilities for immediate annuities without life contingent payouts are computed on the basis of assumed investment yield and expenses.

The following table summarizes Individual Markets life insurance future policy benefits liabilities, Individual Markets life insurance separate account balances, and Individual Markets life insurance in-force prior to reinsurance ceded for the years indicated:

	(In millions)		
Year Ended December 31,	Individual Markets Life Insurance Future Policy Benefits Liabilities	Individual Markets Life Insurance Separate Accounts	Individual Markets Life Insurance In-force
2017	$ 15,924	$ 5,770	$ 102,354
2016	15,070	5,494	101,185
2015	14,382	5,287	100,398
2014	13,649	5,588	99,768
2013	12,520	4,819	98,489

For both the Individual Markets life insurance future policy benefits liabilities and life insurance separate accounts, the future policy benefits are computed on the basis of assumed investment yield, mortality, morbidity, and expenses, including a margin for adverse deviation. These future policy benefits are calculated as the present value of future benefits (including dividends) and expenses less the present value of future net premiums. The assumptions used in calculating the future policy benefits liabilities generally vary by plan, year of issue, and policy duration.

Additionally, for both the Individual Markets life insurance future policy benefits liabilities and life insurance separate accounts, policy and contract claim liabilities are established for claims that have been incurred but not reported based on factors derived from past experience.

The aforementioned policy benefit liabilities are computed amounts that, with additions from premiums and deposits to be received and with interest on such liabilities, are expected to be sufficient to meet the Company's policy obligations (such as paying expected death or retirement benefits or surrender requests) and to generate profits.

Other Segment

The Company's Other reporting segment is substantially comprised of activity related to term life insurance policies assumed by Great-West Life & Annuity Insurance Company of South Carolina ("GWSC"), a wholly-owned subsidiary, from CLAC. Additionally, it includes corporate items not directly allocated to the other operating segments and interest expense on long-term debt.

The following table shows future policy benefits liabilities and life insurance in-force in the Other segment for the years indicated:

	December 31,				
(In millions)	2017	2016	2015	2014	2013
Future policy benefits liabilities	$ 370	$ 387	$ 419	$ 410	$ 391
Life insurance in-force	49,133	51,408	53,604	56,249	59,902

Future policy benefits liabilities for the policies in the Other segment are calculated as the present value of future benefits and expenses less the present value of future net premiums. The assumptions used in calculating the future policy benefits liabilities generally vary by plan, year of issue, and policy duration. Future policy benefits liabilities are also established for claims that have been incurred but not reported based on factors derived from past experience.

Reinsurance

The Company enters into reinsurance transactions as a purchaser of reinsurance for its various insurance products and as a provider of reinsurance for some insurance products. Reinsurance transactions are assumed from and ceded to affiliated entities and third parties. When purchasing reinsurance, the Company seeks to limit its exposure to loss on any single insured and to recover a portion of benefits paid by ceding risks to other insurance enterprises under excess coverage, quota share, yearly renewable term, coinsurance, and modified coinsurance contracts. Under the terms of these contracts, the reinsurer agrees to reimburse the Company for the ceded amount in the event a claim is paid. However, the Company remains liable to its policyholders with respect to the ceded insurance if a reinsurer fails to meet the obligations it assumed. Accordingly, the

Company strives to cede risks to highly rated, well-capitalized companies. The Company retains an initial maximum of $3.5 million of coverage per individual life. This initial retention limit of $3.5 million may increase due to automatic policy increases in coverage at a maximum rate of $175 thousand per annum, with an overall maximum increase in coverage of $1.0 million. The Company assumes risk from approximately 40 insurers and reinsurers by participating in yearly renewable term and coinsurance pool agreements. When assuming risk, the Company seeks to generate revenue while maintaining reciprocal working relationships with these partners as they also seek to limit their exposure to loss on any single life. Maximum capacity to be accepted or retained by the Company is dictated at the treaty level and is monitored annually to ensure the total risk acquired or retained on any one life is limited to a maximum retention of $4.5 million.

Method of Distribution of Products Within the Individual Markets and Empower Retirement Segments

The Individual Markets segment distributes individual life insurance through wholesale and retail sales force, banks, broker-dealers, and investment advisors. Executive benefits products are distributed through wholesalers and specialized consultants.

The Empower Retirement segment distributes products to plan sponsors through a subsidiary, GWFS Equities, Inc. ("GWFS Equities"), as well as through brokers, consultants, advisors, third-party administrators, and banks. It markets IRAs as a distribution option for employees terminated from employer-sponsored defined contribution plans through its Retirement Solutions Group, which includes a retail sales force. Recordkeeping and administrative services are distributed through institutional clients.

Competition Within the Individual Markets and Empower Retirement Segments

The life insurance, savings, and investment marketplaces are highly competitive. The Company's competitors include insurance companies, banks, investment advisors, mutual fund companies, and certain service and professional organizations. No individual competitor or small group of competitors is dominant. Competition focuses on name recognition, service, technology, cost, variety of investment options, investment performance, product features, and price, in addition to financial strength as indicated by ratings issued by nationally recognized agencies.

Individual Markets Outlook

Through its Individual Markets line of business, the Company focuses on providing value and innovative products to the partners, brokers and the clients they serve. The Company was the second largest distributor of life insurance through banks in 2015, 2016 and 2017. The Company's strategy focuses on protecting customers' wealth and income in retirement with a comprehensive suite of asset growth, income protection and wealth transfer products.

To distribute retail retirement income products, the Company has established strategic partnerships with banks and independent broker dealers. The diversified product offering coupled with new product launches planned in early 2018 are expected to increase sales in 2018. The Company expects the innovative distribution and product strategies for longevity will increase Great-West Financial's share in the retirement income marketplace.

In the executive benefits market, the Company provides unique solutions to address the complex needs of organizations for funding employee benefits and retaining key executives. The Company partners with a network of specialized benefit consultants and brokers to create customized solutions based on clients' needs. The longstanding broker relationships and new partnerships continued to generate strong regional and community bank sales in 2017.

Empower Retirement Outlook

As the second largest recordkeeping provider in the U.S., Empower Retirement is positioned for significant growth opportunities with expertise and diversification across all plan types, company sizes and market segments. The Company continually examines opportunities to structure products and develop strategies to stimulate growth in assets under management.

In 2018, Empower Retirement's strategies to drive sales growth will continue to include active marketing of the brand, investing in product differentiation and offering a best-in-class service model. In 2017, service enhancements were made to this model including standardizing and improving client-facing tools, optimizing advisor relationship management and client alignment as well as adopting best practices for participant communications. In 2018, investments will continue to be made to improve the customer web experiences, including adding innovative capabilities and ease of service products. These efforts are expected to increase customer retention and ultimately increase participant retirement savings.

In 2018, the Company will continue to pursue operational efficiencies. With the completion of the recordkeeping business conversion to single back office platform, Empower Retirement will continue to focus on its unique, interactive web-based experience which was launched to help participants understand their retirement income needs. Great West Global Business Services India Private Limited ("Great West Global"), an indirect wholly-owned subsidiary of Lifeco U. S. in India, which launched in 2015 with over 800 professionals, will continue to expand with a focus on enhanced service levels.

1.3 Investment Operations

The Company's investment division manages and administers the investments of its general and separate accounts in support of the cash and liquidity requirements of its insurance and investment products.

The Company's principal general account investments are in fixed maturities and mortgage loans on real estate, all of which are exposed to three primary sources of investment risk: credit, interest rate, and market valuation. Total investments at December 31, 2017, of $60 billion were comprised of general account investment assets of $32 billion and separate account assets of $28 billion. Total investments at December 31, 2016, of $58 billion were comprised of general account investment assets of $31 billion and separate account assets of $27 billion.

The Company's general account investments are in a broad range of asset classes, but consist primarily of domestic fixed maturities. Fixed maturity investments include public and privately placed corporate bonds, government bonds, and mortgage-backed and asset-backed securities. The Company's mortgage loans on real estate are comprised primarily of domestic commercial collateralized real estate loans diversified with regard to geographical markets and commercial real estate property types.

The Company manages the characteristics of its investment assets, such as liquidity, currency, yield, and duration, to reflect the underlying characteristics of related insurance and policyholder liabilities that vary among its principal product lines. The Company observes strict asset and liability matching guidelines designed to ensure that the investment portfolio will appropriately meet the cash flow requirements of its liabilities. The Company uses derivative financial instruments for risk management purposes associated with certain invested assets and policy liabilities, not for speculative purposes.

The Company routinely monitors and evaluates the status of its investments in light of current economic conditions, trends in capital markets, and other factors. These other factors include investment size, quality, concentration by issuer and industry, and other diversification considerations relevant to the Company's fixed maturity investments.

The Company reduces credit risk for the portfolio as a whole by investing primarily in investment grade fixed maturities. At December 31, 2017, and 2016, 99% of the Company's fixed maturity portfolio carried an investment grade rating.

1.4 Regulation

The Company and its insurance subsidiaries are licensed in and regulated by all 50 states, the District of Columbia, Puerto Rico, Guam, and the United States Virgin Islands to transact life insurance business, accident and health insurance business, and annuity business. The extent of such regulation varies, but most jurisdictions have laws and regulations governing the business conduct of insurers as well as the financial aspects of insurers, including standards of solvency, statutory reserves, reinsurance, and capital adequacy. In addition, statutes and regulations usually require the licensing of insurers and their agents, the approval of policy forms and certain other related materials, and, for certain lines of insurance, the approval of rates. Such statutes and regulations also prescribe the permitted types and concentration of investments.

The Company and certain of its subsidiaries are subject to, and comply with, insurance holding company regulations in applicable states. The Company's insurance subsidiaries are each required to file reports, generally including detailed annual financial statements, with insurance regulatory authorities in each of the jurisdictions in which they do business, and their operations and accounts are subject to periodic examination by such authorities. These subsidiaries must also file, and in many jurisdictions and in some lines of insurance, obtain regulatory approval for rules, rates, and forms relating to the insurance written in the jurisdictions in which they operate.

The National Association of Insurance Commissioners ("NAIC") has established a program of accrediting state insurance departments. NAIC accreditation permits accredited states to conduct periodic examinations of insurers domiciled in such states. NAIC-accredited states will not accept reports of examination of insurers from unaccredited states, except under limited circumstances. As a direct result, insurers domiciled in unaccredited states may be subject to financial examination by accredited states in which they are licensed, in addition to any examinations conducted by their domiciliary states. The Colorado Department of Insurance is the Company's principal insurance regulator. Additionally, the State of New York

Department of Financial Services ("NYDFS") and the South Carolina Department of Insurance are the principal insurance regulators for the Company's two wholly-owned subsidiaries, Great-West Life & Annuity Insurance Company of New York ("GWNY") and GWSC, respectively. All three insurance regulators have received NAIC accreditation.

State and federal insurance and securities regulatory authorities, and other state law enforcement agencies and attorneys general, from time to time make inquiries regarding compliance by the Company and its insurance subsidiaries with insurance, securities, and other laws and regulations regarding the conduct of the Company's insurance and securities business.

Following is a description of certain regulatory and legal frameworks to which the Company or its subsidiaries may be subject:

- ***Insurance Company Regulation*** - The Company and its insurance subsidiaries are subject to regulation under the insurance company laws of various jurisdictions. The insurance company laws and regulations vary from jurisdiction to jurisdiction, but generally require an insurance company that is a member of an insurance holding company system (two or more affiliated persons, one or more of which is an insurer) to register with state regulatory authorities and to file with those authorities certain reports, including information concerning their capital structure, ownership, financial condition, certain intercompany transactions, and general business operations. In addition, various state jurisdictions have broad administrative powers with respect to such matters as admittance of assets, premium rating methodology, policy forms, establishing reserve requirements and solvency standards, maximum interest rates on life insurance policy loans and minimum rates for accumulation of surrender values, the type and amounts and valuation of investments permitted. State insurance statutes also typically place restrictions and limitations on the amount of dividends or other distributions payable by insurance companies to their parent companies, as well as on transactions between an insurer and its affiliates.

State insurance regulators, the NAIC, and other regulatory agencies are also investigating the use of affiliated captive reinsurers or off-shore entities to reinsure insurance risks. In October 2011, the NAIC established a subgroup to study insurers' use of captives and special purpose vehicles to transfer insurance risk in relation to existing state laws and regulations, and to establish appropriate regulatory requirements to address concerns identified in the study. This subgroup, which has been disbanded, prepared a white paper offering seven recommendations for consideration and a possible study. These recommendations addressed accounting considerations, confidentiality, access to alternative markets, International Association of Insurance Supervisors principles, standards and guidance; enhancements to credit for reinsurance models; disclosure and transparency, and *Financial Analysis Handbook* guidance. Two task forces have been assigned to determine how to implement many of these recommendations. Additionally, in June 2013, the NYDFS released a report critical of certain captive reinsurance structures and calling, in part, for other state regulators to adopt a moratorium on approving such structures pending further review by state and federal regulators. Also, in December 2013, the United States Treasury Department's Federal Insurance Office ("FIO") issued a report on how to modernize and improve the system of insurance regulation in the United States, recommending, in part, that states develop a uniform and transparent solvency oversight regime for the transfer of risk to reinsurance captives and adopt a uniform capital requirement for reinsurance captives, including a prohibition on transactions that do not constitute legitimate risk transfer.

- ***Guaranty Associations and Similar Arrangements*** - Most of the jurisdictions in which the Company and its insurance subsidiaries are permitted to transact business require life insurers doing business within their jurisdiction to participate in guaranty associations, which are organized to pay certain contractual insurance benefits owed pursuant to insurance policies issued by impaired, insolvent or failed insurers. These associations levy assessments, up to prescribed limits, on all member insurers in a particular state on the basis of the proportionate share of the premiums written by member insurers in the lines of business in which the impaired, insolvent or failed insurer is engaged. Some states permit member insurers to recover assessments paid through full or partial premium tax offsets. The Company has historically recovered more than half of the guaranty assessments through these offsets.

- ***Statutory Insurance Examinations*** - As part of their regulatory oversight process, state insurance departments conduct periodic detailed examinations of the books, records, accounts, and business practices of insurers domiciled in their states. During the three-year period ended December 31, 2017, these examinations produced no significant adverse findings regarding the operations or accounts of the Company and its insurance subsidiaries.

- ***Policy and Contract Reserve Sufficiency Analysis*** - Annually, the Company and its insurance subsidiaries are required to conduct an analysis of the sufficiency of all statutory reserves. In each case, a qualified actuary must submit an opinion which states that the aggregate statutory reserves, when considered in light of the assets held with respect to such reserves, make good and sufficient provision for the associated contractual obligations and related expenses of the insurer. If such an opinion cannot be provided, the insurer must set up additional reserves by moving funds from available statutory surplus. Since inception of this requirement, the Company and its insurance subsidiaries, which are required by their states of domicile to provide these opinions, have provided such opinions without qualification.

- ***Surplus and Capital*** - The Company and its insurance subsidiaries are subject to the supervision of the regulators in each jurisdiction in which they are licensed to transact business. Regulators have discretionary authority, in connection with the continued licensing of these insurance subsidiaries, to limit or prohibit sales to policyholders if, in their judgment, the regulators determine that such insurer has not maintained the minimum surplus or capital or that the further transaction of business will be hazardous to policyholders. We do not believe that the current or anticipated levels of statutory surplus of the Company and its subsidiaries present a material risk that any such regulator would limit the amount of new policies that we issue.

- ***Risk-Based Capital ("RBC")*** - The Company and its insurance subsidiaries are subject to certain RBC requirements and report their RBC based on a formula calculated by applying factors to various asset, premium, face amount, and statutory reserve items. The formula takes into account the risk characteristics of the insurer, including asset risk, insurance risk, interest rate risk, and business risk. The formula is used as an early warning regulatory tool to identify possible inadequately capitalized insurers for purposes of initiating regulatory action and not as a means to rank insurers generally. As of the date of the most recent statutory financial statements filed with insurance regulators, the total adjusted capital of the Company and its insurance subsidiaries was in excess of the minimum RBC that require regulatory action.

- ***Regulation of Investments*** - The Company and its insurance subsidiaries are subject to state laws and regulations that require diversification of its investment portfolios and limit the amount of investments in certain asset categories, such as below investment grade fixed income securities, other equity investments, and derivatives. Failure to comply with these laws and regulations would cause investments exceeding regulatory limitations to be treated as non-admitted assets for purposes of measuring statutory surplus and, in some instances, would require divestiture of such non-qualifying investments. As of the date of the most recent statutory financial statements filed with insurance regulators, the Company did not have any non-admitted assets as a result of investments exceeding regulatory limitations.

- ***Federal Initiatives*** - Although the federal government generally does not directly regulate the insurance business, federal initiatives often have an impact on the Company's business in a variety of ways. From time to time, federal measures are proposed that may significantly affect the Company's business.

The Dodd-Frank Act mandates changes to the regulation of the financial services industry. Implementation of the Dodd-Frank Act is ongoing and may affect the Company's operations and governance in ways that could adversely affect its financial condition and results of operations. The Dodd-Frank Act requires central clearing of, and imposes new margin requirements on, certain derivatives transactions, which increases the costs of the Company's hedging program. The other provision in the Dodd-Frank Act that may impact the Company is the new FIO within the United States Treasury Department.

The Dodd-Frank Act provides the Financial Stability Oversight Council ("FSOC") with the power to designate "systemically important" institutions, which will be subject to special regulatory supervision and other provisions intended to prevent, or mitigate the impact of, future disruptions in the U.S. financial system. Based on its most current financial data, the Company is below the quantitative thresholds used by the FSOC to determine which nonbank companies merit consideration. However, the FSOC has indicated it will review on a quarterly basis whether nonbank financial institutions meet the metrics for further review. If the Company were to be designated as a systemically important institution, it could be subject to heightened regulation under the Federal Reserve, which could impact requirements regarding its capital, liquidity, and leverage, as well as its business and investment conduct. In addition, the Company could be subject to assessments to pay for the orderly liquidation of other systemically important financial institutions that have become insolvent.

- ***Broker-Dealer and Securities Regulation*** - One of the Company's subsidiaries, GWFS Equities, is a non-clearing broker-dealer and subject to certain regulatory provisions by the SEC and the Financial Industry Regulatory Authority ("FINRA"). This subsidiary acts as the underwriter and distributor for variable annuity contracts and variable life insurance policies issued by the Company and for Great-West Funds, Inc., an open-end management investment company, which is a related party of GWL&A. GWFS Equities also acts as an introducing brokerage firm in the offer and sale of debt and equity securities. GWFS Equities is subject to the requirements of the Securities Exchange Act of 1934 relating to broker-dealers, including, among other things, minimum net capital requirements under the SEC Uniform Net Capital Rules (Rule 15c3-1) and segregation of client funds under the SEC Customer Protection Rule (Rule 15c3-3). GWFS Equities' net capital was in excess of the minimum requirements.

- ***Banking Regulation*** - One of the Company's subsidiaries, Great-West Trust Company, is a Colorado non-depository trust company that offers directed and discretionary trustee and custodial services to retirement plans, including 401(a), 401(k), 403(b), and 457 plans, IRAs, and Rabbi trusts for non-qualified deferred compensation plans. Great-West Trust Company

operates pursuant to the rules and regulations of the Colorado Division of Banking including various regulatory capital requirements. Great-West Trust Company's capital was in excess of the minimum requirements.

• ***Registered Investment Advisor Regulation*** - Two of the Company's subsidiaries, Great-West Capital Management and Advised Assets Group are registered as investment advisors with the SEC and are subject to examination by the SEC. The Investment Advisers Act of 1940, as amended, and the related regulations impose various obligations and restrictions on registered investment advisors including fiduciary duties, recordkeeping requirements, operational requirements, and marketing requirements.

ERISA and Other Considerations

The Company provides products and services to certain employee benefit plans that are subject to the Employee Retirement Income Security Act ("ERISA"), or the Internal Revenue Code of 1986, as amended (the "Code"). As such, the Company's activities are subject to the restrictions imposed by ERISA and the Code, including the requirement under ERISA that fiduciaries must perform their duties solely in the interests of ERISA plan participants and beneficiaries, and the requirement under ERISA and the Code that fiduciaries may not cause a covered plan to engage in prohibited transactions with persons who have certain relationships with respect to such plans. The applicable provisions of ERISA and the Code are subject to enforcement by the Department of Labor, the Internal Revenue Service ("IRS"), and the Pension Benefit Guaranty Corporation.

1.5 Ratings

The Company is rated by a number of nationally recognized rating agencies. The ratings represent the opinion of the rating agencies regarding the financial strength of the Company and its ability to meet ongoing obligations to policyholders. The Company's financial strength ratings as of the date of this filing are as follows:

Rating agency	Measurement	Current rating
A.M. Best, Inc.	Financial strength, operating performance, and business profile	A+ [(1)]
Fitch Ratings	Financial strength	AA [(2)]
Moody's Investor Service, Inc.	Financial strength	Aa3 [(3)]
Standard & Poor's Rating Services	Financial strength	AA [(2)]

[(1)] Superior (highest category out of 10 categories).
[(2)] Very Strong (second highest category out of nine categories).
[(3)] Excellent (second highest category out of nine categories).

1.6 Employees

The Company had approximately 5,800 employees at December 31, 2017, and 2016, respectively.

1.7 Available Information

The Company files periodic reports and other information with the SEC. Such reports and other information may be obtained by visiting the Public Reference Room of the SEC at its Headquarters Office, 100 F Street, N.E., Room 1580, Washington D.C. 20549, or by calling the SEC at 1-202-551-8090 (Public Reference Room) or 1-800-SEC-0330 (Office of Investor Education and Advocacy). In addition, the SEC maintains an Internet website (www.sec.gov) that contains reports and other information regarding issuers that file electronically with the SEC, including the Company.

The Company makes available, free of charge, on its website (www.greatwest.com) through its Financial Information page, its annual reports on Form 10-K, quarterly reports on Form 10-Q, and amendments to all those reports, as soon as reasonably practicable after filing such reports to the SEC. Other information found on the website is not part of this or any other report filed with or furnished to the SEC.

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 industry in which the Company operates is highly competitive. The Company's competitors include insurance companies, mutual fund companies, banks, investment advisors, and certain service and professional organizations. Although there has been consolidation in some sectors, no one competitor is dominant. Customer retention is a key factor for continued profitability. Management cannot be certain that the Company will be able to maintain its current competitive position in the markets in which it operates, or that it will be able to expand its operations into new markets. If the Company fails to do so, its business, results of operations, and financial condition could be materially and adversely affected.

The insurance and financial services industries are heavily regulated and changes in regulation may reduce profitability.

Federal and state regulatory reform that increases the compliance requirements imposed on the Company or that changes the way that the Company is able to do business may significantly harm its business or adversely impact the results of operations in the future. It is not possible to predict whether future legislation or regulation adversely affecting the Company's business will be enacted and, if enacted, the extent to which such legislation will have an effect on the Company or its competitors. Furthermore, there can be no assurance as to which of the Company's specific products would be impacted by any such legislative or regulatory reform.

The Company's operations and accounts are subject to examination by the Colorado Department of Insurance and other regulators at specified intervals. The NAIC has also prescribed RBC rules and other financial ratios for life insurance companies. The calculations set forth in these rules are used by regulators to assess the sufficiency of an insurer's capital and measure the risk characteristics of an insurer's assets, liabilities, and certain off-balance sheet items. RBC is calculated by applying factors to various asset, premium, face amount, and liability items. Although the Company has RBC levels well in excess of those required by its regulators, there can be no assurances made that it will continue to maintain these levels.

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.

The Company is rated by a number of nationally recognized rating agencies. The ratings represent the opinion of the rating agencies regarding the Company's financial strength and its ability to meet ongoing obligations to policyholders. Claims paying ability and financial strength ratings are factors in establishing the competitive position of insurers. A rating downgrade, or the potential for such a downgrade, of the Company or any of its rated insurance subsidiaries could, among other things, materially increase the number of policy surrenders and withdrawals by policyholders of cash values from their policies, adversely affecting relationships with broker-dealers, banks, agents, wholesalers, and other distributors of its products and services. This may result in cash payments requiring the Company to sell invested assets, including illiquid assets such as

privately placed fixed maturity investments and mortgage loans on real estate, at a price that may result in realized investment losses. These cash payments to policyholders result in a decrease in total invested assets and a decrease in net income. Among other things, early withdrawals may also cause the Company to accelerate amortization of deferred acquisition cost ("DAC") and value of business acquired ("VOBA"), reducing net income. In addition, a significant downgrade may negatively impact new sales and adversely affect the Company's ability to compete and thereby have a material effect on its business, results of operations, and financial condition. Negative changes in credit ratings may also increase the Company's cost of funding.

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 establishes and carries, as a liability, reserves based on estimates of how much it will need to pay for future benefits and claims. Future policy benefits do not represent an exact calculation of liability. Rather, future policy benefits represent an estimate of what management expects the ultimate settlement and administration of benefits will cost. These estimates, which generally involve actuarial projections, are based upon management's assessment of facts and circumstances then known, as well as estimates of future trends in persistency (how long a contract stays with the Company), mortality, judicial theories of liability, interest rates, and other factors. These variables are affected by both internal and external events, such as changes in market and interest rate conditions, catastrophic events, inflation, judicial trends, and legislative changes. Many of these items are not directly quantifiable in advance. The Company's life insurance products are exposed to the risk of catastrophic events, such as a pandemic, terrorism, or other such events that cause a large number of deaths. Additionally, there may be a significant reporting delay between the occurrence of an insured event and the date it is reported to the Company. The inherent uncertainties of estimating policy and contract claim liabilities are greater for certain types of liabilities, particularly those in which the various considerations affecting the type of claim are subject to change and in which long periods of time may elapse before a definitive determination of liability is made. Liability estimates including estimated premiums the Company will receive over the assumed life of the policy are continually refined in a regular and ongoing process as experience develops and further claims are reported and settled. Adjustments to policy benefit liabilities are reflected in the Company's consolidated statement of income in the period in which adjustments are determined. Because setting policy benefit liabilities is inherently uncertain, there can be no assurance that current liabilities will prove to be adequate in light of subsequent events.

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.

DAC represents the costs that vary with and are related directly to the successful acquisition of new insurance and annuity contracts and are amortized over the expected lives of the related contracts based upon the level and timing of either gross profits or gross premiums. VOBA represents the present value of future profits associated with acquired insurance, annuity, and investment-type contracts and is amortized over the expected lives of the related contracts based upon the level and timing of either gross profits or gross premiums. Goodwill represents the excess of the amounts the Company paid to acquire subsidiaries and other businesses over the fair value of their net assets at the date of acquisition. Other intangible assets represent the estimated fair value of the portion of the purchase price that was allocated to the value of customer relationships and non-competition intangible asset in various acquisitions. The Company, on an ongoing basis, tests the DAC and VOBA recorded on the consolidated balance sheets to determine if these amounts are recoverable under current assumptions. In addition, management regularly reviews the estimates and assumptions underlying DAC and VOBA for those products for which DAC and VOBA are amortized in proportion to gross profits or gross premiums. The Company tests goodwill for impairment at least annually based upon estimates of the fair value of the reporting unit to which the goodwill relates. The Company tests other intangible assets for impairment when events or changes in circumstances indicate that its carrying amount may not be recoverable. Given changes in facts and circumstances, these tests and reviews could lead to reductions in DAC, VOBA, goodwill, and/or other intangible assets that could have an adverse effect on the 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.

The Company purchases reinsurance by transferring, or ceding, part of the risk it assumes to a reinsurance company in exchange for part of the premium it receives in connection with the risk. The part of the risk the Company retains for its own account is known as the retention. The Company retains an initial maximum of $3.5 million of coverage per individual life. This initial retention limit of $3.5 million may increase due to automatic policy increases in coverage at a maximum rate of $175 thousand per annum, with an overall maximum increase in coverage of $1 million. Through reinsurance, the Company has the contractual right to collect the amount above its retention from its reinsurers. Although reinsurance makes the reinsurer

liable to the Company to the extent the risk is transferred or ceded to the reinsurer, it does not relieve it of its liability to its policyholders. Accordingly, the Company bears credit risk with respect to its reinsurers. Management cannot make assurances that the Company's reinsurers will pay all of their reinsurance claims, or that they will pay claims on a timely basis. If the Company's reinsurers cease to meet their obligations, whether because they are in a weakened position as a result of incurred losses or otherwise, the Company's results of operations, financial position, and cash flows could be materially adversely affected.

As related to the Company's reinsurance facilities, there are no assurances that the Company can maintain its current reinsurance facilities or that it can obtain other reinsurance facilities in adequate amounts and at favorable rates. If the Company is unable to obtain new reinsurance facilities, either its net exposures would increase or, if it is unwilling to bear an increase in net exposures, it would have to reduce the level of its underwriting commitments. Either of these potential developments could have a material adverse effect on the Company's business, results of operations, and financial position.

Interest rate fluctuations could have a negative impact on results of operations and financial condition.

In periods of rapidly increasing interest rates, policy surrenders and withdrawals may increase and premiums in flexible premium policies may decrease as policyholders seek investments with higher perceived returns. This activity may result in the Company's making cash payments, requiring that it sell invested assets at a time when the prices of those assets are adversely affected by the increase in market interest rates. Among other things, early withdrawals may also cause the Company to accelerate the amortization of DAC and VOBA, reducing net income.

During periods of sustained low interest rates, life insurance and annuity products may be affected by increased premium payments on products with flexible premium features and a higher percentage of insurance policies remaining in-force from year to year on products with minimum guarantees. During such a period, investment earnings may be lower because the interest earnings on new fixed income investments will likely have declined with the market interest rates. Also there may be increased early repayment on investments held such as mortgage-backed securities, asset-backed securities, and callable bonds. Although the Company invests in a broad range of asset classes, it is primarily invested in domestic fixed income securities. Accordingly, during periods of sustained low interest rates, an adverse effect on the results of operations and financial condition may result from a decrease in the spread between the earned rate on the Company's assets and either the interest rates credited to policyholders or the rates assumed in reserve calculations. Several products have current credited interest rates that are at or approaching their minimum guaranteed credited rate, which could have an adverse effect on the results of operations and financial condition due to spread compression.

The Company has hedging and other risk mitigating strategies to reduce the risk of a volatile interest rate environment. However, there can be no assurance that it would be fully insulated from realizing any losses on sales of securities. In addition, regardless of whether the Company realized an investment loss, potential withdrawals would produce a decrease in invested assets, with a corresponding adverse effect on the results of operations and financial condition.

Market fluctuations and general economic conditions may adversely affect results of operations and financial condition.

The risk of fluctuations in market value of all of the separate account assets, proprietary mutual funds, proprietary collective trusts, and external mutual funds is borne by the policyholders. The Company's fee income for administering and/or managing these assets, however, is generally set as a percentage of those assets. Accordingly, fluctuations in the market value of these assets may result in fluctuations in revenue. On certain products, the Company offers guarantees to policyholders to protect them against the risk of adverse market performance, including guaranteed minimum death benefits and guaranteed lifetime withdrawal benefits. When equity markets decline, the Company is at a greater risk of having to pay guaranteed benefits that exceed available policyholder account balances, and will therefore have to increase its reserves for these benefits, resulting in a financial loss. While the Company does have hedging programs in place to reduce the market risk associated with these guarantees, no assurance can be provided that these programs will generate the returns that will be needed to meet policyholder obligations relating to these guarantees.

The Company manages or administers its general and separate accounts in support of cash and liquidity requirements of its insurance and investment products. The Company's general account investment portfolio is diversified over a broad range of asset classes but consists primarily of domestic fixed income investments. The fair value of these and other general account invested assets fluctuates depending upon, among other factors, general economic and market conditions. In general, the market value of the Company's general account fixed maturity securities portfolio increases or decreases in inverse relationship with fluctuations in interest rates.

The occurrence of a major economic downturn, acts of corporate malfeasance, or other events that adversely affect the issuers of the Company's investment securities could cause the value of these securities and net income to decline and the default rate of the fixed maturity securities to increase. A ratings downgrade affecting particular issuers or securities could have a similar effect. Any event reducing the value of these securities other than on a temporary basis could have an adverse effect on the results of operations and financial condition. Ratings downgrades on general account assets may also result in a higher capital charge under RBC, resulting in lower RBC ratio.

Additionally, the Company may, from time to time, for business, regulatory, or other reasons, elect or be required to sell certain of its general account invested assets at a time when their fair values are less than their original cost, resulting in realized capital losses, which would have an adverse effect on the 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.

Changes in U.S. federal income tax law could make some of the Company's products less attractive to consumers. For example, the following events could adversely affect the Company's business:

- Changes in tax laws that would reduce or eliminate tax-deferred accumulation of earnings on the premiums paid by the holders of annuities and life insurance products;
- Reductions in the federal income tax that investors are required to pay on long-term capital gains and on some dividends paid on stock that may provide an incentive for some of the Company's customers and potential customers to shift assets into mutual funds and away from products, including life insurance and annuities, designed to defer taxes payable on investment returns;
- Changes in applicable regulations that could restrict the ability of some companies to purchase certain executive benefits products;
- Changes in the availability of, or rules concerning the establishment, operation, and taxation of, Section 401, 403(b), 408, and 457 plans; and
- Repeal of the federal estate tax or changes in the tax treatment of life insurance death benefits.

The Company cannot predict whether any other legislation will be enacted, what the specific terms of any such legislation will be, or how, if at all, this legislation or any other legislation could have an adverse effect on its results of operations or financial condition.

Congress, as well as state and local governments, also considers from time to time legislation that could change the Company's tax costs and increase or decrease its ability to use existing tax credits. If such legislation is adopted, the results of operations could be impacted. Changes to the Company's tax costs would include changes to tax rates, which could affect the consolidated financial statements in several ways. For example, a decrease in the federal income tax rate could affect the consolidated financial statements as follows:

- A lower effective tax rate, which would have a favorable impact on net income over the period that the lower rate remains in effect.
- A reduction in certain deferred tax liabilities, which would have an immediate favorable impact on net income in the period during which the lower rate came into effect.
- A reduction in certain deferred tax assets, which would have an immediate unfavorable impact on net income in the period during which the lower tax rate came into effect.
- A reduction in tax rates could affect the timing of recognizing tax benefits.

The Company may be subject to litigation resulting in substantial awards or settlements and this may adversely affect its reputation and results of operations.

In recent years, life and accident insurance and financial service companies have been named as defendants in lawsuits, including class actions. A number of these lawsuits have resulted in substantial awards and settlements. There can be no assurance that any future litigation relating to matters such as the provision of insurance coverage or pricing and sales practices will not have a material adverse affect on the Company's results of operations or financial position.

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.

Management of operational, legal, regulatory, and financial risks requires, among other things, policies and procedures to record properly and verify a large number of transactions and events. Management has devoted significant resources to develop the Company's risk management and disaster recovery policies and procedures. However, policies and procedures may not be fully effective and may leave the Company exposed to unidentified and unanticipated risks. The Company may be subject to disruptions of its operating systems or its ability to conduct business from events that are wholly or partially beyond its control such as a natural catastrophe, act of terrorism, pandemic, or electrical/telecommunications outage.

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

The Company distributes its life and savings products through a variety of distribution channels, including brokers, independent agents, consultants, retail financial institutions, and its own internal sales force. In some areas the Company generates a significant portion of its business through third-party arrangements. Management periodically negotiates provisions and renewals of these relationships and there can be no assurance that such terms will remain acceptable to either party. An interruption in the continuing relationship with a significant number of these third parties could materially affect the Company's ability to market its products. The Company must attract and retain productive internal sales representatives to sell its products. If the Company is unsuccessful in attracting and retaining sales representatives with demonstrated abilities, its results of operations and financial condition could be adversely affected.

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 depends heavily upon computer systems to provide reliable service, as a significant portion of the Company's operations relies on the secure processing, storage, and transmission of confidential or proprietary information and complex transactions. Despite the implementation of a variety of security measures, the Company's computer systems could be subject to physical and electronic break-ins, cyber attacks, and similar disruptions from unauthorized tampering, including threats that may come from external factors, such as governments, organized crime, hackers and other third parties, or may originate internally from within the Company.

If one or more of these events occurs, it could potentially jeopardize the confidential or proprietary information, including personally identifiable non-public information, processed and stored in, and transmitted through, the computer systems and networks. It could also potentially cause interruptions or malfunctions in the operations of the Company, its customers, or other third parties. This could result in damage to the Company's reputation, financial losses, litigation, increased costs, regulatory penalties, and/or customer dissatisfaction or loss. Although steps have been taken to prevent and detect such attacks, it is possible that the Company may not become aware of a cyber incident for some time after it occurs, which could increase its exposure to these consequences.

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

The Company has engaged in acquisitions of businesses in the past and may continue to do so in the future. Such activity exposes the Company to a number of risks. For example, there could be unforeseen liabilities or asset impairments, including goodwill impairments that arise in connection with the businesses that will be acquired in the future.

The Company's ability to achieve certain benefits which are anticipated from acquisitions of businesses will depend in large part upon the Company's ability to successfully integrate such businesses in an efficient and cost effective manner. The Company may not be able to integrate such businesses smoothly or successfully, and the process may take longer than expected. The integration of operations and differences in operational culture may require the dedication of significant management resources, which may result in greater expenditures than expected to integrate the acquired businesses. If the Company is unable to successfully integrate the operations of such acquired businesses, it may be unable to realize the benefits it expects to achieve as a result of such acquisitions.

The success with which the Company is able to integrate acquired operations will depend on its ability to manage a variety of issues, including the following:

- Loss of key personnel or higher than expected employee attrition rates could adversely affect the performance of the acquired business and the Company's ability to successfully integrate it.
- Integrating acquired operations with existing operations may require the Company to coordinate geographically separated organizations, address possible differences in culture and management philosophies, merge financial processes and risk and compliance procedures, combine separate information technology platforms, and integrate organizations that were previously closely tied to the former parent of the acquired business or other service provider.

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

The Company mitigates market risks through the use of derivative transactions with approved counterparties. Should some or all of these counterparties be unwilling or unable to continue to offer derivatives to the Company, the cost of purchasing these financial instruments may increase and/or the Company may not be able to continue to transfer certain risks, thereby increasing its exposure to a financial loss.

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

While the Company monitors its liquidity and capital on a regular basis, it may need to seek external financing if available internal levels of liquidity or capital are insufficient. Liquidity demands include but are not limited to the payment of policyholder benefits, collateral posting as required under our agreements with counterparties, the payment of operating expenses, and the servicing of debt. Capital demands could result from the growth of new business, a change in investment strategy, an investment in systems or other infrastructure, or a deterioration of the Company's capital arising from financial losses. The availability of additional financing will depend on a variety of factors such as market conditions, the general availability of credit in financial markets, the overall availability of credit to the financial services industry, the volume of trading activities in financial markets, the Company's credit ratings and credit capacity, and the perception of customers or lenders of the Company's long or short term financial strength. If the Company is unable to secure external financing to meet a liquidity or capital shortfall it may be required to curtail its operations, sell assets or reinsure liabilities, make changes to the investment strategy, or discontinue the use of certain derivatives, which could have a detrimental impact on the financial strength of the Company.

Item 1B.

Unresolved Staff Comments

None.

Item 2.

Properties

The Company's corporate office facility is comprised of an 886,000 square foot complex located in Greenwood Village, Colorado. The Company owns its corporate office facilities which are occupied by all of the Company's segments. At December 31, 2017, the Company leased approximately 188,000 square feet of the complex to CIGNA for a lease period expiring on March 31, 2019. The Company also leases approximately 609,000 square feet of sales and administrative offices throughout the United States and Bangalore, India. Management believes that the Company's properties are suitable and adequate for its current and anticipated business operations.

Item 3.

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 retirement or fund products. 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 4.

Mine Safety Disclosures

Not applicable.

Part II

Item 5.

Market for Registrant's Common Equity and Related Stockholder Matters

5.1 Equity Security Holders and Market Information

There is no established public trading market for the Company's common equity. GWL&A Financial is the sole shareholder of the Company's common equity securities.

5.2 Dividends

In the three most recent fiscal years, the Company has paid dividends on its common shares. Dividends paid on the Company's common stock were $145 million, $126 million, and $140 million during the years ended December 31, 2017, 2016, and 2015, respectively.

On February 1, 2018, the Company's Board of Directors declared a dividend of $24 million, payable on March 30, 2018, to its sole shareholder, GWL&A Financial.

Under Colorado law, the Company cannot, without the approval of the Colorado Commissioner of Insurance, pay a dividend if as a result of such payment, the total of that dividend and all dividends paid in the preceding twelve months, would exceed the greater of (i) 10% of the Company's statutory surplus as regards policyholders as of the preceding year ended December 31; or (ii) the Company's statutory net gain, not including realized capital gains, for the twelve-month period ending the preceding December 31 not including pro rata distributions of the Company's own securities. Additionally, dividend payments generally will not be allowed if the statutory surplus remaining after the proposed dividend would fall below the minimum RBC that requires regulatory action.

Item 6.

Selected Financial Data

The following is a summary of selected consolidated financial information for the Company. The information should be read in conjunction with and is qualified in its entirety by the information contained in Item 7, "Management's Discussion and Analysis of Financial Condition and Results of Operations," and the consolidated financial statements and notes thereto appearing in Item 8, "Financial Statements and Supplementary Data."

The selected consolidated financial information for the years ended December 31, 2017, 2016, and 2015, and at December 31, 2017, and December 31, 2016, has been derived in part from the Company's audited consolidated financial statements included in Item 8. The selected consolidated income statement data for the years ended December 31, 2014, and 2013, and the selected consolidated balance sheet data at December 31, 2015, 2014, and 2013, have been derived in part from the Company's consolidated financial statements not included elsewhere herein.

	As of and for the Year Ended December 31,				
(In millions)	2017	2016	2015	2014	2013
Total revenues	$ 2,776	$ 2,804	$ 2,742	$ 2,559	$ 2,167
Total benefits and expenses	2,490	2,487	2,453	2,086	1,979
Income from continuing operations	286	317	289	473	188
Provision (benefit) for income taxes	(83)	86	99	156	59
Net income	369	231	190	317	129
Dividends declared	$ 145	$ 126	$ 140	$ 316	$ 102
Investment assets	$ 32,137	$ 30,601	$ 28,811	$ 28,323	$ 26,516
Separate account assets	27,661	27,038	26,631	27,719	26,631
Total assets	62,461	60,309	57,900	58,348	55,324
Total policy benefit liabilities	30,775	29,596	27,838	26,722	25,374
Due to parent and affiliates	554	538	540	547	542
Separate account liabilities	27,661	27,038	26,631	27,719	26,631
Total liabilities	60,012	58,296	56,018	56,211	53,448
Total stockholder's equity	2,450	2,012	1,882	2,137	1,876

Item 7.

Management's Discussion and Analysis of Financial Condition and Results of Operations

Management's discussion and analysis of financial condition and results of operations of the Company for the three years ended December 31, 2017, 2016, and 2015, follows. This management discussion and analysis should be read in conjunction with the financial data contained in Item 6, "Selected Financial Data," and in Item 8, "Financial Statements and Supplementary Data."

Certain statements in this report constitute forward-looking statements. See "Business" in Item 1 of this report for additional factors relating to these statements, and see "Risk Factors" in Item 1A of this report for a discussion of certain risk factors applicable to the business and its financial condition and results of operations.

7.1 Executive Summary

The Company and its subsidiaries are providers of insurance and other financial service products to individual, corporate, institutional, and government customers. Management considers the ability to continue to expand its presence in the United States defined contribution and institutional insurance markets to be its primary points of focus. The life insurance, savings, and investments marketplace is highly competitive. Competitors include insurance companies, banks, investment advisors, mutual fund companies, and certain service and professional organizations.

The Individual Markets segment distributes life insurance, annuity, and retirement 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. The Empower Retirement segment provides various retirement plan products (including IRAs) and investment options, as well as comprehensive administrative and recordkeeping services for financial institutions and employers, which include educational, advisory, enrollment, and communication services to employer-sponsored defined contribution plans and associated defined benefit plans. Defined contribution plans provide for benefits based upon the value of contributions to, and investment returns on, an individual's account. The Company's Other reporting segment is substantially comprised of activity under the assumption of reinsurance between GWSC and CLAC, corporate items not directly allocated to the other operating segments and interest expense on long-term debt.

Recent Events

The Tax Reconciliation Act, took effect on January 1, 2018 and included, among other things, the lowering of the U.S. corporate federal tax rate from 35% to 21%. As a result of this U.S. tax reform, the Company revalued certain deferred tax balances. The impact of these items was a net benefit of $176 million included in the Other segment.

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 the Company 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. The DOL has issued an 18-month delay for full compliance with the rule to July 1, 2019. There is potential for substantial revisions prior to the full compliance date. The Company continues to monitor any developments or proposed revisions.

Acquisition of Putnam Retirement Business

On January 1, 2015, the Company acquired the retirement business of Putnam, an affiliate of the Company. The 2015 results of operations reflect the new business structure which includes the Putnam retirement business. This business is integrated within the Empower Retirement segment.

Empower Retirement

In 2017, Empower Retirement completed its program activities related to integrating the J.P. Morgan Retirement Plan Services ("RPS") business, improving the client-facing experience as well as streamlining back-office processing. Included in net earnings in the first quarter of 2017 were restructuring costs of $8 million, primarily resulting from Great-West Financial executing a restructuring action to right-size the cost structure and better position the business competitively following the finalization of the Empower Retirement integration activities. The Company expects that these enhancements will increase market share by driving future sales and improving the retention of participants and assets. Empower Retirement participant accounts have grown to approximately 8.3 million at December 31, 2017 from 8.0 million at December 31, 2016.

Market Conditions

The S&P 500 index ended 2017 up by 19% as compared to 2016, and 2016 was up by 10% when compared to 2015. The average of the S&P 500 index during the year ended December 31, 2017, was up by 17% when compared to the average for the year ended December 31, 2016, and the average was up by 2% for the year ended December 31, 2016, when compared to the average for the year ended December 31, 2015.

	Year Ended December 31,				
S&P 500 Index	**2017**	**2016**	**2015**	**2014**	**2013**
Index Close	2,674	2,239	2,044	2,059	1,848
Index Average	2,448	2,094	2,061	1,931	1,644

Variable asset-based fees earned by the Company fluctuate with changes in participant account balances. Participant account balances change due to cash flow and market gains and losses, which are primarily associated with changes in the United States equities market. Fee income increased by $103 million, or 11%, to $1,060 million for the year ended December 31, 2017, when compared to 2016. The increase was primarily related to asset-based variable fee income resulting from increased average asset levels driven by sales and higher average equity market levels.

The 10-year U.S. Treasury rate ended 2017 down by 5 basis points as compared to 2016, while 2016 was up by 18 basis points when compared to 2015. The average of the 10-year U.S. Treasury rate during the year ended December 31, 2017 ended up by 50 basis points when compared to the average for the year ended December 31, 2016, and the average was down by 31 basis points for the year ended December 31, 2016, when compared to the average for the year ended December 31, 2015.

	Year Ended December 31,				
10-Year Treasury Rate	**2017**	**2016**	**2015**	**2014**	**2013**
Close	2.40%	2.45%	2.27%	2.17%	3.04%
Average	2.33%	1.83%	2.14%	2.54%	2.35%

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 an increase in gross unrealized gains of $103 million and a decrease in gross unrealized losses of $245 million during the year ended December 31, 2017. This resulted in an increase to accumulated other comprehensive income (loss), net of policyholder 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 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 year ended December 31, 2017, the Company recorded realized gains on forward settling to be announced ("TBA") securities of $15 million, compared to gains of $5 million in 2016. For the year ended December 31, 2017, the Company recorded losses in net investment income on cross-currency swaps of $56 million, compared to gains of $86 million in 2016.

7.2 Summary of Critical Accounting Judgments and Estimates

The preparation of financial statements in conformity with accounting principles generally accepted in the United States of America ("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 on-going 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

Valuation of investments

The Company's investments are in fixed maturity investments, mortgage loans on real estate, policy loans, and limited partnership interests and other investments. The Company's investments are exposed to three primary sources of risk: credit, interest rate, and market valuation. The financial statement risks, stemming from such investment risks, are those associated with the determination of fair values.

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 flow 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. The use of different market assumptions and/or estimation methodologies may have a material effect on the estimated fair value amounts of the Company's financial instruments.

Impairment of investments

The Company evaluates its available-for-sale general account investments on a quarterly basis to determine whether there has been an other-than-temporary decline in fair value below the amortized cost basis. Assumptions and estimates about the issuer's operations and ability to generate future cash flows are inherent in management's evaluation of investments for other-than-temporary impairments ("OTTI"). The assessment of whether an OTTI has occurred on securities where management does not intend to sell the investment and it is not more likely than not the Company will be required to sell the investment before recovery of its amortized cost basis, is based upon management's case-by-case evaluation of the underlying reasons for the decline in fair value of each individual security. Management considers a wide range of factors regarding the security issuer and uses its best judgment in evaluating the cause of the decline in its estimated fair value and in assessing the prospects for near-term recovery. While all available information is taken into account, it is difficult to predict the ultimate recoverable amount from a distressed or impaired security. The evaluation of impairments is a quantitative and qualitative process, which is subject to risks and uncertainties and is intended to determine whether declines in the fair value of investments should be recognized in current period earnings. The risks and uncertainties include changes in general economic conditions, the issuer's financial condition or near term recovery prospects, the effects of changes in interest rates or credit spreads, and the recovery period.

If an OTTI has occurred, the impairment amount is bifurcated into two components: the amount related to the credit loss and the amount attributed to other factors (referred to as the non-credit portion). The calculation of expected cash flows utilized during the impairment evaluation and bifurcation process is determined using judgment and the best information available to the Company including default rates, credit ratings, collateral characteristics, and current levels of subordination.

The determination of the calculation and the adequacy of the commercial mortgage provision allowance and mortgage impairments (when management deems it probable that the Company will be unable to collect all amounts due according to the contractual terms of the loan agreement) involve judgments that incorporate qualitative and quantitative Company and industry mortgage performance data. Management's periodic evaluation and assessment of the adequacy of the mortgage provision allowance and the need for mortgage impairments is based on known and inherent risks in the portfolio, adverse situations that may affect the borrower's ability to repay, the fair value of the underlying collateral, composition of the loan portfolio, current economic conditions, loss experience, and other relevant factors.

Valuation of derivatives and related hedge accounting

The fair value of derivatives is determined by quoted market prices or through the use of pricing models. The determination of fair value, when quoted market values are not available, is based on valuation methodologies and assumptions deemed appropriate under the circumstances. Values can be affected by changes in interest rates, foreign currency exchange rates, financial indices, credit spreads, market volatility, and liquidity.

Judgment is applied in determining the availability and application of hedge accounting designations and the appropriate accounting treatment under accounting guidance. If it were determined that hedge accounting designations were not appropriately applied, reported net income could be materially affected. Differences in judgment as to the availability and application of hedge accounting designations and the appropriate accounting treatment may result in a differing impact on the consolidated financial statements of the Company from that previously reported. Assessments of hedge effectiveness and measurements of ineffectiveness of hedging relationships are also subject to interpretations and estimations and different interpretations or estimates may have a material effect on the amount reported in net income.

Valuation of DAC and related amortization

DAC represents policy acquisition costs consisting primarily of commissions, agency and policy issue expenses that have been capitalized and are subject to amortization, and interest. Capitalized costs are incremental, direct costs of contract acquisition related directly to successful acquisition activities. Indirect or unsuccessful acquisition costs are expensed as incurred. DAC is amortized over the expected lives of the related contracts based upon the level and timing of either gross profits or gross premiums, depending upon the type of contract as discussed below. The recovery of DAC is dependent upon the future profitability of the related business. Recoverability testing is performed for current issue year products to determine if gross revenues less expenses are sufficient to cover DAC on these new sales. At least annually, loss recognition testing is also

performed on aggregated blocks of existing business to determine if gross revenues less expenses are sufficient to cover the existing DAC balance.

DAC associated with traditional life insurance products is amortized over the premium-paying period in proportion to the present value of estimated premium revenues. Assumptions are locked in for traditional products.

DAC associated with universal-life type, annuity, and investment-type products is amortized over the life of the contracts in proportion to the emergence of estimated gross profits. At each valuation date, estimated gross profits are updated with actual gross profits, and the assumptions underlying future estimated gross profits are evaluated for continued reasonableness. Adjustments to estimated gross profits require that amortization rates be revised retroactively to the date of the contract issuance ("unlocking"). If the update of assumptions causes estimated gross profits to increase, DAC amortization will decrease, resulting in a current period increase to earnings. The opposite result occurs when the assumption update causes estimated gross profits to decrease.

DAC, for applicable products, is adjusted for the impact of unrealized gains or losses on investments as if these gains or losses had been realized, with corresponding credits or charges included in accumulated other comprehensive income (loss) in the stockholder's equity section in its consolidated balance sheets.

Valuation of policy benefit liabilities

The Company establishes liabilities for amounts payable under insurance policies and annuity contracts that are dependent on actuarial assumptions. Principal assumptions used in the establishment of liabilities for future policy benefits are mortality, policy lapse, renewal, retirement, investment returns, inflation, expenses, and other contingent events as appropriate to the respective product type. These assumptions are established at the time the policy is issued and are intended to estimate the experience for the period the policy benefits are payable. Utilizing these assumptions, liabilities are established on a block of business basis. If experience is less favorable than the assumptions employed, additional liabilities may be required, resulting in a charge to current period earnings.

Generally, reserves for traditional life insurance contracts (term, whole life, and group life) represent amounts payable over an extended period of time and the related liabilities are calculated as the present value of future expected benefits to be paid, reduced by the present value of future expected premiums. Such liabilities are established based upon estimates of future experience, including a provision for adverse deviation.

The Company calculates additional liabilities for certain variable annuity guaranteed death benefits. The additional reserve for such products recognizes the portion of contract assessments received to compensate the Company for death benefits. Reserves for annuity GMDB are determined by estimating the present value of expected benefits in excess of the projected account balance. Expected experience is based on a range of inputs and scenarios. The assumptions of investment performance and volatility are consistent with the historical experience of the appropriate underlying equity index, such as the Standard & Poor's ("S&P") 500 Index.

The Company also offers 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 consolidated balance sheets. Changes in fair value of GLWB are recorded in net investment income in the consolidated statements of income.

7.3 Company Results of Operations

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. The Company has defined adjusted net investment income as net investment income, excluding 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 U.S. GAAP. In addition, the Company's adjusted operating income measures may not be comparable to similarly titled measures reported by other companies.

Year ended December 31, 2017, compared with the year ended December 31, 2016

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

Income statement data (In millions)	Year Ended December 31, 2017	Year Ended December 31, 2016	Increase (decrease)	Percentage change
Net income				
Individual Markets segment	$ 77	$ 115	$ (38)	(33)%
Empower Retirement segment	134	112	22	20 %
Other segment	158	4	154	3,850 %
Total net income	369	231	138	60 %
Adjustments to net income				
Unrealized investment (losses) gains, net	(56)	62	(118)	(190)%
Realized investment gains (losses), net	46	93	(47)	(51)%
Pro-rata tax benefit (expense) [1]	3	(54)	57	106 %
Adjusted operating income	$ 376	$ 130	$ 246	189 %

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

Unrealized investment (losses) gains, net, had an unfavorable change of $118 million, or 190%, from a gain of $62 million in 2016 to a loss of $56 million in 2017. The primary driver of the change were a $127 million unfavorable change from unrealized gains in 2016 to unrealized losses in 2017 on derivatives, partially offset by a $14 million favorable change in unrealized gains on bonds from an unrealized loss in 2016.

Realized investment gains (losses), net, had an unfavorable change of $47 million, or 51%, to $46 million for the year ended December 31, 2017. The change was primarily driven by an unfavorable change in realized gains on bonds of $74 million, partially offset by $11 million favorable change in unrealized gains on forward settling TBA securities and a gain of $10 million on the sale of an equity investment.

Pro-rata tax benefit (expense) had a favorable change of $57 million, or 106%, from a $54 million expense to a $3 million benefit for the year ended December 31, 2017, resulting from the income tax benefit associated with the unfavorable change in total unrealized and realized investment gains (losses), net.

Year ended December 31, 2016, compared with the year ended December 31, 2015

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

Income statement data (In millions)	Year Ended December 31, 2016	Year Ended December 31, 2015	Increase (decrease)	Percentage change
Net income				
Individual Markets segment	$ 115	$ 123	$ (8)	(7)%
Empower Retirement segment	112	83	29	35 %
Other segment	4	(16)	20	125 %
Total net income	231	190	41	22 %
Adjustments to net income				
Unrealized investment gains (losses), net	62	62	—	— %
Realized investment gains (losses), net	93	84	9	11 %
Pro-rata tax (expense) benefit [1]	(54)	(51)	(3)	(6)%
Adjusted operating income	$ 130	$ 95	$ 35	37 %

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

Realized investment gains (losses), net, had a favorable change of $9 million, or 11%, to $93 million. The primary driver was a $41 million favorable change from bonds, partially offset by an unfavorable change of $21 million from mortgages and $11 million unfavorable change from derivatives and other investments.

Pro-rata tax expense increased by $3 million, or 6%, to $54 million primarily as a result of a favorable change in realized investment gains (losses).

Company Results of Operations

Year ended December 31, 2017, compared with the year ended December 31, 2016

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

Income statement data (in millions)	Year Ended December 31, 2017	Year Ended December 31, 2016	Increase (decrease)	Percentage change
Premium income	$ 440	$ 465	$ (25)	(5)%
Fee income	1,060	957	103	11 %
Other revenue	10	12	(2)	(17)%
Adjusted net investment income	1,276	1,215	61	5 %
Total adjusted operating revenues	2,786	2,649	137	5 %
Policyholder benefits	1,241	1,241	—	— %
Operating expenses	1,249	1,246	3	— %
Total benefits and expenses	2,490	2,487	3	— %
Adjusted operating income before income taxes	296	162	134	83 %
Adjusted income tax (benefit) expense	(80)	32	(112)	(350)%
Adjusted operating income	$ 376	$ 130	$ 246	189 %

The Company's consolidated adjusted operating income increased by $246 million, or 189%, to $376 million. The increase was primarily due to higher adjusted income tax benefit, higher fee income, and higher adjusted net investment income, partially offset by lower premium income.

Premium income decreased by $25 million, or 5%, to $440 million, in 2017. The decrease was primarily related to lower net premiums collected on group health and disability policies.

Fee income increased by $103 million, or 11%, to $1,060 million in 2017. This increase was primarily related to an increase in asset-based variable fee income resulting from increased average asset levels, which were driven by sales and higher average equity market levels.

Adjusted net investment income increased by $61 million, or 5%, to $1,276 million in 2017. 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.

Adjusted income tax expense decreased by $112 million, from an expense of $32 million to a benefit of $80 million in 2017. The change was primarily due to the impact of the Tax Reconciliation Act; partially offset by the income tax expense as a result of higher adjusted operating income before tax.

Year ended December 31, 2016, compared with the year ended December 31, 2015

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

Income statement data (in millions)	Year Ended December 31, 2016	Year Ended December 31, 2015	Increase (decrease)	Percentage change
Premium income	$ 465	$ 446	$ 19	4 %
Fee income	957	945	12	1 %
Other revenue	12	14	(2)	(14)%
Adjusted net investment income	1,215	1,191	24	2 %
Total adjusted operating revenues	2,649	2,596	53	2 %
Policyholder benefits	1,241	1,235	6	— %
Operating expenses	1,246	1,218	28	2 %
Total benefits and expenses	2,487	2,453	34	1 %
Adjusted operating income before income taxes	162	143	19	13 %
Adjusted income tax (benefit) expense	32	48	(16)	(33)%
Adjusted operating income	$ 130	$ 95	$ 35	37 %

The Company's consolidated adjusted operating income increased by $35 million, or 37%, to $130 million. The increase was primarily due to higher adjusted net investment income, higher premium income, higher fee income, and lower adjusted income tax expense, partially offset by higher operating expenses.

Premium income increased by $19 million, or 4%, to $465 million. The increase was primarily related to higher net premiums on group health and disability policies.

Fee income increased by $12 million, or 1%, to $957 million. 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 increased by $24 million, or 2%, to $1,215 million. 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.

Operating expenses increased by $28 million, or 2%, to $1,246 million. The increase was primarily attributable to an increase in higher salaries and benefits as a result of higher headcount driven by business growth, partially offset by a decrease in DAC amortization.

Adjusted income tax expense decreased by $16 million from an expense of $48 million to $32 million. The change was primarily due to a management election to claim foreign tax credits, partially offset by higher adjusted operating income before tax.

7.4 Individual Markets Segment Results of Operations

Year ended December 31, 2017, compared with the year ended December 31, 2016

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

Income statement data (in millions)	Year Ended December 31, 2017	Year Ended December 31, 2016	Increase (decrease)	Percentage change
Premium income	$ 358	$ 379	$ (21)	(6)%
Fee income	110	99	11	11 %
Adjusted net investment income	774	762	12	2 %
Total adjusted operating revenues	1,242	1,240	2	— %
Policyholder benefits	953	969	(16)	(2)%
Operating expenses	170	175	(5)	(3)%
Total benefits and expenses	1,123	1,144	(21)	(2)%
Adjusted operating income before income taxes	119	96	23	24 %
Adjusted income tax expense	39	32	7	22 %
Adjusted operating income	$ 80	$ 64	$ 16	25 %

The Company's Individual Markets segment adjusted operating income increased by $16 million, or 25%, to $80 million, in 2017. The increase was primarily due to lower policyholder benefits, higher adjusted net investment income, and higher fee income, partially offset by lower premium income.

Premium income decreased by $21 million, or 6%, to $358 million, in 2017. The decrease is primarily related to lower net premiums collected on group health and disability policies.

Fee income increased by $11 million, or 11%, to $110 million, in 2017. The increase was primarily related to asset-based variable fee income resulting from increased average asset levels, which were driven by sales.

Adjusted net investment income increased by $12 million, or 2%, to $774 million, in 2017. This 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.

Policyholder benefits decreased by $16 million, or 2%, to $953 million, in 2017, primarily due to favorable mortality experience.

Year ended December 31, 2016, compared with the year ended December 31, 2015

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

Income statement data (in millions)	Year Ended December 31, 2016	Year Ended December 31, 2015	Increase (decrease)	Percentage change
Premium income	$ 379	$ 361	$ 18	5 %
Fee income	99	88	11	13 %
Adjusted net investment income	762	757	5	1 %
Total adjusted operating revenues	1,240	1,206	34	3 %
Policyholder benefits	969	932	37	4 %
Operating expenses	175	159	16	10 %
Total benefits and expenses	1,144	1,091	53	5 %
Adjusted operating income before income taxes	96	115	(19)	(17)%
Adjusted income tax expense	32	40	(8)	(20)%
Adjusted operating income	$ 64	$ 75	$ (11)	(15)%

The Company's Individual Markets segment adjusted operating income decreased by $11 million, or 15%, to $64 million. The decrease was primarily due to higher policyholder benefits, and higher operating expenses, partially offset by higher premium income, higher fee income, lower adjusted income tax expense, and higher adjusted net investment income.

Premium income increased by $18 million, or 5%, to $379 million. The increase is primarily related to higher net premiums on group health and disability policies.

Fee income increased by $11 million, or 13%, to $99 million. The increase was primarily related to asset-based variable fee income resulting from increased average asset levels driven by sales and higher average equity market levels.

Adjusted net investment income increased by $5 million, or 1%, to $762 million. This 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.

Policyholder benefits increased by $37 million, or 4%, to $969 million primarily due to unfavorable mortality experience.

Operating expenses increased by $16 million, or 10%, to $175 million. The increase was primarily due to higher salaries and benefits due to increased headcount attributable to growth.

Adjusted income tax expense decreased by $8 million, or 20%, to $32 million, primarily due to the decrease in adjusted operating income before income taxes.

7.5 Empower Retirement Segment Results of Operations

Year ended December 31, 2017, compared with the year ended December 31, 2016

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

Income statement data (in millions)	Year Ended December 31, 2017	Year Ended December 31, 2016	Increase (decrease)	Percentage change
Premium income	$ 2	$ 2	$ —	— %
Fee income	943	852	91	11 %
Other revenue	10	12	(2)	(17)%
Adjusted net investment income	454	403	51	13 %
Total adjusted operating revenues	1,409	1,269	140	11 %
Policyholder benefits	207	206	1	— %
Operating expenses	998	1,002	(4)	— %
Total benefits and expenses	1,205	1,208	(3)	— %
Adjusted operating income before income taxes	204	61	143	234 %
Adjusted income tax expense (benefit)	66	(2)	68	3,400 %
Adjusted operating income	$ 138	$ 63	$ 75	119 %

Adjusted operating income for the Empower Retirement segment increased by $75 million, or 119%, to $138 million, in 2017. The increase was primarily due to higher fee income and adjusted net investment income, partially offset by higher adjusted income tax expense.

Fee income increased by $91 million, or 11%, to $943 million, in 2017. This increase was primarily related to an increase in asset-based variable fee income resulting from increased average asset levels, which were driven by sales and higher average equity market levels.

Adjusted net investment income increased by $51 million, or 13%, to $454 million, in 2017. This was due to higher investment income earned on bonds, mortgages, and policy loans as a result of higher invested asset balances as well as higher yields.

Adjusted income tax expense increased by $68 million from a benefit of $2 million in 2016 to an expense of $66 million in 2017. The change was primarily due to higher adjusted operating income before income taxes in addition to a management election to claim foreign tax credits in prior year.

Year ended December 31, 2016, compared with the year ended December 31, 2015

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

Income statement data (in millions)	Year Ended December 31, 2016	Year Ended December 31, 2015	Increase (decrease)	Percentage change
Premium income	$ 2	$ 1	$ 1	100 %
Fee income	852	853	(1)	— %
Other revenue	12	14	(2)	(14)%
Adjusted net investment income	403	380	23	6 %
Total adjusted operating revenues	1,269	1,248	21	2 %
Policyholder benefits	206	202	4	2 %
Operating expenses	1,002	993	9	1 %
Total benefits and expenses	1,208	1,195	13	1 %
Adjusted operating income before income taxes	61	53	8	15 %
Adjusted income tax (benefit) expense	(2)	17	(19)	(112)%
Adjusted operating income	$ 63	$ 36	$ 27	75 %

Adjusted operating income for the Empower Retirement segment increased by $27 million, or 75%, to $63 million. The increase was primarily due to higher adjusted net investment income and lower adjusted income tax expense, partially offset by higher operating expenses.

Adjusted net investment income increased by $23 million, or 6%, to $403 million. 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.

Operating expenses increased by $9 million, or 1%, to $1,002 million for the year ended December 31, 2016, when compared to 2015. The increase was primarily due to higher salaries and benefits due to increased headcount attributable to growth, partially offset by a decrease in DAC amortization.

Adjusted income tax expense decreased by $19 million from an expense of $17 million in 2015 to a benefit of $2 million in 2016. The change was primarily due to a management election to claim foreign tax credits, partially offset by higher adjusted operating income before tax.

7.6 Other Segment Results of Operations

Year ended December 31, 2017, compared with the year ended December 31, 2016

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

Income statement data (in millions)	Year Ended December 31, 2017	Year Ended December 31, 2016	Increase (decrease)	Percentage change
Premium income	$ 80	$ 84	$ (4)	(5)%
Fee income	7	6	1	17 %
Adjusted net investment income	48	50	(2)	(4)%
Total adjusted operating revenues	135	140	(5)	(4)%
Policyholder benefits	81	66	15	23 %
Operating expenses	81	69	12	17 %
Total benefits and expenses	162	135	27	20 %
Adjusted operating loss before income taxes	(27)	5	(32)	(640)%
Adjusted income tax (benefit) expense	(185)	2	(187)	(9,350)%
Adjusted operating income	$ 158	$ 3	$ 155	5,167 %

Adjusted operating income for the Company's Other segment increased by $155 million, or 5,167%, to $158 million in 2017. The increase was primarily due to the impact of the Tax Reconciliation Act.

Year ended December 31, 2016, compared with the year ended December 31, 2015

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

Income statement data (in millions)	Year Ended December 31, 2016	Year Ended December 31, 2015	Increase (decrease)	Percentage change
Premium income	$ 84	$ 84	$ —	— %
Fee income	6	4	2	50 %
Adjusted net investment income	50	54	(4)	(7)%
Total adjusted operating revenues	140	142	(2)	(1)%
Policyholder benefits	66	101	(35)	(35)%
Operating expenses	69	66	3	5 %
Total benefits and expenses	135	167	(32)	(19)%
Adjusted operating loss before income taxes	5	(25)	30	120 %
Adjusted income tax expense (benefit)	2	(9)	11	122 %
Adjusted operating income (loss)	$ 3	$ (16)	$ 19	119 %

Adjusted operating income (loss) for the Company's Other segment increased by $19 million from a loss of $16 million in 2015 to a gain of $3 million in 2016. The increase was primarily due to a decrease in reserves as a result of expected run-off in the business, partially offset by increased operating expenses due to a legal settlement.

7.7 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.

	December 31,			
(In millions)	**2017**		**2016**	
Fixed maturities, available-for-sale	$ 23,593	73.4%	$ 22,154	72.4%
Fixed maturities, held-for-trading	21	0.1%	515	1.7%
Mortgage loans on real estate	4,005	12.4%	3,559	11.6%
Policy loans	4,104	12.8%	4,020	13.1%
Short-term investments	350	1.1%	303	1.0%
Limited partnership and other corporation interests	46	0.1%	35	0.1%
Other investments	18	0.1%	15	0.1%
Total investments	$ 32,137	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 rating agencies to develop its internal rating. In addition, the 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:

	December 31,	
Credit Rating	**2017**	**2016**
AAA	22.7%	27.3%
AA	14.9%	13.9%
A	33.8%	30.8%
BBB	27.7%	26.8%
BB and below (Non-investment grade)	0.9%	1.2%
Total	100.0%	100.0%

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:

	December 31,	
Sector	**2017**	**2016**
Utility	17.8%	18.1%
Finance	14.8%	10.8%
Consumer	11.0%	9.7%
Natural resources	6.1%	6.3%
Transportation	4.2%	3.6%
Other	12.6%	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.

Investment Yield

Net investment income includes interest income, dividends, the amortization of premiums, discounts and origination fees, and unrealized gains (losses) on held-for-trading fixed maturity investments. Additionally, it includes changes in the fair value of derivatives not qualifying for hedge accounting or where hedge accounting is not elected and the ineffective portion of cash flow hedges.

To analyze investment performance, the Company excludes net investment income related to derivative instruments and interest on funds withheld balances under reinsurance agreements in order to assess underlying profitability and results from ongoing operations. Net investment income performance is summarized as follows:

(In millions)	Year Ended December 31,		
	2017	2016	2015
Net investment income	$ 1,220	$ 1,277	$ 1,254
Less:			
Net investment income from derivative instruments	(49)	100	79
Net interest on funds withheld balances under reinsurance agreements, related party	22	22	22
Net investment income excluding derivative instruments and interest on funds withheld balances	1,247	1,155	1,153
Average invested assets, at amortized cost	30,801	29,464	27,683
Yield on average invested assets	4.05%	3.92%	4.17%

The yield on average invested assets increased in 2017 when compared to 2016. The increase was primarily due to foreign exchange gains and unrealized gains on investments classified as held-for-trading. When excluding those two items for both 2017 and 2016 the yield on average assets would remain unchanged at 4.01%. The yield on average invested assets decreased in 2016 when compared to 2015. The decline was primarily due to the Company earning lower earned rates on new investments as the U.S. Treasury curve shifted lower during the year in conjunction with charging lower interest rates on policy loans. In addition, the decline is caused by the recognition of foreign exchange losses and unrealized losses on investments classified as held-for-trading. The yield on average assets for 2016 would be 4.01% if all foreign exchange and unrealized gains and losses are removed.

7.8 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 $367 million and $322 million as of December 31, 2017, and 2016, respectively. In addition, 99% of the fixed maturity portfolio carried an investment grade rating at December 31, 2017, and 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 $100 million and $99 million of commercial paper outstanding as of December 31, 2017, and 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 year ended December 31, 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.

7.9 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 December 31, 2017, and 2016 were $313 million and $438 million, respectively. The precise timing of the fulfillment of the commitment cannot be predicted; however, $312 million of the December 31, 2017 balance and all $438 million of the December 31, 2016 balance are due within one year of the dates indicated. The remaining $1 million of the December 31, 2017 balance is due within one to three years. There are no other obligations or liabilities arising from such arrangements that are reasonably likely to become material.

The Company participates in a short-term reverse repurchase program for the purpose of enhancing the total return on its investment portfolio. This type of transaction involves the purchase of securities with a simultaneous agreement to sell similar securities at a future date at an agreed-upon price. In exchange, the counterparty financial institutions put non-cash collateral on deposit with a third-party custodian on behalf of the Company. The amount of securities purchased in connection with these transactions was $23 million and zero at December 31, 2017, and 2016, respectively. Non-cash collateral on deposit with the third-party custodian on the Company's behalf was $24 million and zero at December 31, 2017, and 2016, respectively, which cannot be sold or re-pledged and which has not been recorded on the consolidated balance sheets. Collateral related to the reverse repurchase agreements generally consists of U.S. government or U.S. government agency securities.

The Company, as lessee, has entered into various lease and sublease agreements primarily for the rental of office space.

The Company maintains a corporate credit facility agreement in the amount of $50 million for general corporate purposes. The Company had no borrowings under the credit facility either at or during the years ended December 31, 2017, and 2016.

GWL&A Financial has a letter of credit for the benefit of GWSC for capital support in the amount of $70 million and which renews annually until the Company terminates it under the provisions specified in the agreement. Additionally, GWL&A Financial terminated a letter of credit on December 21, 2017 in the amount of $1,141 million which was for the benefit of the Company as collateral under the GWSC and CLAC reinsurance agreement for policy liabilities. This letter of credit was replaced with an excess of loss reinsurance agreement with a third party reinsurer. At December 31, 2017 and 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 million, renewable annually for an indefinite period of time.

7.10 Contractual Obligations

The following table summarizes the Company's major contractual obligations at December 31, 2017:

	Payment due by period				
(in thousands)	Less than one year	One to three years	Three to five years	More than five years	Total
Future policy benefits [1]	$ 3,020,553	$ 5,154,358	$ 4,402,977	$ 44,494,969	$ 57,072,857
Policy and contract claims [2]	183,762	45,419	36,083	129,551	394,815
Policyholders' funds [3]	280,578	—	—	—	280,578
Provision for policyholder dividends [4]	41,972	—	—	—	41,972
Undistributed earnings on participating business [5]	—	—	—	14,636	14,636
Related party long-term debt - principal [6]	—	—	—	540,400	540,400
Related party long-term debt - interest [7]	26,796	53,591	53,591	468,942	602,920
Commercial paper [8]	99,886	—	—	—	99,886
Investment purchase obligations [9]	312,152	1,090	—	—	313,242
Operating leases [10]	15,467	23,703	7,000	13	46,183
Other liabilities [11]	115,917	40,481	42,444	19,834	218,676
Total	$ 4,097,083	$ 5,318,642	$ 4,542,095	$ 45,668,345	$ 59,626,165

[1],[2] ***Future policy benefits, and policy and contract claims*** - The Company has estimated payments to be made to policy and contract holders for future policy benefits. Insurance and investment contract liabilities include various investment-type products with contractually scheduled maturities, including periodic payments of a term certain nature. However, a significant portion of policy benefits and claims to be paid do not have stated contractual maturity dates and ultimately may not result in any payment obligation.

Estimated future policyholder obligations have been developed in accordance with industry accepted actuarial standards based upon the estimated timing of cash flows related to the policies or contracts, the Company's historical experience and its expectation of future payment patterns. Management has incorporated significant assumptions in developing these estimates, many of which are outside of the Company's control and include assumptions relating to mortality, morbidity, policy renewals and terminations, retirement, inflation, disability recovery rates, investment returns, future interest credited rate levels, policy loans, future premium receipts on current policies in-force, and other contingent events as may be appropriate to the respective product type. Due to the significance of the assumptions used, the amounts presented could materially differ from actual results.

The amounts presented in the table above are undiscounted as to interest. Accordingly, the sum of the estimated cash payment presented significantly exceeds the liability amount on the Company's consolidated balance sheet principally due to the time value of money.

Separate account liabilities have been excluded from the table above. Separate account obligations are legally insulated from general account assets. Separate account liabilities represent funds maintained by the Company to meet the specific investment objectives of the contract holders who bear the related investment risk. It is generally expected that the separate account liabilities will be fully funded by the separate account assets.

Policy and contract claims consist of liabilities associated with installment claims on certain long-term disability policies. Because the timing of the payment of these obligations is based upon assumptions of disability recovery rates, the amounts presented could differ from actual results.

[3] ***Policyholders' funds*** - Policyholders' funds consist primarily of future policy benefits associated with policyholder deposits, participating policy dividends left on deposit, and provisions for experience rating refunds. Because the timing of the payment of some of these obligations is unknown and beyond the control of the Company, the obligations related to these liabilities are presented in the table above in the less than one year category in the amounts of the liabilities presented in the Company's consolidated balance sheet.

[4] ***Provision for policyholders' dividends*** - The provision for policyholders' dividends payable represents the liabilities related to dividends payable in the following year on participating policies. As such, the obligations related to these liabilities are

presented in the table above in the less than one year category in the amounts of the liabilities presented in the Company's consolidated balance sheet.

(5) ***Undistributed earnings on participating business*** — The dividend scale for the undistributed earnings on participating business is determined annually. As such, the timing of the payment of the liability for undistributed earnings on participating business is unknown by its nature and subject to significant long-term uncertainty. Due to this uncertainty, the obligation related to this liability is presented in the table above in the more than five year category in the amount of the liability presented in the Company's consolidated balance sheet.

(6) ***Related party long-term debt principal*** - Represents contractual maturities of principal due to the Company's parent, GWL&A Financial, under the terms of three long-term surplus notes. The amounts shown in this table differ from the amounts included in the Company's consolidated balance sheet because the amounts shown above do not consider the discount upon the issuance of one of the surplus notes.

(7) ***Related party long-term debt interest*** - Two long-term surplus note bear interest at a fixed rate through maturity. One surplus note bears a variable interest rate plus the then-current three-month London Interbank Offering Rate ("LIBOR"). The interest payments shown in this table are calculated based upon the contractual rates in effect on December 31, 2017, and do not consider the impact of future interest rate changes.

(8) ***Commercial paper*** - The Company's obligations under its commercial paper program are short-term in nature. The amount presented represents the amount due upon maturity of the instrument. The obligation related to this liability is presented in the table above in the less than one year category as presented in the Company's consolidated balance sheet.

(9) ***Investment purchase obligations*** - The Company makes commitments to fund partnership interests, mortgage loans on real estate, and other investments in the normal course of its business. As the timing of the fulfillment of the commitment to fund partnership interests cannot be predicted, such obligations are presented in the less than one year category. The timing of the funding of mortgage loans on real estate is based on the expiration date of the commitment.

(10) ***Operating leases*** - The Company is obligated to make payments under various non-cancelable operating leases, primarily for office space. Contractual provisions exist that could increase the lease obligations presented, including operating expense escalation clauses. Management does not consider the impact of any such clauses to be material to the Company's operating lease obligations. The Company's total future operating lease obligation will be reduced by minimum reimbursement of $5,938 due in the future under non-cancelable agreements.

From time to time, the Company enters into agreements or contracts, including capital leases, to purchase goods or services in the normal course of its business. However, these agreements and contracts are not material and are excluded from the table above.

(11) ***Other liabilities*** - Other liabilities include those other liabilities which represent contractual obligations not included elsewhere in the table above. If the timing of the payment of any other liabilities was sufficiently uncertain, the amounts were included in the less than one year category. Other liabilities presented in the table above include:

- Liabilities under reinsurance arrangements
- Liabilities related to securities purchased but not yet settled
- Liabilities related to derivative obligations
- Statutory state escheat liabilities
- Expected contributions to the Company's defined benefit pension plan, and benefit payments for the post-retirement medical plan and supplemental executive retirement plan through 2022
- Unrecognized tax benefits
- Miscellaneous purchase obligations to acquire goods and services

7.11 Application of Recent Accounting Pronouncements

See Note 3 to the accompanying consolidated financial statements for a further discussion of the application of recent accounting pronouncements.

Item 7A. 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.

Market risk

The Company's exposure to interest rate changes results from its significant holdings of floating rate debt, fixed maturity investments, mortgage loans on real estate, and interest rate sensitive liabilities. The fixed maturity investments primarily consist of direct obligations of the U.S. government and its agencies, direct obligations of U.S. states and their subdivisions, corporate debt securities, and asset-backed and mortgage-backed securities. All of these investments are exposed to changes in interest rates. Interest rate sensitive product liabilities, primarily those liabilities associated with universal life insurance contracts and annuity contracts, have the same type of interest rate risk exposure as fixed maturity securities and mortgage loans on real estate.

To reduce interest rate risk, the Company performs periodic projections of asset and liability cash flows in order to evaluate the interest rate sensitivity of its fixed maturity securities and its product liabilities to interest rate movements. For determinate liabilities, i.e. liabilities with stable, predictable cash flows on products that can't be repriced (for example, certificate annuities and payout annuities), asset/liability cash flow mismatches are monitored and the asset portfolios are rebalanced as necessary to keep the mismatches within tolerance limits. For these determinate liabilities, the investment policy predominantly requires assets with stable, predictable cash flows so that changes in interest rates will not cause changes in the timing of asset cash flows resulting in mismatches. For indeterminate liabilities, i.e. liabilities that have less predictable cash flows but that can be repriced (for example, portfolio annuities and universal life insurance), the potential mismatch of assets and liabilities is tested under a wide variety of interest rate scenarios. The potential cost of this mismatch is calculated. If the potential cost is considered to be too high, actions considered would include rebalancing the asset portfolio and/or purchasing derivatives that reduce the risk as part of the hedging strategy program discussed below. For each major block of indeterminate liabilities, the asset and liability positions are reviewed in senior management meetings to proactively recommend changes in the current investment strategy and/or a rebalance of the asset portfolio.

The Company has strict operating policies which prohibit the use of derivative instruments for speculative purposes, permit derivative transactions only with approved counterparties, specify limits on concentration of risk, and provide requirements of reporting and monitoring systems. The Company supports a hedging strategy program that consists of the use of various derivative instruments including futures, interest rate swaps, and options such as interest rate swaptions. Derivative strategies include the following:

- Futures are commitments to either purchase or sell designated financial instruments at a future date for a specified price.
- Interest rate swaps involve the periodic exchange of cash flows with third parties at specified intervals calculated using agreed upon rates or other financial variables.

- Option contracts grant the purchaser, in consideration for the payment of a premium, the right to either purchase from or sell to the issuer a financial instrument at a specified price within a specified time period or on a stated date. Interest rate swaptions grant the purchaser the right to enter into a swap with predetermined fixed-rate payments over a predetermined time period on the exercise date.

The Company has estimated the possible effects of interest rate changes at December 31, 2017. If interest rates increased by 100 basis points (1.00%), the December 31, 2017 fair value of the fixed income assets in the general account would decrease by approximately $1.8 billion. This calculation uses projected asset cash flows, discounted back to December 31, 2017. The cash flow projections are shown in the table below. The table below shows cash flows rather than expected maturity dates because many of the Company's assets have substantial expected principal payments prior to the final maturity date. The fair value shown in the table below was calculated using spot discount interest rates that varied by the year in which the cash flows are expected to be received. The spot rates in the benchmark calculation range from 1.768% to 3.656%.

Projected cash flows by calendar years (In millions)	Benchmark	Interest rate increase one percent
2018	$ 2,673	$ 2,649
2019	2,452	2,422
2020	2,207	2,180
2021	2,752	2,697
2022	2,775	2,754
Thereafter	22,686	23,060
Undiscounted total	$ 35,545	$ 35,762
Fair value	$ 28,652	$ 26,888

The Company administers separate account variable annuities and provides other investment and retirement services where fee income is earned based upon a percentage of account balances. Fluctuations in fund asset levels occur as a result of both changes in cash flow and general market conditions. There is a market risk of lower fee income if equity markets decline. If equity markets were to decline by 10% from benchmark levels at December 31, 2017, the Company's associated net fee income after payment of subadvisor fees in 2017 would decline by approximately $23 million.

The Company's surplus assets include equity investments, primarily partnership interests. There is a market risk of lower asset values if equity markets decline. If equity markets were to decline by 10%, the Company would have an additional unrealized loss of approximately $5.3 million on equity investments. This unrealized loss would not impact net income but would reduce stockholder's equity.

The Company has sold variable annuities with various forms of GMDB and GLWB. The Company is required to hold future policy benefit liabilities for these guaranteed benefits. If equity markets were to decline by 10%, the liability for GMDB and GLWB would increase by approximately $2.7 million. The Company's dynamic hedging program for the GLWB product would be expected to offset $2.2 million of the $2.7 million change in the benefit liability related to capital markets. Therefore the net impact to variable annuities with various forms of guarantees for an 10% decline in the equity markets is estimated to be $0.5 million.

The Company has exposure to foreign currency exchange rate fluctuations. To manage foreign currency exchange risk, the Company uses currency swaps and forwards to convert foreign currency back to United States dollars. These currency contracts are generally entered into upon any acquisition or disposition of foreign currency denominated assets.

Insurance risk

The Company manages the risks associated with its insurance and other contractual liabilities through the use of actuarial modeling techniques. These techniques utilize significant assumptions including morbidity, mortality, persistency, expenses, and the cash flow stream of benefit payments. Through these techniques, the Company attempts to match the anticipated cash flow streams of its invested assets with the anticipated cash flow streams of its insurance and other contractual obligations. The cash flows associated with determinate policy liabilities are not interest rate sensitive but will vary based upon the timing and amount of benefit payments. The primary risks associated with these liabilities are that the benefits will exceed those anticipated in the actuarial modeling or that the actual timing of the payment of benefits will differ from what was anticipated.

The Company utilizes reinsurance programs to control its exposure to general insurance risks. Reinsurance agreements do not relieve the Company from its direct obligations to its insureds. However, an effective reinsurance program limits the Company's exposure to potentially large losses. The failure of reinsurers to honor their obligations could result in losses to the Company. To manage this risk, the Company evaluates the financial condition of its reinsurers and monitors concentrations of credit risk relative to the reinsurers in order to minimize its exposure to significant losses from reinsurer insolvencies. The Company retains an initial maximum of $3.5 million of coverage per individual life. This initial retention limit of $3.5 million may increase due to automatic policy increases in coverage at a maximum rate of $175 thousand per annum, with an overall maximum increase in coverage of $1.0 million. Maximum capacity to be accepted or retained by the Company is dictated at the treaty level and is monitored annually to ensure the total risk acquired or retained on any one life is limited to a maximum retention of $4.5 million.

Credit risk

Credit risk is the risk the Company assumes if its debtors, customers, reinsurers, or other counterparties and intermediaries may be unable or unwilling to pay their contractual obligations when they come due and may manifest itself through the downgrading of credit ratings of counterparties. It is the Company's policy to acquire only investment grade assets to enable it to provide for future policy obligations and to minimize undue concentrations of assets in any single geographic area, industry, or entity. To minimize this risk, management regularly reviews the credit ratings of the entities in which the Company invests. These credit ratings are internally derived by the Company, taking into consideration ratings from several external credit rating agencies.

Operational and corporate risk

The Company manages and mitigates internal operational risk through integrated and complementary policies, procedures, processes, and practices. Human Resources hiring practices, performance evaluations and promotion, and compensation practices are designed to attract, retain and develop the skilled personnel required. A comprehensive job evaluation process is in place and training and development programs are supported. Each business area provides training designed for its specific needs and has developed internal controls for significant processes. Processes and controls are monitored and redefined by the business areas and subject to review by the Company's internal audit staff. The Company applies a robust project management discipline to all significant initiatives.

Appropriate security measures protect premises and information. The Company has emergency procedures in place for short-term incidents and is committed to maintaining business continuity and disaster recovery plans at every business location for the recovery of critical functions in the event of a disaster, including offsite data backup and work facilities. The Company maintains various corporate insurance coverages such as property, general liability, excess liability, automobile liability, workers' compensation, financial institution bonds, other regulatory bonds, and professional liability insurance to protect its owned property assets and to insure against certain third-party liabilities.

The Company's businesses are subject to various regulatory requirements imposed by regulation or legislation applicable to insurance companies and companies providing financial services. These regulations are primarily intended to protect policyholders and beneficiaries. Material changes in the regulatory framework or the failure to comply with legal and regulatory requirements could have a material adverse effect on the Company. The Company monitors compliance with legal and regulatory requirements in all jurisdictions in which it conducts business and assesses trends in legal and regulatory change to keep business areas current and responsive.

In the course of its business activities, the Company may be exposed to the risk that some actions may lead to damaging its reputation and hence damage its future business prospects. These actions may include unauthorized activities of employees or others associated with the Company, inadvertent actions of the Company that become publicized and damage its reputation, regular or past business activities of the Company that become the subject of regulatory or media scrutiny or litigation and, due to a change of public perception, cause damage to the Company. To manage or mitigate this risk, the Company has ongoing controls to limit the unauthorized activities of people associated with it. The Company has adopted a Code of Business Conduct and Ethics which sets out the standards of business conduct to be followed by all of its directors, officers, and employees.

Item 8. Financial Statements and Supplementary Data

Index to Consolidated Financial Statements, Notes, and Schedules

	Page Number
Report of Independent Registered Public Accounting Firm	44
Financial Statements at December 31, 2017, and 2016 and for the Years Ended December 31, 2017, 2016, and 2015	
Consolidated Balance Sheets	45
Consolidated Statements of Income	47
Consolidated Statements of Comprehensive Income (Loss)	48
Consolidated Statements of Stockholder's Equity	49
Consolidated Statements of Cash Flows	50
Notes to the Consolidated Financial Statements	52
Note 1 - Organization and Significant Accounting Policies	52
Note 2 - Acquisition	61
Note 3 - Application of Recent Accounting Pronouncements	61
Note 4 - Related Party Transactions	63
Note 5 - Summary of Investments	65
Note 6 - Derivative Financial Instruments	70
Note 7 - Summary of Offsetting Assets and Liabilities	73
Note 8 - Fair Value Measurements	75
Note 9 - Minimum Guarantees	81
Note 10 - Reinsurance	82
Note 11 - Deferred Acquisition Costs and Value of Business Acquired	84
Note 12 - Goodwill and Other Intangible Assets	84
Note 13 - Commercial Paper	85
Note 14 - Stockholder's Equity and Dividend Restrictions	85
Note 15 - Other Comprehensive Income	86
Note 16 - General Insurance Expense	87
Note 17 - Employee Benefit Plans	87
Note 18 - Income Taxes	94
Note 19 - Segment Information	97
Note 20 - Share-based Compensation	100
Note 21 - Commitments and Contingencies	102
Note 22 - Subsequent Events	104
Financial Statement Schedule at December 31, 2017, and 2016 and for the Years Ended December 31, 2017, 2016, and 2015	
Schedule III - Supplemental Insurance Information	105

REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

To the Board of Directors and Stockholder of
Great-West Life & Annuity Insurance Company

Opinion on the Financial Statements

We have audited the accompanying consolidated balance sheets of Great-West Life & Annuity Insurance Company and subsidiaries (the "Company") as of December 31, 2017 and 2016, the related consolidated statements of income, comprehensive income (loss), stockholder's equity, and cash flows for each of the three years in the period ended December 31, 2017 and the related notes (collectively referred to as the "financial statements"). In our opinion, the financial statements present fairly, in all material respects, the financial position of the Company as of December 31, 2017 and 2016, and the results of its operations and its cash flows for each of the three years in the period ended December 31, 2017, in conformity with accounting principles generally accepted in the United States of America.

Basis for Opinion

These financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on the Company's financial statements based on our audits. We are a public accounting firm registered with the Public Company Accounting Oversight Board (United States) (PCAOB) and are required to be independent with respect to the Company in accordance with the U.S. federal securities laws and the applicable rules and regulations of the Securities and Exchange Commission and the PCAOB.

We conducted our audits in accordance with the standards of the PCAOB and in accordance with auditing standards generally accepted in the United States of America. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement, whether due to error or fraud. The Company is not required to have, nor were we engaged to perform, an audit of its internal control over financial reporting. As part of our audits, we are required to obtain an understanding of internal control over financial reporting but not for the purpose of expressing an opinion on the effectiveness of the Company's internal control over financial reporting. Accordingly, we express no such opinion.

Our audits included performing procedures to assess the risks of material misstatement of the financial statements, whether due to error or fraud, and performing procedures that respond to those risks. Such procedures included examining, on a test basis, evidence regarding the amounts and disclosures in the financial statements. Our audits also included evaluating the accounting principles used and significant estimates made by management, as well as evaluating the overall presentation of the financial statements. We believe that our audits provide a reasonable basis for our opinion.

/s/ DELOITTE & TOUCHE LLP

Denver, Colorado

February 28, 2018

We have served as the Company's auditor since 1981.

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

	December 31,	
	2017	**2016**
Assets		
Investments:		
Fixed maturities, available-for-sale, at fair value (amortized cost of $22,762,962 and $21,672,727)	$ 23,593,139	$ 22,153,703
Fixed maturities, held-for-trading, at fair value (amortized cost of $20,512 and $519,495)	21,059	514,738
Mortgage loans on real estate (net of valuation allowances of $773 and $2,882)	4,005,187	3,558,826
Policy loans	4,104,094	4,019,648
Short-term investments (amortized cost of $350,266 and $303,988)	350,266	303,988
Limited partnership and other corporation interests	45,540	34,895
Other investments	17,997	15,052
Total investments	32,137,282	30,600,850
Other assets:		
Cash and cash equivalents	17,211	18,321
Reinsurance recoverable	589,080	598,864
Deferred acquisition costs (“DAC”) and value of business acquired (“VOBA”)	518,510	486,690
Investment income due and accrued	299,362	287,681
Due from parent and affiliates	114,133	81,995
Goodwill	137,683	137,683
Other intangible assets	17,085	20,087
Other assets	954,250	1,021,210
Assets of discontinued operations	16,095	17,652
Separate account assets	27,660,571	27,037,765
Total assets	$ 62,461,262	$ 60,308,798

See notes to consolidated financial statements.

(Continued)

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

	December 31,	
	2017	**2016**
Liabilities and stockholder's equity		
Policy benefit liabilities:		
Future policy benefits	$ 30,048,927	$ 28,872,899
Policy and contract claims	389,029	372,259
Policyholders' funds	280,578	285,554
Provision for policyholders' dividends	41,972	49,521
Undistributed earnings on participating business	14,636	15,573
Total policy benefit liabilities	30,775,142	29,595,806
General liabilities:		
Due to parent and affiliates	553,901	537,990
Commercial paper	99,886	99,049
Deferred income tax liabilities, net	93,203	191,911
Other liabilities	812,875	816,304
Liabilities of discontinued operations	16,095	17,652
Separate account liabilities	27,660,571	27,037,765
Total liabilities	60,011,673	58,296,477
Commitments and contingencies (See Note 21)		
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; 7,320,176 and 7,292,708 shares issued and outstanding	7,320	7,293
Additional paid-in capital	949,520	863,031
Accumulated other comprehensive income	440,957	235,875
Retained earnings	1,051,792	906,122
Total stockholder's equity	2,449,589	2,012,321
Total liabilities and stockholder's equity	$ 62,461,262	$ 60,308,798

See notes to consolidated financial statements. (Concluded)

GREAT-WEST LIFE & ANNUITY INSURANCE COMPANY
Consolidated Statements of Income
Years Ended December 31, 2017, 2016, and 2015
(In Thousands, Except Share Amounts)

	Year Ended December 31,		
	2017	**2016**	**2015**
Revenues:			
Premium income	$ 439,731	$ 465,349	$ 445,550
Fee income	1,060,122	956,817	944,526
Other revenue	9,611	12,261	13,563
Net investment income	1,220,053	1,276,559	1,254,430
Realized investment gains (losses), net:			
Total other-than-temporary (losses)	(4,152)	(4,963)	(1,044)
Other-than-temporary (losses) transferred to other comprehensive income	—	—	(78)
Other realized investment gains, net	50,555	97,845	84,832
Total realized investment gains, net	46,403	92,882	83,710
Total revenues	2,775,920	2,803,868	2,741,779
Benefits and expenses:			
Life and other policy benefits	651,597	709,333	636,855
Decrease in future policy benefits	(84,251)	(124,576)	(41,636)
Interest paid or credited to contractholders	633,611	608,803	583,319
Provision for policyholders' share of losses on participating business	(1,669)	(1,024)	(1,267)
Dividends to policyholders	41,846	48,487	57,356
Total benefits	1,241,134	1,241,023	1,234,627
General insurance expenses	1,197,613	1,181,227	1,078,996
Amortization of DAC and VOBA	19,728	31,309	100,589
Interest expense	30,943	33,705	38,588
Total benefits and expenses	2,489,418	2,487,264	2,452,800
Income before income taxes	286,502	316,604	288,979
Income tax (benefit) expense	(82,614)	85,512	98,524
Net income	$ 369,116	$ 231,092	$ 190,455

See notes to consolidated financial statements.

GREAT-WEST LIFE & ANNUITY INSURANCE COMPANY
Consolidated Statements of Comprehensive Income (Loss)
Years Ended December 31, 2017, 2016, and 2015
(In Thousands, Except Share Amounts)

	Year Ended December 31,		
	2017	**2016**	**2015**
Net income	$ 369,116	$ 231,092	$ 190,455
Components of other comprehensive income (loss)			
Unrealized holding gains (losses), net, arising on available-for-sale fixed maturity investments	377,605	20,295	(643,880)
Unrealized holding (losses) gains, net, arising on cash flow hedges	(73,726)	44,776	31,061
Reclassification adjustment for (gains), net, realized in net income	(34,208)	(74,271)	(52,597)
Net unrealized gains (losses) related to investments	269,671	(9,200)	(665,416)
Future policy benefits, DAC and VOBA adjustments	(88,648)	10,983	65,245
Employee benefit plan adjustment	14,265	1,966	31,586
Other, net	(74,383)	12,949	96,831
Other comprehensive income (loss) before income taxes	195,288	3,749	(568,585)
Income tax expense (benefit) related to items of other comprehensive income	68,351	1,312	(199,005)
Other comprehensive income (loss) [1]	126,937	2,437	(369,580)
Total comprehensive income (loss)	$ 496,053	$ 233,529	$ (179,125)

[1] Other comprehensive income (loss) includes the non-credit component of impaired losses on fixed maturities available-for-sale, net of future policy benefits, DAC and VOBA adjustments and income taxes, in the amounts of $(1,362), $(6,520), and $(6,596) for the years ended December 31, 2017, 2016, and 2015, respectively.

See notes to consolidated financial statements.

GREAT-WEST LIFE & ANNUITY INSURANCE COMPANY
Consolidated Statements of Stockholder's Equity
Years Ended December 31, 2017, 2016, and 2015
(In Thousands, Except Share Amounts)

	Common stock	Additional paid-in capital	Accumulated other comprehensive income (loss)	Retained earnings	Total
Balances, January 1, 2015	$ 7,032	$ 777,664	$ 603,018	$ 749,799	$ 2,137,513
Net income	—	—	—	190,455	190,455
Other comprehensive loss, net of income taxes	—	—	(369,580)	—	(369,580)
Dividends	—	—	—	(139,533)	(139,533)
Common stock issuance	201	60,602	—	—	60,803
Share-based compensation	—	1,655	—	—	1,655
Income tax benefit on share-based compensation	—	953	—	—	953
Balances, December 31, 2015	7,233	840,874	233,438	800,721	1,882,266
Net income	—	—	—	231,092	231,092
Other comprehensive income, net of income taxes	—	—	2,437	—	2,437
Dividends	—	—	—	(125,691)	(125,691)
Common stock issuance	60	19,690	—	—	19,750
Share-based compensation	—	2,190	—	—	2,190
Income tax benefit on share-based compensation	—	277	—	—	277
Balances, December 31, 2016	7,293	863,031	235,875	906,122	2,012,321
Net income	—	—	—	369,116	369,116
Other comprehensive income, net of income taxes	—	—	126,937	—	126,937
Impact of rate changes on deferred income taxes	—	—	78,145	(78,145)	—
Dividends	—	—	—	(145,301)	(145,301)
Capital contribution [1]	—	76,429	—	—	76,429
Common stock issuance	27	8,488	—	—	8,515
Share-based compensation	—	1,572	—	—	1,572
Balances, December 31, 2017	$ 7,320	$ 949,520	$ 440,957	$ 1,051,792	$ 2,449,589

[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.

See notes to consolidated financial statements.

GREAT-WEST LIFE & ANNUITY INSURANCE COMPANY
Consolidated Statements of Cash Flows
Years Ended December 31, 2017, 2016, and 2015
(In Thousands, Except Share Amounts)

	Year ended December 31,		
	2017	**2016**	**2015**
Cash flows from operating activities:			
Net income	$ 369,116	$ 231,092	$ 190,455
Adjustments to reconcile net income to net cash provided by operating activities:			
Losses allocated to participating policyholders	(1,669)	(1,024)	(1,267)
(Accretion of discounts) amortization of premiums on investments, net	(3,943)	2,209	(12,213)
Net realized gains on investments	(47,035)	(75,472)	(73,331)
Net proceeds (purchases) of trading securities	491,154	107,770	(277,510)
Interest credited to contractholders	631,051	606,790	577,548
Depreciation and amortization	69,781	74,987	139,735
Deferral of acquisition costs	(107,353)	(93,621)	(64,709)
Deferred income taxes	(167,059)	53,481	21,682
Contingent consideration	—	(209)	(17,600)
Amortization of low-income housing partnerships	517	372	4,563
Other, net	(5,052)	(1,366)	(3,072)
Changes in assets and liabilities:			
Policy benefit liabilities	(320,518)	(231,952)	(273,507)
Reinsurance recoverable	11,341	10,340	8,738
Investment income due and accrued	(11,764)	(4,392)	(4,385)
Other, net	32,406	(23,188)	10,213
Net cash provided by operating activities	940,973	655,817	225,340
Cash flows from investing activities:			
Proceeds from sales, maturities, and redemptions of investments:			
Fixed maturities, available-for-sale	5,366,470	6,229,209	5,470,124
Mortgage loans on real estate	426,421	389,663	594,497
Limited partnership interests, other corporation interests, and other investments	20,916	10,742	6,833
Purchases of investments:			
Fixed maturities, available-for-sale	(6,442,306)	(7,840,166)	(6,468,699)
Mortgage loans on real estate	(854,459)	(694,127)	(448,924)
Limited partnership interests, other corporation interests, and other investments	(22,255)	(5,766)	(1,527)
Net change in short-term investments	(53,097)	(39,677)	(2,238)
Policy loans, net	(10,553)	5,527	98,143
Purchases of furniture, equipment, and software	(40,997)	(44,644)	(78,778)
Net cash used in investing activities	(1,609,860)	(1,989,239)	(830,569)

See notes to consolidated financial statements.

(Continued)

GREAT-WEST LIFE & ANNUITY INSURANCE COMPANY
Consolidated Statements of Cash Flows
Years Ended December 31, 2017, 2016, and 2015
(In Thousands, Except Share Amounts)

	Year ended December 31,		
	2017	**2016**	**2015**
Cash flows from financing activities:			
Contract deposits	$ 3,000,182	$ 3,546,320	$ 2,527,039
Contract withdrawals	(2,240,275)	(2,098,286)	(1,782,571)
Change in due to/from parent and affiliates	(16,227)	(21,719)	(22,359)
Dividends paid	(145,301)	(125,691)	(139,533)
Capital contribution	76,429	—	—
Proceeds from issuance of common stock	8,515	19,750	60,803
Payments for and interest paid on financing element derivatives, net	(3,233)	(6,744)	(9,383)
Payment of contingent consideration	—	(14,400)	—
Net commercial paper borrowings	837	5,678	(5,218)
Change in book overdrafts	(12,332)	12,713	(1,651)
Employee taxes paid for withheld shares	(818)	(517)	(1,264)
Income tax benefit of stock option exercises	—	277	953
Net cash provided by financing activities	667,777	1,317,381	626,816
Net (decrease) increase in cash and cash equivalents	(1,110)	(16,041)	21,587
Cash and cash equivalents, beginning of year	18,321	34,362	12,775
Cash and cash equivalents, end of year	$ 17,211	$ 18,321	$ 34,362
Supplemental disclosures of cash flow information:			
Net cash paid during the year for:			
Income taxes	$ (22,668)	$ (1,543)	$ (4,093)
Interest	(26,630)	(31,254)	(37,288)
Non-cash investing and financing transactions during the years:			
Share-based compensation expense	$ (1,572)	$ (2,190)	$ (1,655)
Fair value of assets acquired in settlement of fixed maturity investments	9,659	—	—

See notes to consolidated financial statements. (Concluded)

GREAT-WEST LIFE & ANNUITY INSURANCE COMPANY
Notes to Consolidated Financial Statements
(Dollars in Thousands, Except Share Amounts)

1. Organization and Significant Accounting Policies

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 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.

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. Significant estimates are required to account for items and matters such as, but not limited to, the valuation of investments and derivatives in the absence of quoted market values, impairment of investments, accounting for derivative financial instruments, valuation of DAC and VOBA, valuation of policy benefit liabilities, valuation of employee benefits plan obligation, the valuation of deferred tax assets or liabilities, net, and valuation of contingent consideration. Actual results could differ from those estimates.

Summary of Significant Accounting Policies

Investments

Investments are reported as follows:

1. The Company classifies the majority of its fixed maturity investments as available-for-sale which are recorded at fair value with the related net unrealized gain or loss, net of policyholder related amounts, and deferred taxes, recorded in accumulated other comprehensive income (loss) ("AOCI"). Included in 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. Also included in AOCI is net unrealized gain or loss resulting from foreign currency translations of fixed maturity investments denominated in foreign currencies.

   Premiums and discounts are recognized as a component of net investment income using the effective interest method. Realized gains and losses are included in net realized investment gains (losses), declines in value determined to be other-than-temporary are included in total other-than-temporary losses, and realized gains and losses from foreign currency translations are recorded in net investment income.

   The Company also classifies certain fixed maturity investments as held-for-trading. Assets in the held-for-trading category are carried at fair value with changes in fair value reported in net investment income.

   The recognition of income on certain investments (e.g. loan-backed securities, including mortgage-backed and asset-backed securities) is dependent upon market conditions, which may result in prepayments and changes in amounts to be earned. Prepayments on all mortgage-backed and asset-backed securities are monitored monthly, and amortization of the premium and/or the accretion of the discount associated with the purchase of such securities are adjusted by such prepayments.

   The Company recognizes the acquisition of its public fixed maturity investments on a trade date basis and its private

placement investments on a funding date basis.

2. Mortgage loans on real estate consist primarily of domestic commercial collateralized loans and are carried at their unpaid principal balances adjusted for any unamortized premiums or discounts, origination fees, provision allowances, and foreign currency translations. Interest income is accrued on the unpaid principal balance for all loans, except for loans on non-accrual status. Premiums, discounts, and origination fees are amortized to net investment income using the effective interest method. Prepayment penalty fees are recognized in other realized investment gains upon receipt.

   The Company actively manages its mortgage loan portfolio by completing ongoing comprehensive analysis of factors such as debt service coverage ratios, loan-to-value ratios, payment status, default or legal status, annual collateral property evaluations, and general market conditions. On a quarterly basis, the Company reviews the above primary credit quality indicators in its internal risk assessment of loan impairment and credit loss. Management's risk assessment process is subjective and includes the categorization of all loans, based on the above mentioned credit quality indicators, into one of the following categories:

   - Performing - generally indicates the loan has standard market risk and is within its original underwriting guidelines.
   - Non-performing - generally indicates there is a potential for loss due to the deterioration of financial/monetary default indicators or potential foreclosure. Due to the potential for loss, these loans are evaluated for impairment.

   The adequacy of the Company's mortgage provision allowance is reviewed quarterly. The determination of the calculation and the adequacy of the mortgage provision allowance and mortgage impairments involve judgments that incorporate qualitative and quantitative Company and industry mortgage performance data. Management's periodic evaluation and assessment of the adequacy of the mortgage provision allowance and the need for mortgage impairments is based on known and inherent risks in the portfolio, adverse situations that may affect the borrower's ability to repay, the fair value of the underlying collateral, composition of the loan portfolio, current economic conditions, loss experience, and other relevant factors. Loans included in the non-performing category and other loans with certain substandard credit quality indicators are individually reviewed to determine if a specific impairment is required. Risk is mitigated primarily through first position collateralization, guarantees, loan covenants, and borrower reporting requirements. Since the Company does not originate or hold uncollateralized mortgages, loans are generally not deemed fully uncollectable. Generally, unrecoverable amounts are written off during the final stage of the foreclosure process.

   Loan balances are considered past due when payment has not been received based on contractually agreed upon terms. The accrual of interest is discontinued when concerns exist regarding the realization of loan principal or interest. The Company resumes interest accrual on loans when a loan returns to current status or under new terms when loans are restructured or modified.

   On a quarterly basis, any loans with terms that were modified during that period are reviewed to determine if the loan modifications constitute a troubled debt restructuring ("TDR"). In evaluating whether a loan modification constitutes a TDR, it must be determined that the modification is a significant concession and the debtor is experiencing financial difficulties.

3. Limited partnership and other corporation interests are accounted for using either the cost or equity method of accounting. The Company uses the cost method on investments where it has a minor equity interest and no significant influence over the entity's operations. The Company uses the equity method when it has a partnership interest that is considered more than minor, although the Company has no significant influence over the entity's operations. Also included in limited partnership interests are limited partnerships established for the purpose of investing in low-income housing that qualify for federal and state tax credits. These interests are carried at amortized cost as determined using the effective yield method.

   In the normal course of its activities, the Company is involved with other entities that are considered variable interest entities ("VIE"). The Company would be determined to be a primary beneficiary, and thus consolidate the VIE when the Company has both (a) the power to direct the activities of a VIE that most significantly impact the VIE's economic performance, and (b) the obligation to absorb losses of the VIE that could potentially be significant to the VIE or the right to receive benefits from the VIE that could potentially be significant to the VIE. The Company would also consolidate a VIE when it has, directly or indirectly, more than 50% of the outstanding voting shares (or more than 50% of the kick-out rights through voting interests for investments in limited partnerships). When the Company becomes involved with an entity and

when the nature of the Company's involvement with the entity changes, in order to determine if the Company must consolidate the entity, it evaluates:

- The structure and purpose of the entity;
- The risks and rewards created by and shared through the entity;
- The entity's participants' ability to direct the activities, receive its benefits, and absorb its losses; and
- If the Company has more than 50% of the outstanding voting rights or can unilaterally exercise substantive kick-out rights.

The Company performs ongoing qualitative analyses of its involvement with VIEs to determine if consolidation is required.

4. Policy loans are carried at their unpaid balances. Interest income on policy loans is recognized in net investment income at the contract interest rate when earned. Policy loans are fully collateralized by the cash surrender value of the associated insurance policy.

5. Short-term investments include securities purchased with investment intent and with initial maturities of one year or less, and are generally carried at fair value which is approximated from amortized cost. They also include highly liquid money market securities that are traded in an active market and are carried at fair value.

6. The Company participates in a securities lending program in which the Company lends fixed maturity securities that are held as part of its general account investment portfolio to third parties. The Company does not enter into these types of transactions for liquidity purposes, but rather for yield enhancement on its investment portfolio. The borrower can return and the Company can request the loaned securities be returned at any time. The Company maintains ownership of the securities at all times and is entitled to receive from the borrower any payments for interest received on such securities during the loan term. Securities lending transactions are accounted for as secured borrowings. The securities on loan are included within fixed maturities and short-term investments in the accompanying consolidated balance sheets. The securities lending agent indemnifies the Company against borrower risk, meaning that the lending agent agrees contractually to replace securities not returned due to a borrower default. 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. Such collateral is used to replace the securities loaned in event of default by the borrower. Acceptable collateral is generally defined as government securities, letters of credit and/or cash collateral. Some cash collateral may be reinvested in short-term repurchase agreements which are also collateralized by U.S. Government or U.S. Government Agency securities. Reinvested cash collateral is recognized within collateral under securities lending agreements in the accompanying consolidated balance sheets. Non-cash collateral is not recognized as the Company does not have effective control.

7. The Company's other-than-temporary impairments ("OTTI") accounting policy requires that a decline in the value of a security below its cost or amortized cost basis be assessed to determine if the decline is other-than-temporary. The assessment of whether an OTTI has occurred on fixed maturity investments, where management does not intend to sell the fixed maturity investment and it is not more likely than not the Company will be required to sell the fixed maturity investment before recovery of its amortized cost basis, is based upon management's case-by-case evaluation of the underlying reasons for the decline in fair value of each individual security. Management considers a wide range of factors, as described below, regarding the security issuer and uses its best judgment in evaluating the cause of the decline in its estimated fair value and in assessing the prospects for near-term recovery.

   Considerations used by the Company in the impairment evaluation process include, but are not limited to, the following:

   - The extent to which estimated fair value is below cost;
   - Whether the decline in fair value is attributable to specific adverse conditions affecting a particular instrument, its issuer, an industry, or geographic area;
   - The length of time for which the estimated fair value has been below cost;
   - Downgrade of a fixed maturity investment by a credit rating agency;
   - Deterioration of the financial condition of the issuer;
   - The payment structure of the fixed maturity investment and the likelihood of the issuer being able to make payments in the future; and
   - Whether dividends have been reduced or eliminated or scheduled interest payments have not been made.

If either (a) management has the intent to sell a fixed maturity investment or (b) it is more likely than not the Company will be required to sell a fixed maturity investment before its anticipated recovery, a charge is recorded in net realized investment losses equal to the difference between the fair value and cost or amortized cost basis of the security. If management does not intend to sell the security and it is not more likely than not the Company will be required to sell the fixed maturity investment before recovery of its amortized cost basis, but the present value of the cash flows expected to be collected (discounted at the effective interest rate implicit in the fixed maturity investment prior to impairment) is less than the amortized cost basis of the fixed maturity investment (referred to as the credit loss portion), an OTTI is considered to have occurred. In this instance, total OTTI is bifurcated into two components: the amount related to the credit loss, which is recognized in current period earnings; and the amount attributed to other factors (referred to as the non-credit portion), which is recognized as a separate component in AOCI. The expected cash flows utilized during the impairment evaluation process are determined using judgment and the best information available to the Company including default rates, credit ratings, collateral characteristics, and current levels of subordination. After the recognition of an OTTI, a fixed maturity investment is accounted for as if it had been purchased on the measurement date of the OTTI, with an amortized cost basis equal to the previous amortized cost basis less the OTTI recognized in earnings. The difference between the new amortized cost basis and the future cash flows is accreted into net investment income. The Company continues to estimate the present value of cash flows expected to be collected over the life of the security.

Derivative financial instruments

The Company enters into derivative transactions which include the use of interest rate swaps, interest rate swaptions, cross-currency swaps, foreign currency forwards, U.S. government treasury futures, Eurodollar futures, futures on equity indices, interest rate swap futures, and other forward contracts. The Company uses these derivative instruments to manage various risks, including interest rate and foreign currency exchange rate risk associated with its invested assets and liabilities. Derivative instruments are not used for speculative reasons. Certain of the Company's over-the-counter ("OTC") derivatives are cleared and settled through a central clearing counterparty while others are bilateral contracts between the Company and a counterparty.

All derivatives, regardless of hedge accounting treatment, are recorded in other assets and other liabilities at fair value. Although some derivatives are executed under a master netting arrangement, the Company does not offset in the consolidated balance sheets the fair value of those derivative instruments and the related cash collateral or net derivative receivables and payables executed with the same counterparty under the same master netting arrangement. At inception of a derivative transaction, the hedge relationship and risk management objective is documented and the designation of the derivative is determined based on specific criteria of the transaction. Accounting for the ongoing changes in the fair value of a derivative depends on the intended use of the derivative. If the derivative is designated as a cash flow hedge, the effective portions of the changes in the fair value of the derivative are recorded in AOCI and are recognized in the consolidated income statements when the hedged item affects earnings. Changes in fair value resulting from foreign currency translations are recorded in either AOCI or net investment income, consistent with where they are recorded on the underlying hedged asset or liability. Changes in the fair value, including changes resulting from foreign currency translations, of derivatives not qualifying for hedge accounting or where hedge accounting is not elected and the over effective portion of cash flow hedges are recognized in net investment income in the period of the change. Realized foreign currency transactional gains and losses, regardless of hedge accounting treatment, are recorded in net investment income. Termination of derivative contracts prior to expiration generally result in investment gains and losses. Fluctuations in interest rates, foreign currencies, or equity markets may cause the Company to experience volatility in net income.

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 are utilized to enhance the return of the Company's investment portfolio and are accounted for as derivative instruments not qualifying for hedge accounting. The Company purchases agency mortgage-backed TBAs yet does not always take physical delivery of a security but rather may roll the security into the next month. The Company generally takes physical delivery of a security before year end. Changes in fair value on open TBA transactions are recorded in net investment income while realized investment gains or losses are recorded once the Company cash settles or accepts physical delivery of a security.

As part of its hedging strategy, the Company may enter into certain derivative transactions where a cash investment is made by one party. Certain derivative instruments that contain a financing element at inception and where the Company is deemed to be the borrower are included in financing activities in the consolidated statements of cash flows. The cash flows from all other derivative transactions are included in operating activities.

The Company uses derivative financial instruments for risk management purposes associated with certain invested assets and policy liabilities. Derivatives are used to (a) hedge the economic effects of interest rate and stock market movements on the Company's guaranteed lifetime withdrawal benefit ("GLWB") liability, (b) hedge the economic effect of a large increase in interest rates on the Company's general account life insurance, group pension liabilities, and certain separate account life insurance liabilities, (c) hedge the economic risks of other transactions such as future asset acquisitions or dispositions, the timing of liability pricing, currency risks on non-U.S. dollar denominated assets, and (d) convert floating rate assets or debt obligations to fixed rate assets or debt obligations for asset/liability management purposes.

The Company controls the credit risk of its derivative contracts through credit approvals, limits, monitoring procedures, and in many cases, requiring collateral. The Company's exposure is 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.

Derivatives in a net asset position may have cash or securities pledged as collateral to the Company in accordance with the collateral support agreements with the counterparty. This collateral is held in a custodial account for the benefit of the Company. Unrestricted cash collateral is included in other assets and the obligation to return it is included in other liabilities. The cash collateral is reinvested in a government money market fund. Cash collateral pledged by the Company is included in other assets.

Fair Value

Certain assets and liabilities are recorded at fair value on the Company's consolidated balance sheets. The Company defines fair value as the price that would be received to sell an asset or paid to transfer a liability in the principal or most advantageous market for the asset or liability in an orderly transaction between market participants on the measurement date. The Company categorizes its assets and liabilities measured at fair value on a recurring basis into a three-level hierarchy, based on the priority of the inputs to the respective valuation technique. The fair value hierarchy gives the highest priority to quoted prices in active markets for identical assets or liabilities (Level 1) and the lowest priority to unobservable inputs (Level 3). The Company's assets and liabilities recorded at fair value on a recurring basis have been categorized based upon the following fair value hierarchy:

- Level 1 inputs utilize observable, quoted prices (unadjusted) in active markets for identical assets or liabilities that the Company has the ability to access at the measurement date. Financial assets and liabilities utilizing Level 1 inputs include certain money market funds.

- Level 2 inputs utilize other than quoted prices included in Level 1 that are observable for the asset or liability, either directly or indirectly. Level 2 inputs include quoted prices for similar assets and liabilities in active markets and inputs other than quoted prices that are observable for the asset or liability, such as interest rates and yield curves that are observable at commonly quoted intervals. The fair values for some Level 2 securities are obtained from pricing services. The inputs used by the pricing services are reviewed at least quarterly or when the pricing vendor issues updates to its pricing methodology. For fixed maturity securities and separate account assets and liabilities, inputs include benchmark yields, reported trades, broker-dealer quotes, issuer spreads, two-sided markets, benchmark securities, bids, evaluated bids, offers, and reference data including market research publications. Additional inputs utilized for assets and liabilities classified as Level 2 are:

    - Asset-backed, residential mortgage-backed, commercial mortgage-backed securities, and collateralized debt obligations - new issue data, monthly payment information, collateral performance, and third party real estate analysis.
    - U.S. states and their subdivisions - material event notices.
    - Short-term investments - valued based on amortized cost due to their short term nature and high credit quality of the issuers.
    - Derivative instruments - trading activity, swap curves, credit spreads, currency volatility, net present value of cash flows, and news sources.
    - Separate account assets and liabilities - various index data and news sources, amortized cost (which approximates fair value), trading activity, swap curves, credit spreads, recovery rates, restructuring, net present value of cash flows, and quoted prices in markets that are not active or for which all significant inputs are observable, either directly or indirectly.

- Level 3 inputs are unobservable and include situations where there is little, if any, market activity for the asset or liability. In general, the prices of Level 3 securities are obtained from single broker quotes and internal pricing models. If the broker's inputs are largely unobservable, the valuation is classified as a Level 3. Broker quotes are validated through an internal analyst review process, which includes validation through known market conditions and other relevant data, as noted below. Internal models are usually cash flow based utilizing characteristics of the underlying collateral of the security such as default rate and other relevant data. Inputs utilized for securities classified as Level 3 are as follows:

    - Corporate debt securities - unadjusted single broker quotes which may be in an illiquid market or otherwise deemed unobservable.
    - Asset-backed securities - internal models utilizing asset-backed securities index spreads.
    - GLWB - internal models utilizing long-term equity and interest rate implied volatility, mortality, and policyholder behavior assumptions, such as benefit utilization and partial withdrawals.

The fair value of certain investments in the separate accounts, limited partnerships, and common collective trusts are estimated using net asset value per unit as a practical expedient and are excluded from the fair value hierarchy tables in Notes 8 and 17. These net asset values are based on the fair value of the underlying investments less liabilities.

In certain cases, the inputs used to measure fair value may fall into different levels of the fair value hierarchy. In such cases, the level in the fair value hierarchy within which the fair value measurement in its entirety falls has been determined based on the lowest level input that is significant to the fair value measurement in its entirety. The Company's assessment of the significance of a particular input to the fair value measurement in its entirety requires judgment and considers factors specific to the asset or liability.

Overall, transfers between levels are attributable to a change in the observability of inputs. Assets and liabilities are transferred to a lower level in the hierarchy when a significant input cannot be corroborated with market observable data. This may occur when market activity decreases and underlying inputs cannot be observed, current prices are not available, and/or when there are significant variances in quoted prices, thereby affecting transparency. Assets and liabilities are transferred to a higher level in the hierarchy when circumstances change such that a significant input can be corroborated with market observable data. This may be due to a significant increase in market activity including recent trades, a specific event, or one or more significant input(s) becoming observable. All transfers between levels are recognized at the beginning of the reporting period in which the transfer occurred.

The policies and procedures utilized to review, account for, and report on the value and level of the Company's securities were determined and implemented by the Finance division. The Investments division is responsible for the processes related to security purchases and sales and provides valuation and leveling input to the Finance division when necessary. Both divisions within the Company have worked in conjunction to establish thorough pricing, review, approval, accounting, and reporting policies and procedures around the securities valuation process.

In some instances, securities are priced using external broker quotes. In most cases, when broker quotes are used as pricing inputs, more than one broker quote is obtained. External broker quotes are reviewed internally by comparing the quotes to similar securities in the public market and/or to vendor pricing, if available. Additionally, external broker quotes are compared to market reported trade activity to ascertain whether the price is reasonable, reflective of the current market prices, and takes into account the characteristics of the Company's securities.

Cash and cash equivalents

Cash and cash equivalents include amounts in demand deposit accounts as well as highly liquid investments that are readily convertible into cash and are not subject to significant risks from fluctuations in interest rates. In evaluating for classification as cash equivalents, the Company requires that individual securities have original maturities of 90 days or less.

Book overdrafts occur when checks have been issued by the Company, but have not been presented to the Company's disbursement bank accounts for payment. These bank accounts allow the Company to delay funding of the issued checks until they are presented for payment. This delay in funding results in a temporary source of financing. The activity related to book overdrafts is included in the financing activities in the consolidated statement of cash flows. The book overdrafts, in the amounts of $518 and $12,850, are included in other liabilities at December 31, 2017 and 2016, respectively.

Internal use software

Purchased software costs, as well as certain internal and external costs incurred to develop internal use computer software during the application development stage, are capitalized and amortized using the straight-line method over the software's estimated useful life up to five years. Capitalized internal use software development costs, net of accumulated amortization, in the amounts of $103,487 and $98,074, are included in other assets at December 31, 2017 and 2016, respectively. The Company capitalized $34,164, $30,420, and $47,895 of internal use software development costs during the years ended December 31, 2017, 2016, and 2015, respectively.

DAC and VOBA

The Company incurs costs in connection with the acquisition of new and renewal insurance business. Costs that vary directly with and relate to the successful production of new business are deferred as DAC. These costs consist primarily of commissions, costs associated with the Company's sales representatives, and policy issuance and underwriting expenses related to the production of successfully acquired new business. A success factor is derived from actual contracts issued by the Company from requests for proposals or applications received and applied to the deferrable costs. The recoverability of such costs is dependent upon the future profitability of the related business. Recoverability testing is performed for current issue year products to determine if gross revenues are sufficient to cover DAC and expenses. At least annually, loss recognition testing is performed on aggregated blocks of business to adjust the DAC balance.

VOBA represents the estimated fair value of insurance or annuity contracts acquired either directly through the acquisition of another insurance company or through the acquisition of insurance or annuity contracts through assumption reinsurance transactions.

DAC and VOBA associated with the annuity products and flexible premium universal life insurance products are being amortized over the life of the contracts in proportion to the emergence of gross profits. Retrospective adjustments of these amounts are made when the Company revises its estimates of current or future gross profits on an annual basis. DAC and VOBA associated with traditional life insurance are amortized over the premium-paying period of the related policies in proportion to premium revenues recognized. DAC and VOBA, for applicable products, are adjusted for the impact of unrealized gains or losses on investments as if these gains or losses had been realized, with corresponding credits or charges included in AOCI.

Goodwill and other intangible assets

Goodwill is the excess of cost over the fair value of assets acquired and liabilities assumed in connection with an acquisition. It is considered an indefinite lived asset and therefore is not amortized. The Company tests goodwill for impairment annually or more frequently if events or circumstances indicate that there may be justification for conducting an interim test. If the carrying value of goodwill exceeds its fair value, the excess is recognized as an impairment and recorded as a charge against net income in the period in which the impairment is identified.

Other intangible assets represent the estimated fair value of the portion of the purchase price that was allocated to the value of customer relationships and non-competition intangible asset in various acquisitions. These intangible assets have been assigned values using various methodologies, including present value of projected future cash flows, analysis of similar transactions that have occurred or could be expected to occur in the market and replacement or reproduction cost. The initial valuations of these intangible assets were supported by an independent valuation study commissioned by the Company. Other identified intangible assets with finite lives are amortized straight-line over their estimated useful lives, which initially ranged from two to 18 years (weighted average 15 years), primarily based on the cash flows generated by these assets.

Separate accounts

Separate account assets and related liabilities are carried at fair value in the accompanying consolidated balance sheets. The Company issues variable annuity contracts and variable universal life contracts through separate accounts for which investment income and investment gains and losses accrue directly to, and investment risk is borne by, the contract holder and therefore, are not included in the Company's consolidated statements of income.

Revenues to the Company from the separate accounts consist of contract maintenance fees, investment management fees,

administrative fees, and mortality and expense risk charges.

The Company's separate accounts invest in shares of Great-West Funds, Inc. ("Great-West Funds") and Putnam Investments, LLC ("Putnam") sponsored mutual funds ("Putnam Funds"), open-end management investment companies, which are related parties of the Company, and shares of other non-affiliated mutual funds and government and corporate bonds.

Future policy benefits liabilities

Life insurance and annuity future benefits liabilities with life contingencies in the amounts of $17,293,006 and $16,530,160 at December 31, 2017 and 2016, respectively, are computed on the basis of assumed investment yield, mortality, morbidity, and expenses, including a margin for adverse deviation. These future policy benefits are calculated as the present value of future benefits (including dividends) and expenses less the present value of future net premiums. The assumptions used in calculating the future policy benefits generally vary by plan, year of issue, and policy duration. Additionally, these future policy benefits are established for claims that have been incurred but not reported based on factors derived from past experience.

Annuity contract benefits liabilities without life contingencies in the amounts of $12,704,401 and $12,291,378 at December 31, 2017 and 2016, respectively, are established at the contract holder's account value, which is equal to cumulative deposits and credited interest, less withdrawals and mortality, and expense and/or administrative service charges. The Company's general account also has some immediate annuities. Future benefits for immediate annuities without life contingent payouts are computed on the basis of assumed investment yield and expenses.

Minimum guarantees

The Company calculates additional liabilities for certain variable annuity guaranteed death benefits. The additional reserve for such products recognizes the portion of contract assessments received to compensate the Company for death benefits. Reserves for annuity guaranteed minimum death benefits ("GMDB") are determined by estimating the present value of expected benefits in excess of the projected account balance. Expected experience is based on a range of inputs and scenarios. The assumptions of investment performance and volatility are consistent with the historical experience of the appropriate underlying equity index, such as the Standard & Poor's ("S&P") 500 Index.

The Company also offers 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 consolidated balance sheets. Changes in fair value of GLWB are recorded in net investment income in the consolidated statements of income.

Reinsurance

In the normal course of its business, the Company seeks to limit its exposure to loss on any single insured and to recover a portion of benefits paid by ceding risks to other insurance enterprises under excess coverage, quota share, yearly renewable term, coinsurance, and modified coinsurance contracts. The Company also assumes risk by participating in yearly renewable term and coinsurance agreements.

For each of its reinsurance agreements, the Company determines if the agreement provides indemnification against loss or liability relating to insurance risk in accordance with applicable accounting standards. If the Company determines that a reinsurance agreement does not provide indemnification against loss or liability relating to insurance risk, the Company records the agreement using the deposit method of accounting. The Company reviews all contractual features, particularly those that may limit the amount of insurance risk to which the reinsurer is subject or features that delay the timely reimbursement of claims.

Policy benefits, and policy and contract claims ceded to (assumed from) other insurance companies, are carried as a reinsurance recoverable (payable) in the accompanying consolidated balance sheets. Premiums, fee income, and policyholder benefits are reported net of reinsurance ceded (assumed) in the accompanying consolidated statements of income. The cost of reinsurance related to long duration contracts is accounted for over the life of the underlying reinsured policies using assumptions consistent with those used to account for the underlying policies.

The Company strives to cede risks to highly rated, well-capitalized reinsurers. The Company monitors and evaluates the financial condition of reinsurers to minimize exposure to credit risk.

Policy and contract claims

Policy and contract claims include provisions for claims incurred but not reported and claims in the process of settlement. The provision for claims incurred but not reported is valued based primarily on the Company's prior experience. Claims in the process of settlement are valued in accordance with the terms of the related policies and contracts.

Participating business

The Company has participating policies in which the policyholder shares in the Company's earnings through policyholder dividends that reflect the difference between the assumptions used in the premium charged and the actual experience on those policies. The amount of dividends to be paid is determined by the Board of Directors.

Participating life and annuity policy benefit liabilities were $6,946,953 and $6,844,640 at December 31, 2017 and 2016, respectively. Participating business comprised approximately 10% and 10% of the Company's individual life insurance in-force at December 31, 2017 and 2016, respectively, and 19%, 18%, and 20% of individual life insurance premium income for the years ended December 31, 2017, 2016, and 2015, respectively. The policyholder's share of net income on participating policies that cannot be distributed to the Company's stockholder is excluded from stockholder's equity and recorded as undistributed earnings on participating business in the consolidated balance sheet.

Revenue recognition

Life insurance premiums are recognized when due. Annuity contract premiums with life contingencies are recognized as received. Revenues for annuity and other contracts without significant life contingencies consist of contract charges for the cost of insurance, and contract administration and surrender fees that have been assessed against the contract account balance during the period and are recognized when earned in fee income. Fees from assets under management, assets under administration, shareholder servicing, mortality and expense risk charges, administration and recordkeeping services, and investment advisory services are recognized when earned in fee income.

Net investment income

Interest income from fixed maturities, mortgage loans on real estate, and policy loans is recognized when earned.

Realized investment gains (losses)

Realized investment gains and losses are reported as a component of revenues and are determined on a specific identification basis. Realized investment gains and losses also result from the termination of derivative contracts prior to expiration that are not designated as hedges for accounting purposes and certain fair-value hedge relationships.

Benefits and expenses

Benefits and expenses on policies with life contingencies are associated with earned premiums so as to result in recognition of profits over the life of the contracts.

Income taxes

Income taxes are recorded using the asset and liability method in which deferred tax assets and liabilities are recorded for expected future tax consequences of events that have been recognized in either the Company's consolidated financial statements or consolidated tax returns. In estimating future tax consequences, all expected future events, other than enactments or changes in the tax laws or rules, are considered. A valuation allowance is provided to the extent that it is more likely than not that deferred tax assets will not be realized. Although realization is not assured, management believes it is more likely than not that the deferred tax asset will be realized. The effect on deferred taxes from a change in tax rates is recognized in income in the period that includes the enactment date.

2. Acquisition

Putnam Retirement Business

On January 1, 2015, the Company acquired the retirement business of Putnam, an affiliate of the Company. The transaction was accounted for as a combination between entities under common control. As such, the assets and liabilities acquired from Putnam were recorded at historical cost as of January 1, 2015. In exchange for cash paid in the amount of $4,114, the Company acquired $11,501 of other assets, assumed $7,717 of other liabilities, and recognized a dividend of $330.

3. 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, 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 consolidated financial statements.

In February 2018, the FASB issued ASU 2018-02, *Income Statement - Reporting Comprehensive Income*. The new guidance is effective for the fiscal years beginning after December 15, 2018, including interim periods. Early adoption is permitted for reporting periods for which financial statements have not yet been issued. The new guidance gives companies the option to reclassify from accumulated OCI to retained earnings stranded tax effects resulting from the new federal corporate income tax rate. The Company elected to early adopt this standard and to reclassified stranded tax effects of $78,145 in accumulated OCI to retained earnings on enactment date.

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 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 were primarily focused on customer contracts with 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 not impact current revenue recognition policies; however, it will impact the accounting for certain contract costs 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. This change will not have a material impact to the Company's 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 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. The adoption of this standard will not have a material impact on the Company's consolidated financial statements.

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 continues to evaluate the impact of this update on its 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 continues to evaluate the impact of this update on its 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 continues to evaluate the impact of this update on its consolidated financial statements.

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 adoption of this standard will not have a material impact on the 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 adoption of this standard will not have a material impact on the 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 while providing guidance for capitalization eligibility for service costs. The adoption of this standard will not have a material impact on the consolidated financial statements.

4. Related Party Transactions

In the normal course of its business, the Company enters into reinsurance agreements with related parties. Included in the consolidated balance sheets are the following amounts related to reinsurance ceded to and assumed from related parties:

	December 31,	
	2017	2016
Reinsurance recoverable	$ 515,417	$ 522,950
Future policy benefits	1,513,311	1,608,884

Included in the consolidated statements of income are the following related party amounts:

	Year Ended December 31,		
	2017	2016	2015
Premium income, net of related party premiums ceded of $20,033, $17,774, and $15,731	$ 61,368	$ 66,928	$ 68,722
Life and other policy benefits, net of reinsurance recoveries of $10,313, $8,862, and $6,494	179,748	189,125	193,215
Decrease in future policy benefits	(70,654)	(88,639)	(52,842)

In the normal course of business the Company enters into agreements with related parties whereby it provides and/or receives recordkeeping services, investment advisory services, and tax-related services, as well as corporate support services which include general and administrative services, information technology services, and marketing services. The following table presents revenue, expenses incurred and expense reimbursement from related parties for services provided and/or received pursuant to these service agreements. These amounts, in accordance with the terms of the contracts, are based upon market price, estimated costs incurred or resources expended as determined by number of policies, number of participants, certificates in-force, administered assets, or other similar drivers.

Description	Related party	Year Ended December 31,			Financial statement line
		2017	2016	2015	
Receives corporate support services	The Canada Life Assurance Company ("CLAC")[1], Great-West Life[1], Great West Global[3], and Putnam[2]	$ 22,400	$ 18,763	$ 12,609	General insurance expense
Provides shareholder services	Putnam[2]	16,598	15,852	5,531	Fee income
Receives reimbursement from tax sharing indemnification related to state and local tax liabilities	Putnam[2]	9,611	12,261	13,563	Other revenue
Provides advisory, trustee, recordkeeping and administrative services	Great-West Funds and Collective Income Trusts[4]	150,441	140,455	138,936	Fee income

[1] An indirect wholly-owned subsidiary of Lifeco
[2] A wholly-owned subsidiary of Lifeco U.S.
[3] An indirect wholly-owned subsidiary of Lifeco U.S.
[4] Great-West Capital Management, LLC, a subsidiary of the Company, serves as a Registered Investment Advisor to Great-West Funds, an open-end management investment company, which is an affiliate of GWL&A and to Great-West Trust Company, LLC, an affiliated trust company. Great-West Trust Company, LLC, serves as trustee to several collective investment trusts. The Company provides Great-West Funds, Inc. recordkeeping and administrative services to shareholders and account owners.

The following table summarizes amounts due from parent and affiliates:

Related party	Indebtedness	Due date	December 31, 2017	December 31, 2016
GWL&A Financial	On account	On demand	$ 52,646	$ 45,190
Lifeco U.S.	On account	On demand	41,966	34,992
CLAC	On account	On demand	19,503	—
Other related party receivables	On account	On demand	18	1,813
Total			$ 114,133	$ 81,995

The following table summarizes amounts due to parent and affiliates:

Related party	Indebtedness	Due date	December 31, 2017	December 31, 2016
GWL&A Financial [1]	Surplus note	November 2034	$ 194,532	$ 194,502
GWL&A Financial [2]	Surplus note	May 2046	333,400	333,400
GWL&A Financial [3]	Surplus note	December 2027	12,000	—
GWL&A Financial	Note interest	May 2018	3,409	3,190
Other related party payables	On account	On demand	10,560	6,898
Total			$ 553,901	$ 537,990

[1] A note payable to GWL&A Financial was issued as a surplus note on November 15, 2004, with a face amount of $195,000 and carrying amounts of $194,532 and $194,502 at December 31, 2017, and 2016, respectively. The surplus note bears interest at the rate of 6.675% per annum, payable in arrears each May and November. The note matures on November 15, 2034.
[2] A note payable to GWL&A Financial was issued as a surplus note on May 19, 2006, with a face amount and carrying amount of $333,400. The surplus note bears an interest rate of 2.588% plus the then-current three-month London Interbank Offering Rate ("LIBOR"). The surplus note became redeemable by the Company at the principal amount plus any accrued and unpaid interest after May 16, 2016. The note matures on May 16, 2046.
[3] A note payable to GWL&A Financial was issued as a surplus note on December 29, 2017, with a face amount and carrying amount of $12,000. The surplus note bears an interest rate of 3.5% per annum. The note matures on December 29, 2027.

Payments of principal and interest under the surplus notes shall be made only out of surplus funds of the Company and only with prior written approval of the Commissioner of Insurance of the State of Colorado when the Commissioner of Insurance is satisfied that the financial condition of the Company warrants such action pursuant to applicable Colorado law. Payments of principal and interest on the surplus notes are payable only if at the time of such payment and after giving effect to the making thereof, the Company's surplus would not fall below 2.5 times the authorized control level as required by the most recent risk-based capital calculations.

Interest expense attributable to these related party debt obligations was $25,773, $29,185 and $37,059 for the years ended December 31, 2017, 2016, and 2015, respectively. Included in other liabilities on the consolidated balance sheets is $3,409 and $3,190 of interest payable attributable to these related party debt obligations for the years ended December 31, 2017, and 2016, respectively.

GWL&A Financial has a letter of credit for the benefit of GWSC for capital support in the amount of $70 million and which renews annually until the Company terminates it under the provisions specified in the agreement. Additionally, GWL&A Financial terminated a letter of credit on December 21, 2017 in the amount of $1,141 million which was for the benefit of the Company as collateral under the GWSC and CLAC reinsurance agreement for policy liabilities. This letter of credit was replaced with an excess of loss reinsurance agreement with a third party reinsurer. At December 31, 2017 and 2016, there were no outstanding amounts related to the letters of credit.

Included within reinsurance recoverable in the consolidated balance sheets are $503,258 and $511,575 of funds withheld assets as of December 31, 2017, and 2016, respectively. This reinsurance agreement is related to term life insurance policies assumed by GWSC from CLAC. CLAC pays the Company, on a quarterly basis, interest on the funds withheld balance at a rate of

4.55% per annum. The interest income, in the amount of $21,813, $22,045, and $22,165, is included in net investment income for the years ended December 31, 2017, 2016, and 2015, respectively.

The Company's separate accounts invest in shares of Great-West Funds and Putnam Funds, which are related parties of the Company and shares of other non-affiliated mutual funds and government and corporate bonds. The Company's separate accounts include mutual funds or other investment options that purchase guaranteed interest annuity contracts issued by the Company. During the years ended December 31, 2017, 2016, and 2015, these purchases totaled $292,774, $183,365, and $146,547, respectively. As these general account investment contracts are also included in the separate account balances in the accompanying consolidated balance sheets, the Company has reduced the separate account assets and liabilities by $335,311 and $302,898 at December 31, 2017, and 2016, respectively, to eliminate these amounts in its consolidated balance sheets at those dates.

5. Summary of Investments

The following tables summarize fixed maturity investments classified as available-for-sale and the non-credit-related component of OTTI in AOCI:

	December 31, 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	$ 1,837,748	$ 41,777	$ 7,883	$ 1,871,642	$ —
Obligations of U.S. states and their subdivisions	1,872,120	220,507	1,655	2,090,972	—
Corporate debt securities [2]	15,234,473	581,991	110,377	15,706,087	(1,018)
Asset-backed securities	1,622,806	105,301	10,131	1,717,976	(56,735)
Residential mortgage-backed securities	63,187	2,446	649	64,984	(140)
Commercial mortgage-backed securities	1,352,906	17,692	12,989	1,357,609	—
Collateralized debt obligations	779,722	4,227	80	783,869	—
Total fixed maturities	$22,762,962	$ 973,941	$ 143,764	$ 23,593,139	$ (57,893)

[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 $89,267 and estimated fair value of $87,348.

	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 8 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.

	December 31, 2017	
	Amortized cost	**Estimated fair value**
Maturing in one year or less	$ 721,952	$ 735,235
Maturing after one year through five years	3,775,332	3,895,328
Maturing after five years through ten years	7,894,918	8,085,972
Maturing after ten years	5,064,983	5,455,996
Mortgage-backed and asset-backed securities	5,305,777	5,420,608
Total fixed maturities	$ 22,762,962	$ 23,593,139

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

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

	Year Ended December 31,		
	2017	**2016**	**2015**
Proceeds from sales	$ 3,933,887	$ 4,541,303	$ 4,187,547
Gross realized gains from sales	64,885	84,305	47,965
Gross realized losses from sales	30,991	16,858	6,476

Mortgage loans on real estate - The following table summarizes the recorded investment of the mortgage loan portfolio by risk assessment category as of December 31, 2017, and 2016, respectively.

	December 31, 2017	December 31, 2016
Performing	$ 4,005,960	$ 3,560,243
Non-performing	—	1,465
Total	$ 4,005,960	$ 3,561,708

The following table summarizes activity in the mortgage provision allowance:

	Year Ended December 31,		
	2017	2016	2015
	Commercial mortgages	Commercial mortgages	Commercial mortgages
Beginning balance	$ 2,882	$ 2,890	$ 2,890
Provision increases	157	536	—
Charge-off	(663)	—	—
Recovery	(30)	—	—
Provision decreases	(1,573)	(544)	—
Ending balance	$ 773	$ 2,882	$ 2,890
Allowance ending balance by basis of impairment method:			
Individually evaluated for impairment	$ —	$ 536	$ —
Collectively evaluated for impairment	773	2,346	2,890
Recorded investment balance in the mortgage loan portfolio, gross of allowance, by basis of impairment method:	$ 4,005,960	$ 3,561,708	$ 3,250,594
Individually evaluated for impairment	2,942	1,465	14,031
Collectively evaluated for impairment	4,003,018	3,560,243	3,236,563

Limited partnership and other corporation interests - At December 31, 2017, and 2016, the Company had $45,540 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 VIE. Consolidation is not required as the Company is not deemed to be the primary beneficiary of the VIEs.

The carrying value and maximum exposure to loss in relation to the activities of the VIEs was $45,540 and $32,444 at December 31, 2017 and 2016, respectively.

Securities lending - The Company had no securities on loan under the program, and therefore no cash or securities held as collateral, at December 31, 2017, and 2016.

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:

	December 31, 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	$ 755,861	$ 4,159	$ 230,447	$ 3,724	$ 986,308	$ 7,883
Obligations of U.S. states and their subdivisions	24,908	180	37,012	1,475	61,920	1,655
Corporate debt securities	2,229,585	19,568	2,036,323	90,809	4,265,908	110,377
Asset-backed securities	544,778	3,011	245,341	7,120	790,119	10,131
Residential mortgage-backed securities	4,405	23	11,416	626	15,821	649
Commercial mortgage-backed securities	342,820	2,451	295,164	10,538	637,984	12,989
Collateralized debt obligations	7,277	80	—	—	7,277	80
Total fixed maturities	$ 3,909,634	$ 29,472	$ 2,855,703	$ 114,292	$6,765,337	$ 143,764
Total number of securities in an unrealized loss position		368		293		661

	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 $246,465, or 63%, from December 31, 2016, to December 31, 2017. The majority, or $206,316, of the decrease was in the less than twelve months category. The overall decrease in unrealized losses was across several asset classes and reflects lower interest rates at December 31, 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 $40,149 from December 31, 2016, to December 31, 2017. Corporate debt securities account for 80%, or $90,809, of the unrealized losses and OTTI greater than twelve months at December 31, 2017. Non-investment grade corporate debt securities account for $6,244 of the unrealized losses and OTTI greater than twelve months. Management does not have the intent to sell these assets; therefore, an OTTI was not recognized in earnings.

Asset-backed and commercial mortgage-backed securities account for 15% of the unrealized losses and OTTI greater than twelve months at December 31, 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:

	Year Ended December 31,		
	2017	2016	2015
Beginning balance	$ 83,665	$ 102,343	$ 119,532
Initial impairments - credit loss on securities not previously impaired	—	—	759
Reductions:			
Due to sales, maturities, or payoffs during the period	—	(1,785)	(559)
Due to increases in cash flows expected to be collected that are recognized over the remaining life of the security	(21,434)	(16,893)	(17,389)
Ending balance	$ 62,231	$ 83,665	$ 102,343

Net Investment Income

The following table summarizes net investment income:

	Year Ended December 31,		
	2017	2016	2015
Investment income:			
Fixed maturity and short-term investments	$ 890,593	$ 819,047	$ 796,133
Mortgage loans on real estate	163,361	142,478	150,284
Policy loans	199,383	199,737	206,081
Limited partnership and other corporation interests	1,812	1,759	10,462
Net interest on funds withheld balances under reinsurance agreements, related party	21,813	22,045	22,165
Derivative instruments [1]	(48,684)	100,007	78,655
Other	11,176	10,468	9,228
	1,239,454	1,295,541	1,273,008
Investment expenses	(19,401)	(18,982)	(18,578)
Net investment income	$ 1,220,053	$ 1,276,559	$ 1,254,430

[1] Includes gains (losses) on the hedged asset for fair value hedges.

Realized Investment Gains (Losses)

The following table summarizes realized investment gains (losses):

	Year Ended December 31,		
	2017	2016	2015
Realized investment gains (losses):			
Fixed maturity and short-term investments	$ 13,443	$ 87,108	$ 46,027
Derivative instruments	8,969	(5,318)	5,840
Mortgage loans on real estate	13,583	10,972	31,841
Limited partnership and other corporation interests	10,383	—	—
Other	25	120	2
Realized investment gains (losses)	$ 46,403	$ 92,882	$ 83,710

Included in net investment income and realized investment gains (losses) are amounts allocable to the participating fund account. This allocation is based upon the activity in a specific block of investments that are segmented for the benefit of the participating fund account.

6. 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 $93,761 and $38,324 as of December 31, 2017, and 2016, respectively. The Company had pledged collateral related to these derivatives of $42,750 and zero as of December 31, 2017, and 2016, respectively, in the normal course of business. If the credit-risk-related contingent features were triggered on December 31, 2017, the fair value of assets that could be required to settle the derivatives in a net liability position was $51,011.

At December 31, 2017, and 2016, the Company had pledged $52,330 and zero of unrestricted cash collateral to counterparties in the normal course of business, while other counterparties had pledged $5,490 and $103,214 of unrestricted cash collateral to the Company to satisfy collateral netting agreements, respectively.

At December 31, 2017, the Company estimated $15,415 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, 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 the Chicago Mercantile Exchange ("CME") while others are bilateral contracts between the Company and a counterparty.

In 2017, the CME amended its rulebook to classify variation margin transfers as settlement payments instead of collateral. The Company adjusts the fair value by the variation margin payments on derivatives cleared through the CME.

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.

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 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 Company had no open TBA contracts at either December 31, 2017, or 2016.

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

	December 31, 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	$ 388,800	$ 7,476	$ 7,476	$ —
Cross-currency swaps	800,060	(31,358)	19,958	51,316
Total cash flow hedges	1,188,860	(23,882)	27,434	51,316
Total derivatives designated as hedges	1,188,860	(23,882)	27,434	51,316
Derivatives not designated as hedges:				
Interest rate swaps	519,100	1,902	3,530	1,628
Futures on equity indices	22,074	—	—	—
Interest rate futures	60,700	—	—	—
Interest rate swaptions	164,522	75	75	—
Cross-currency swaps	612,733	(21,279)	20,320	41,599
Total derivatives not designated as hedges	1,379,129	(19,302)	23,925	43,227
Total derivative financial instruments	$ 2,567,989	$ (43,184)	$ 51,359	$ 94,543

[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 consolidated balance sheets.

	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 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 year ended December 31, 2017, was $905,977, $1,323,398, $108,438, $162,896, and $2,231,196 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 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)			
	Year Ended December 31,			Year Ended December 31,			
	2017	2016	2015	2017	2016	2015	
Cash flow hedges:							
Interest rate swaps	$ 486	$ 810	$ 2,228	$ 5,920	$ 5,437	$ 6,779	(A)
Interest rate swaps	—	—	—	59	—	3,634	(B)
Interest rate swaps	(5,590)	21,228	—	(2,954)	(2,657)	—	(C)
Cross-currency swaps	(68,622)	22,738	28,833	1,473	8,469	2,101	(A)
Interest rate futures	—	—	—	—	—	(134)	(A)
Total cash flow hedges	$ (73,726)	$ 44,776	$ 31,061	$ 4,498	$ 11,249	$ 12,380	

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

	Gain (loss) on derivatives recognized in net income		
	Year Ended December 31,		
	2017	2016	2015
Derivatives not designated as hedging instruments:			
Futures on equity indices	$ (559) (A)	$ 817 (A)	$ (284) (A)
Futures on equity indices	(5,829) (B)	(7,930) (B)	(527) (B)
Interest rate swaps	3,280 (A)	(4,541) (A)	(1,094) (A)
Interest rate futures	75 (A)	(57) (A)	(65) (A)
Interest rate futures	(307) (B)	(164) (B)	1 (B)
Interest rate swaptions	(83) (A)	302 (A)	2,868 (A)
Interest rate swaptions	(280) (B)	(313) (B)	(3,115) (B)
Currency forwards	— (A)	111 (A)	— (A)
Other forward contracts	15,326 (B)	4,690 (B)	5,074 (B)
Cross-currency swaps	(56,018) (A)	85,746 (A)	69,819 (A)
Cross-currency swaps	— (B)	(1,601) (B)	— (B)
Total derivatives not designated as hedging instruments	$ (44,395)	$ 77,060	$ 72,677

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

Embedded derivative - GLWB

The Company offers 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 consolidated balance sheets. Changes in fair value of GLWB are recorded in net investment income in the consolidated statements of income.

The estimated fair value of the GLWB was $11,095 and $5,712 at December 31, 2017, and 2016, respectively. The changes in fair value of the GLWB were $5,383 and $(5,545) for the years ended December 31, 2017, and 2016, respectively.

7. Summary of Offsetting Assets and Liabilities

The Company enters into derivative transactions and short-term reverse repurchase agreements 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. Short-term reverse repurchase agreements also include collateral provisions with the counterparty. 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:

	December 31, 2017			
		Gross fair value not offset in balance sheets		
Financial instruments (assets):	Gross fair value of recognized assets[1]	Financial instruments	Cash collateral	Net fair value
Derivative instruments [2]	$ 52,738	$ (47,827)	$ (4,911)	$ —
Short-term reverse repurchase agreements [3]	23,200	(23,200)	—	—
Total financial instruments (assets)	75,938	(71,027)	(4,911)	—

	December 31, 2017			
		Gross fair value not offset in balance sheets		
Financial instruments (liabilities):	Gross fair value of recognized liabilities [1]	Financial instruments	Cash collateral	Net fair value
Derivative instruments [4]	93,761	(47,827)	(42,750)	3,184

[1] The gross fair value of derivative instruments and short-term reverse repurchase agreement is not netted against offsetting liabilities for presentation on the consolidated balance sheets.
[2] The estimated fair value of derivative instrument assets is reported in other assets in the consolidated balance sheets. Derivative transactions entered into under ISDA master agreements include income and expense accruals.
[3] The estimated fair value of short-term reverse repurchase agreement assets is reported in short-term investments in the consolidated balance sheets. The collateral is held by an independent third-party custodian under a tri-party agreement.
[4] The estimated fair value of derivative instrument liabilities is reported in other liabilities in the 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 instruments and short-term reverse repurchase agreement is not netted against offsetting liabilities for presentation on the consolidated balance sheets.
[2] The estimated fair value of derivative instrument assets is reported in other assets in the 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 consolidated balance sheets. Derivative transactions entered into under ISDA master agreements include income and expense accruals.

8. 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			
	December 31, 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	$ —	$ 1,871,642	$ —	$ 1,871,642
Obligations of U.S. states and their subdivisions	—	2,090,972	—	2,090,972
Corporate debt securities	—	15,696,349	9,738	15,706,087
Asset-backed securities	—	1,717,976	—	1,717,976
Residential mortgage-backed securities	—	64,984	—	64,984
Commercial mortgage-backed securities	—	1,357,609	—	1,357,609
Collateralized debt obligations	—	783,869	—	783,869
Total fixed maturities available-for-sale	—	23,583,401	9,738	23,593,139
Fixed maturities held-for-trading:				
U.S. government direct obligations and U.S. agencies	—	16,836	—	16,836
Corporate debt securities	—	3,156	—	3,156
Commercial mortgage-backed securities	—	1,067	—	1,067
Total fixed maturities held-for-trading	—	21,059	—	21,059
Short-term investments	288,302	61,964	—	350,266
Collateral under derivative counterparty collateral agreements	57,820	—	—	57,820
Derivative instruments designated as hedges:				
Interest rate swaps	—	7,476	—	7,476
Cross-currency swaps	—	19,958	—	19,958
Derivative instruments not designated as hedges:				
Interest rate swaps	—	3,530	—	3,530
Interest rate swaptions	—	75	—	75
Cross-currency swaps	—	20,320	—	20,320
Total derivative instruments	—	51,359	—	51,359
Separate account assets [1]	16,523,630	10,736,532	—	27,660,571
Total assets	$ 16,869,752	$ 34,454,315	$ 9,738	$ 51,734,214
Liabilities				
Collateral under derivative counterparty collateral agreements	5,490	—	—	5,490
Derivative instruments designated as hedges:				
Cross-currency swaps	—	51,316	—	51,316
Derivative instruments not designated as hedges:				
Interest rate swaps	—	1,628	—	1,628
Cross-currency swaps	—	41,599	—	41,599
Total derivative instruments	—	94,543	—	94,543
Embedded derivatives - GLWB	—	—	11,095	11,095
Separate account liabilities [2]	8	409,266	—	409,274
Total liabilities	$ 5,498	$ 503,809	$ 11,095	$ 520,402

[1] Included in the total fair value amount are $400 million of investments as of December 31, 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 Consolidated Financial Statements
(Dollars in Thousands, Except Share Amounts)

	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 flow 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

The amortized cost of short-term investments 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, and interest rate swaptions, 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 derivatives - GLWB

Significant unobservable inputs are 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 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.

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	
	Year Ended December 31, 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	—	5,383
Other comprehensive income (loss)	169	—
Settlements	(1,703)	—
Transfers out of Level 3 [1]	(367)	$ —
Balances, December 31, 2017	$ 9,738	$ 11,095
Total gains (losses) for the period included in net income attributable to the change in unrealized gains and losses relating to assets held at December 31, 2017	$ —	$ 5,383

[1] Transfers out of Level 3 are due primarily to increased observability of inputs in valuation methodologies as evidenced by corroboration of market prices with multiple pricing vendors and internal models.

	Recurring Level 3 financial assets and liabilities	
	Year Ended December 31, 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	—	(5,545)
Other comprehensive income (loss)	273	—
Settlements	(1,478)	—
Transfers into Level 3 [1]	11,236	—
Transfers out of Level 3 [2]	(2,930)	—
Balances, December 31, 2016	$ 11,639	$ 5,712
Total gains (losses) for the period included in net income attributable to the change in unrealized gains and losses relating to assets held at December 31, 2016	$ —	$ (5,545)

[1] Transfers into Level 3 are due primarily to decreased observability of inputs in valuation methodologies.
[2] Transfers out of Level 3 are due primarily to increased observability of inputs in valuation methodologies as evidenced by corroboration of market prices with multiple pricing vendors and internal models.

	Recurring Level 3 financial assets and liabilities			
	Year Ended December 31, 2015			
	Assets			Liabilities
	Fixed maturities available-for-sale			
	Corporate debt securities	Asset-backed securities	Total	Embedded derivatives - GLWB
January 1, 2015	$ 5,842	$ 36	$ 5,878	$ —
Realized and unrealized gains (losses) included in:				
Net income	—	—	—	11,257
Other comprehensive income (loss)	(178)	—	(178)	—
Settlements	(1,126)	—	(1,126)	—
Transfers out of Level 3 [1]	—	(36)	(36)	—
Balances, December 31, 2015	$ 4,538	$ —	$ 4,538	$ 11,257
Total gains (losses) for the period included in net income attributable to the change in unrealized gains and losses relating to assets held at December 31, 2015	$ —	$ —	$ —	$ 11,257

[1] Transfers out of Level 3 are due primarily to increased observability of inputs in valuation methodologies as evidenced by corroboration of market prices with multiple pricing vendors and internal models.

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

	Valuation Technique	Unobservable Input	Range	
			December 31, 2017	December 31, 2016
Embedded derivatives - GLWB	Risk neutral stochastic valuation methodology	Equity volatility	15% - 30%	15% - 30%
		Swap curve	1.69% - 2.54%	0.75% - 3.00%
		Mortality rate	Based on the Annuity 2000 Mortality Table	Based on the Annuity 2000 Mortality Table
		Lapse rate	1% - 15%	1% - 15%

Generally, the following will cause an increase (decrease) in GLWB embedded derivative fair value liabilities:

- An increase (decrease) in equity volatility;
- A decrease (increase) in interest rates;
- A decrease (increase) in mortality;
- A decrease (increase) in lapses.

The Company notes the following interrelationships:

- Low equity returns will potentially result in higher in-the-moneyness. This may result in lower lapses increasing the projected number of inforce policies and may also increase the fair value of the GLWB reserve.

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:

	December 31, 2017		December 31, 2016	
	Carrying amount	Estimated fair value	Carrying amount	Estimated fair value
Assets				
Mortgage loans on real estate	$ 4,005,187	$ 4,066,800	$ 3,558,826	$ 3,574,240
Policy loans	4,104,094	4,104,094	4,019,648	4,019,648
Limited partnership interests	43,281	45,009	29,345	29,822
Other investments	11,507	41,588	14,382	44,687
Liabilities				
Annuity contract benefits without life contingencies	$ 12,704,401	$ 12,647,309	$ 12,291,378	$ 12,129,631
Policyholders' funds	280,578	280,578	285,554	285,554
Commercial paper	99,886	99,886	99,049	99,049
Notes payable	543,338	581,097	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 policyholders 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 their 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 net asset value, 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, is used as a practical expedient to estimate fair value. 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.

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

Notes payable is recorded in due to parent and affiliates in the consolidated balance sheets. 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.

9. Minimum Guarantees

The Company calculates additional liabilities for GMDB and GLWB. The following assumptions and methodology were used to determine GMDB additional reserves at December 31, 2017, and 2016 .

Area	Assumptions/Basis for Assumptions
Data Used	Based on 1,050 investment performance scenarios
Mean Investment Performance	Equity: 7% - 13% Fixed, Bond, Money Market Fund: level 0% - 10%
Volatility	Equity: 10% - 35% Fixed, Bond, Money Market Fund: 0% - 9%
Mortality	Based on the 1994 VA MGDB Mortality Table
Lapse Rates	Lapse Rates vary by duration and surrender charge
Discount Rates	5%

The assumptions and techniques for valuing the GLWB reserve is disclosed within Note 8 and are identical to those used for valuing the GLWB embedded derivative.

The separate account liabilities subject to the requirements for additional liabilities for GMDB and GLWB, net amount at risk, net of reinsurance, and the weighted average attained age of contract owners for GMDB and GLWB at December 31, 2017, and 2016, were as follows:

	GMDB	GLWB	Total
December 31, 2017			
Separate account liability	$ 64,953	$ 620,698	$ 685,651
Net amount at risk, net of reinsurance	$ 17,705	$ 1,480	$ 19,185
Weighted average attained age	70	69	N/A
December 31, 2016			
Separate account liability	$ 55,607	$ 413,569	$ 469,176
Net amount at risk, net of reinsurance	$ 25,891	$ 2,941	$ 28,832
Weighted average attained age	71	58	N/A

The paid and incurred amounts for GMDB and GLWB for the years ended December 31, 2017, 2016, and 2015 were as follows:

	GMDB	GLWB	Total
Additional liability balance:			
Balances, January 1, 2015	$ 5,566	$ —	$ 5,566
Incurred guaranteed benefits	821	4,813	5,634
Paid guaranteed benefits	(920)	—	(920)
Balances, December 31, 2015	5,467	4,813	10,280
Incurred guaranteed benefits	132	(2,740)	(2,608)
Paid guaranteed benefits	(503)	—	(503)
Balances, December 31, 2016	5,096	2,073	7,169
Incurred guaranteed benefits	(294)	3,807	3,513
Paid guaranteed benefits	(819)	—	(819)
Balances, December 31, 2017	$ 3,983	$ 5,880	$ 9,863

The aggregate fair value of equity securities supporting separate accounts with GMDB and GLWB were as follows:

	December 31, 2017	December 31, 2016
Equity securities - GMDB	$ 64,975	$ 55,605
Equity securities - GLWB	622,005	412,977
Total	$ 686,980	$ 468,582

10. Reinsurance

In the normal course of its business, the Company seeks to limit its exposure to loss on any single insured and to recover a portion of benefits paid by ceding risks to other insurance enterprises under excess coverage, quota share, yearly renewable term, coinsurance, and modified coinsurance contracts. The Company retains an initial maximum of $3,500 of coverage per individual life. This initial retention limit of $3,500 may increase due to automatic policy increases in coverage at a maximum rate of $175 per annum, with an overall maximum increase in coverage of $1,000.

Ceded reinsurance contracts do not relieve the Company from its obligations to policyholders. The failure of reinsurers to honor their obligations could result in losses to the Company. The Company evaluates the financial condition of its reinsurers and monitors concentrations of credit risk arising from similar geographic regions, activities or economic characteristics of the reinsurers to minimize its exposure to significant losses from reinsurer insolvencies. At December 31, 2017, and 2016, the reinsurance recoverables had carrying values in the amounts of $589,080 and $598,864, respectively. Included in these amounts are $515,417 and $522,950 at December 31, 2017, and 2016, respectively, associated with reinsurance agreements with related parties. At December 31, 2017, and 2016, 87% and 87%, respectively, of the total reinsurance receivable was due from CLAC, a related party.

The Company assumes risk from approximately 40 insurers and reinsurers by participating in yearly renewable term and coinsurance pool agreements. When assuming risk, the Company seeks to generate revenue while maintaining reciprocal working relationships with these partners as they also seek to limit their exposure to loss on any single life.

Maximum capacity to be retained by the Company is dictated at the treaty level and is monitored annually to ensure the total risk retained on any one life is limited to a maximum retention of $4,500.

The following tables summarize life insurance in-force and total premium income at and for the year ended December 31, 2017:

	Life insurance in-force		
	Individual	Group	Total
Written and earned direct	$ 56,059,075	$ 41,895,505	$ 97,954,580
Reinsurance ceded	(10,881,048)	(1,114,637)	(11,995,685)
Reinsurance assumed	53,532,666	—	53,532,666
Net	$ 98,710,693	$ 40,780,868	$ 139,491,561
Percentage of amount assumed to net	54%	—%	38%

	Premium income		
	Life insurance	Annuities	Total
Written and earned direct	$ 373,896	$ 2,184	$ 376,080
Reinsurance ceded	(55,945)	(88)	(56,033)
Reinsurance assumed	119,684	—	119,684
Net	$ 437,635	$ 2,096	$ 439,731

The following tables summarizes life insurance in-force and total premium income at and for the year ended December 31, 2016:

	Life insurance in-force		
	Individual	Group	Total
Written and earned direct	$ 54,618,888	$ 41,809,635	$ 96,428,523
Reinsurance ceded	(10,568,467)	(833,090)	(11,401,557)
Reinsurance assumed	56,165,011	—	56,165,011
Net	$ 100,215,432	$ 40,976,545	$ 141,191,977
Percentage of amount assumed to net	56%	—%	40%

	Premium income		
	Life insurance	Annuities	Total
Written and earned direct	$ 392,654	$ 1,998	$ 394,652
Reinsurance ceded	(52,397)	(81)	(52,478)
Reinsurance assumed	123,175	—	123,175
Net	$ 463,432	$ 1,917	$ 465,349

The following table summarizes total premium income for the year ended December 31, 2015:

	Premium income		
	Life insurance	Annuities	Total
Written and earned direct	$ 368,442	$ 503	$ 368,945
Reinsurance ceded	(48,107)	(86)	(48,193)
Reinsurance assumed	124,798	—	124,798
Net	$ 445,133	$ 417	$ 445,550

Reinsurance recoveries for life and other policy benefits were $33,737, $39,520, and $23,179 for the years ended December 31, 2017, 2016, and 2015, respectively.

11. Deferred Acquisition Costs and Value of Business Acquired

The following table summarizes activity in DAC and VOBA:

	DAC	VOBA	Total
Balances, January 1, 2015	$ 353,408	$ 25,286	$ 378,694
Capitalized additions	63,093	—	63,093
Amortization and writedowns	(96,095)	(4,493)	(100,588)
Unrealized investment (gains) losses	73,012	(68)	72,944
Balances, December 31, 2015	393,418	20,725	414,143
Capitalized additions	93,222	—	93,222
Amortization and writedowns	(29,317)	(1,992)	(31,309)
Unrealized investment (gains) losses	10,522	112	10,634
Balances, December 31, 2016	467,845	18,845	486,690
Capitalized additions	105,814	—	105,814
Amortization and writedowns	(20,862)	1,134	(19,728)
Unrealized investment (gains) losses	(54,358)	92	(54,266)
Balances, December 31, 2017	$ 498,439	$ 20,071	$ 518,510

The estimated future amortization of VOBA for the years ended December 31, 2018 through December 31, 2022, is approximately $3,800 per annum.

12. Goodwill and Other Intangible Assets

The balance of goodwill, all of which is within the Empower Retirement segment, at December 31, 2017, and 2016 was $137,683.

The following tables summarize other intangible assets, all of which are within the Empower Retirement segment:

	December 31, 2017		
	Gross carrying amount	Accumulated amortization	Net book value
Customer relationships	$ 47,580	$ (30,495)	$ 17,085
Non-competition	362	(362)	—
Total	$ 47,942	$ (30,857)	$ 17,085

	December 31, 2016		
	Gross carrying amount	Accumulated amortization	Net book value
Customer relationships	$ 47,580	$ (27,517)	$ 20,063
Non-competition	1,325	(1,301)	24
Total	$ 48,905	$ (28,818)	$ 20,087

Amortization expense for other intangible assets included in general insurance expenses was $3,002, $3,732, and $4,096 for the years ended December 31, 2017, 2016, and 2015, respectively. Except for goodwill, the Company has no intangible assets with indefinite lives.

The estimated future amortization of other intangible assets using current assumptions, which are subject to change, for the years ended December 31, 2018 through December 31, 2022, is approximately $1,800 per annum.

13. Commercial Paper

The Company maintains a commercial paper program that is partially supported by a $50,000 corporate credit facility.

The following table provides information regarding the Company's commercial paper program:

	December 31,	
	2017	2016
Face value	$ 99,886	$ 99,049
Carrying value	$ 99,886	$ 99,049
Effective interest rate	1.4%-1.7%	0.7%-0.8%
Maturity range (days)	19 - 67	10 - 30

14. Stockholder's Equity and Dividend Restrictions

At December 31, 2017, and 2016, the Company had 50,000,000 shares of $1 par value preferred stock authorized, none of which was issued or outstanding at either date. In addition, the Company has 50,000,000 shares of $1 par value common stock authorized, 7,320,176 and 7,292,708 of which were issued and outstanding at December 31, 2017, and 2016, respectively.

The Company's net income and capital and surplus, as determined in accordance with statutory accounting principles and practices as prescribed by the National Association of Insurance Commissioners ("NAIC"), is as follows:

	Year Ended December 31,				December 31,	
	2017	2016	2015		2017	2016
Net income	$ 170,018	$ 100,657	$ 187,232	Capital and surplus	$ 1,129,510	$ 1,053,333

Regulatory compliance is determined by a ratio of a company's total adjusted capital ("TAC") to its authorized control level risk-based capital ("ACL"), as determined in accordance with statutory accounting principles and practices as prescribed by the NAIC. Companies below specific trigger points or ratios are classified within certain levels, each of which requires specified corrective action. The minimum level of TAC before corrective action commences is 200% of ACL. The Company's risk-based capital ratio was in excess of the required amount as of December 31, 2017.

Dividends are paid as determined by the Board of Directors, subject to restrictions as discussed below. During the years ended December 31, 2017, 2016, and 2015, the Company paid dividends in the amounts of $145,301, $125,691, and $139,533, respectively, to its parent company, GWL&A Financial.

As an insurance company domiciled in the State of Colorado, the Company is required to maintain a minimum of $2,000 of capital and surplus. In addition, the maximum amount of dividends which can be paid to stockholders by insurance companies domiciled in the State of Colorado, without prior approval of the Insurance Commissioner, is subject to restrictions relating to statutory capital and surplus and statutory net gain from operations. As filed with the Colorado Division of Insurance, the statutory capital and surplus and net gain from operations at and for the year ended December 31, 2017, were $1,129,510 and $169,483 , respectively. Based on the as filed amounts, the Company may pay an amount up to $112,951 of dividends during the year ended December 31, 2018, without the prior approval of the Colorado Insurance Commissioner. Prior to any payments of dividends, the Company seeks approval from the Colorado Insurance Commissioner.

15. Other Comprehensive Income

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

	Year Ended December 31, 2017				
	Unrealized holding gains (losses) arising on fixed maturities, available-for-sale [1]	Unrealized holding gains (losses) arising on cash flow hedged [2]	Future policy benefits, DAC and VOBA adjustments	Employee benefit plan adjustment [3]	Total
Balances, January 1, 2015	**$ 784,183**	**$ 33,141**	**$ (108,194)**	**$ (106,112)**	**$ 603,018**
OCI before reclassifications	(643,880)	31,061	65,245	19,730	(527,844)
Deferred income tax benefit (expense)	225,358	(10,871)	(22,836)	(6,905)	184,746
AOCI before reclassification, net of tax	(418,522)	20,190	42,409	12,825	(343,098)
Amounts reclassified from AOCI	(40,217)	(12,380)	—	11,856	(40,741)
Deferred income tax benefit (expense)	14,076	4,333	—	(4,150)	14,259
Amounts reclassified from AOCI, net of tax	(26,141)	(8,047)	—	7,706	(26,482)
Balances, December 31, 2015	**339,520**	**45,284**	**(65,785)**	**(85,581)**	**233,438**
OCI before reclassifications	20,295	44,776	10,983	(7,315)	68,739
Deferred income tax benefit (expense)	(7,103)	(15,672)	(3,844)	2,560	(24,059)
AOCI before reclassification, net of tax	13,192	29,104	7,139	(4,755)	44,680
Amounts reclassified from AOCI	(63,022)	(11,249)	—	9,281	(64,990)
Deferred income tax benefit (expense)	22,058	3,937	—	(3,248)	22,747
Amounts reclassified from AOCI, net of tax	(40,964)	(7,312)	—	6,033	(42,243)
Balances, December 31, 2016	**311,748**	**67,076**	**(58,646)**	**(84,303)**	**235,875**
OCI before reclassifications	377,605	(73,726)	(88,648)	7,283	222,514
Deferred income tax benefit (expense)	(132,162)	25,804	31,027	(2,549)	(77,880)
AOCI before reclassification, net of tax	245,443	(47,922)	(57,621)	4,734	144,634
Amounts reclassified from AOCI	(29,710)	(4,498)	—	6,982	(27,226)
Deferred income tax benefit (expense)	10,399	1,574	—	(2,444)	9,529
Amounts reclassified from AOCI, net of tax	(19,311)	(2,924)	—	4,538	(17,697)
Impact of tax reform	7,007	87,299	—	(16,161)	78,145
Balances, December 31, 2017	**$ 544,887**	**$ 103,529**	**$ (116,267)**	**$ (91,192)**	**$ 440,957**

[1] Reclassifications affect Other realized investment gains(losses), net on the consolidated statements of income.
[2] Reclassifications affect net investment income on the consolidated statements of income, except for $2,954 and $2,657 (before tax) which affected interest expense for the years ended December 31, 2017 and 2016, respectively.
[3] The adjustments for defined benefit plans are included in the computation of net periodic (benefit) cost of employee benefit plans (see note 17 for additional details).

16. General Insurance Expenses

The following table summarizes the significant components of general insurance expenses:

	Year Ended December 31,		
	2017	2016	2015
Compensation	$ 646,595	$ 625,364	$ 564,008
Commissions	241,357	222,028	206,360
Other	309,661	333,835	308,628
Total general insurance expenses	$ 1,197,613	$ 1,181,227	$ 1,078,996

17. Employee Benefit Plans

Defined Benefit Pension, Post-Retirement Medical, and Supplemental Executive Retirement Plans

The Company has a noncontributory Defined Benefit Pension Plan covering substantially all of its employees that were hired before January 1, 1999. Prior to December 31, 2012, the Company accounted for the Defined Benefit Pension Plan as the direct legal obligation of the Company and accounted for the corresponding plan obligations on its balance sheet and statements of income. Effective December 31, 2012, the Company transferred the sponsorship of the Defined Benefit Pension Plan to GWL&A Financial, the Company's immediate parent. Despite the change in sponsorship of the Defined Benefit Pension Plan, the Company continues to account for the corresponding plan obligations on its balance sheet and statements of income.

Benefits for the Defined Benefit Pension Plan are based principally on an employee's years of service and compensation levels near retirement. The Company's policy for funding the Defined Benefit Pension Plans is to make annual contributions, which equal or exceed regulatory requirements.

The Company sponsors an unfunded Post-Retirement Medical Plan (the "Medical Plan") that provides health benefits to retired employees who are not Medicare eligible. The Medical Plan is contributory and contains other cost sharing features which may be adjusted annually for the expected general inflation rate. The Company's policy is to fund the cost of the Medical Plan benefits in amounts determined at the discretion of management.

The Company also provides Supplemental Executive Retirement Plans to certain key executives. These plans provide key executives with certain benefits upon retirement, disability, or death based upon total compensation. The Company has purchased individual life insurance policies with respect to employees covered by these plans. The Company is the owner and beneficiary of the insurance contracts.

A December 31 measurement date is used for the employee benefit plans.

The following tables provide a reconciliation of the changes in the benefit obligations, fair value of plan assets and the underfunded status for the Company's Defined Benefit Pension, Post-Retirement Medical, and Supplemental Executive Retirement plans:

	Defined Benefit Pension Plan		Post-Retirement Medical Plan		Supplemental Executive Retirement Plan		Total	
	Year Ended December 31,		Year Ended December 31,		Year Ended December 31,		Year Ended December 31,	
	2017	2016	2017	2016	2017	2016	2017	2016
Change in projected benefit obligation:								
Benefit obligation, January 1	$ 592,290	$ 560,817	$ 19,031	$ 16,637	$ 44,501	$ 43,858	$ 655,822	$ 621,312
Service cost	3,506	(1,403)	1,457	1,246	(16)	294	4,947	137
Interest cost	24,205	25,263	758	713	1,620	1,775	26,583	27,751
Actuarial (gain) loss	40,840	24,928	(1,216)	1,408	(1,872)	1,911	37,752	28,247
Regular benefits paid	(19,737)	(17,315)	(701)	(973)	(3,336)	(3,337)	(23,774)	(21,625)
Curtailments	(17,244)	—	—	—	—	—	(17,244)	—
Amendment	1,852	—	—	—	24	—	1,876	—
Benefit obligation, December 31	$ 625,712	$ 592,290	$ 19,329	$ 19,031	$ 40,921	$ 44,501	$ 685,962	$ 655,822
Accumulated benefit obligation	$ 625,712	$ 575,024	$ 19,329	$ 19,031	$ 40,921	$ 43,098	$ 685,962	$ 637,153

During 2017, the Company approved an amendment to the Defined Benefit Pension Plan freezing all benefit accruals for pension-eligible participants as of December 31, 2017. The Company also approved an amendment to provide pension-eligible employees with full credit for their anniversary year of services that began in 2017, even if the participants had not completed 1,000 hours of service as of December 31, 2017. The impact of the Plan freeze was reflected on September 25, 2017, and in accordance with ASC 715 Compensation - Retirement Benefits, resulted in a curtailment gain in the amount of $17,244. Additionally, as a result of the amendment to provide an additional year of service credit, prior service cost in the amount of $1,852 was recorded in other comprehensive income as of December 31, 2017. Under a curtailment due to a plan freeze, any unrecognized prior service cost included in other comprehensive income associated with the employees affected by the pension plan freeze must be fully recognized in benefit cost in determining the net gain or loss to be recognized for the curtailment. Additionally, the curtailment gain recognized in the income statement is offset by accelerating, in an equal amount, the recognition of any actuarial gain or loss in other comprehensive income. $15,392 of actuarial loss was recognized from other comprehensive income to offset the net curtailment gain. As a result, the net impact to the income statement was zero.

	Defined Benefit Pension Plan		Post-Retirement Medical Plan		Supplemental Executive Retirement Plan		Total	
	Year Ended December 31,		Year Ended December 31,		Year Ended December 31,		Year Ended December 31,	
	2017	2016	2017	2016	2017	2016	2017	2016
Change in plan assets:								
Value of plan assets, January 1	$ 453,087	$ 427,131	$ —	$ —	$ —	$ —	$ 453,087	$ 427,131
Actual return on plan assets	50,292	43,271	—	—	—	—	50,292	43,271
Employer contributions	—	—	701	973	3,337	3,337	4,038	4,310
Benefits paid	(19,737)	(17,315)	(701)	(973)	(3,337)	(3,337)	(23,775)	(21,625)
Value of plan assets, December 31	$ 483,642	$ 453,087	$ —	$ —	$ —	$ —	$ 483,642	$ 453,087

	Defined Benefit Pension Plan		Post-Retirement Medical Plan		Supplemental Executive Retirement Plan		Total	
	December 31,		December 31,		December 31,		December 31,	
	2017	2016	2017	2016	2017	2016	2017	2016
Under funded status at December 31	$ (142,070)	$ (139,203)	$ (19,329)	$ (19,031)	$ (40,921)	$ (44,501)	$ (202,320)	$ (202,735)

The following table presents amounts recognized in the consolidated balance sheets for the Company's Defined Benefit Pension, Post-Retirement Medical, and Supplemental Executive Retirement plans:

	Defined Benefit Pension Plan		Post-Retirement Medical Plan		Supplemental Executive Retirement Plan		Total	
	December 31,		December 31,		December 31,		December 31,	
	2017	2016	2017	2016	2017	2016	2017	2016
Amounts recognized in consolidated balance sheets:								
Other liabilities	$ (142,070)	$ (139,203)	$ (19,329)	$ (19,031)	$ (40,921)	$ (44,501)	$ (202,320)	$ (202,735)
Accumulated other comprehensive income (loss)	(121,645)	(133,055)	6,276	5,715	(66)	(2,360)	(115,435)	(129,700)

The following table provides information regarding amounts in AOCI that have not yet been recognized as components of net periodic benefit cost at December 31, 2017:

	Defined Benefit Pension Plan		Post-Retirement Medical Plan		Supplemental Executive Retirement Plan		Total	
	Gross	Net of tax	Gross	Net of tax	Gross	Net of tax	Gross	Net of tax
Net gain (loss)	$ (121,645)	$ (96,098)	$ 6,105	$ 4,823	$ 1,157	$ 914	$ (114,383)	$ (90,361)
Net prior service (cost) credit	—	—	171	135	(1,223)	(966)	(1,052)	(831)
	$ (121,645)	$ (96,098)	$ 6,276	$ 4,958	$ (66)	$ (52)	$ (115,435)	$ (91,192)

The following table provides information regarding amounts in AOCI that are expected to be recognized as components of net periodic benefit costs during the year ended December 31, 2018:

	Defined Benefit Pension Plan		Post-Retirement Medical Plan		Supplemental Executive Retirement Plan		Total	
	Gross	Net of tax	Gross	Net of tax	Gross	Net of tax	Gross	Net of tax
Net gain (loss)	$ (2,336)	$ (1,845)	$ 276	$ 218	$ 45	$ 36	$ (2,015)	$ (1,591)
Prior service (cost) credit	—	—	20	16	(324)	(256)	(304)	(240)
	$ (2,336)	$ (1,845)	$ 296	$ 234	$ (279)	$ (220)	$ (2,319)	$ (1,831)

The expected benefit payments for the Company's Defined Benefit Pension, Post-Retirement Medical, and Supplemental Executive Retirement plans for the years indicated are as follows:

	Defined Benefit Pension Plan	Post-Retirement Medical Plan	Supplemental Executive Retirement Plan
2018	$ 20,286	$ 795	$ 2,515
2019	21,396	855	2,520
2020	22,737	873	2,480
2021	24,688	940	2,446
2022	26,676	1,003	10,180
2023 through 2027	158,881	6,579	13,065

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

	Defined Benefit Pension Plan		
	Year Ended December 31,		
	2017	2016	2015
Components of net periodic cost:			
Service cost	$ 3,506	$ (1,403)	$ 12,851
Interest cost	24,205	25,263	23,987
Expected return on plan assets	(20,626)	(22,339)	(28,345)
Amortization of unrecognized prior service cost	—	—	13
Amortization of loss from earlier periods	7,190	10,260	12,398
Net periodic cost	$ 14,275	$ 11,781	$ 20,904

	Post-Retirement Medical Plan		
	Year Ended December 31,		
	2017	2016	2015
Components of net periodic benefit:			
Service cost	$ 1,457	$ 1,246	$ 1,042
Interest cost	758	713	560
Amortization of unrecognized prior service benefit	(453)	(1,102)	(1,640)
Amortization of gain from earlier periods	(202)	(317)	(511)
Net periodic benefit	$ 1,560	$ 540	$ (549)

	Supplemental Executive Retirement Plan		
	Year Ended December 31,		
	2017	2016	2015
Components of net periodic cost:			
Service cost	$ (16)	$ 294	$ 282
Interest cost	1,620	1,775	2,122
Amortization of unrecognized prior service cost	501	501	933
Amortization of loss from earlier periods	(54)	(61)	663
Net periodic cost	$ 2,051	$ 2,509	$ 4,000

The following tables present the assumptions used in determining benefit obligations of the Defined Benefit Pension, Post-Retirement Medical, and the Supplemental Executive Retirement plans:

	Defined Benefit Pension Plan	
	December 31,	
	2017	2016
Discount rate	3.71%	4.20%
Rate of compensation increase	4.47%	4.47%

	Post-Retirement Medical Plan	
	December 31,	
	2017	2016
Discount rate	3.63%	4.05%
Initial health care cost trend	6.50%	6.75%
Ultimate health care cost trend	5.00%	5.00%
Year ultimate trend is reached	2024	2024

	Supplemental Executive Retirement Plan	
	December 31,	
	2017	2016
Discount rate	3.43%	3.80%
Rate of compensation increase	4.00%	4.00%

During 2017, the Company adopted the Society of Actuaries Mortality Improvement Scale (MP-2017).

During 2016, the Company adopted the Society of Actuaries Mortality Improvement Scale (MP-2016).

The following tables present the assumptions used in determining the net periodic (benefit) cost of the Defined Benefit Pension, Post-Retirement Medical, and the Supplemental Executive Retirement plans:

	Defined Benefit Pension Plan	
	Year Ended December 31,	
	2017	2016
Discount rate	4.20%	4.55%
Expected return on plan assets	5.25%	6.00%
Rate of compensation increase	4.47%	4.47%

	Post-Retirement Medical Plan	
	Year Ended December 31,	
	2017	2016
Discount rate	4.05%	4.31%
Initial health care cost trend	6.75%	7.00%
Ultimate health care cost trend	5.00%	5.00%
Year ultimate trend is reached	2024	2024

	Supplemental Executive Retirement Plan	
	Year Ended December 31,	
	2017	2016
Discount rate	3.80%	4.22%
Rate of compensation increase	4.00%	4.00%

The discount rate has been set based on the rates of return on high-quality fixed-income investments currently available and expected to be available during the period the benefits will be paid. In particular, the yields on bonds rated AA or better on the measurement date have been used to set the discount rate.

The following table presents the impact on the Post-Retirement Medical Plan that a one-percentage-point change in assumed health care cost trend rates would have on the following:

	One percentage point increase	One percentage point decrease
Increase (decrease) on total service and interest cost on components	$ 371	$ (309)
Increase (decrease) on post-retirement benefit obligation	2,524	(2,157)

The following table presents how the Company's Defined Benefit Pension Plan assets are invested:

	December 31,	
	2017	2016
Equity securities	47%	45%
Debt securities	45%	39%
Other	8%	16%
Total	100%	100%

The following tables present information about the Defined Benefit Retirement Plan's assets measured at fair value on a recurring basis and indicates the fair value hierarchy of the valuation approach utilized to determine such fair value:

	Defined benefit plan assets measured at fair value on a recurring basis			
	December 31, 2017			
	Quoted prices in active markets for identical assets (Level 1)	Significant other observable inputs (Level 2)	Significant unobservable inputs (Level 3)	Total
Common collective trust funds: [1]				
Equity index funds	$ —	$ —	$ —	$ 32,596
Midcap index funds	—	—	—	31,717
World equity index funds	—	—	—	60,216
U.S. equity market funds	—	—	—	46,400
International equity funds	—	—	—	15,382
Total common collective trust funds	—	—	—	186,311
Fixed maturity investments:				
U.S. government direct obligations and agencies	—	4,608	—	4,608
Obligations of U.S. states and their municipalities	—	18,775	—	18,775
Corporate debt securities	—	183,462	1,108	184,570
Asset-backed securities	—	10,569	—	10,569
Commercial mortgage-backed securities	—	2,475	—	2,475
Total fixed maturity investments	—	219,889	1,108	220,997
Equity investments:				
Fixed income mutual funds	27,516	—	—	27,516
Equity mutual funds	15,609	—	—	15,609
Preferred stock	704	—	—	704
Total equity investments	43,829	—	—	43,829
Limited partnership investments [1]	—	—	—	7,465
Money market funds	29,576	—	—	29,576
Total defined benefit plan assets	$ 73,405	$ 219,889	$ 1,108	$ 488,178

[1] Fair values of Common collective trust funds and Limited partnership investments are 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.

	Defined benefit plan assets 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
Common collective trust funds: [1]				
Equity index funds	$ —	$ —	$ —	$ 34,578
Midcap index funds	—	—	—	35,330
World equity index funds	—	—	—	44,235
U.S. equity market funds	—	—	—	45,614
International equity funds	—	—	—	11,143
Total common collective trust funds	—	—	—	170,900
Fixed maturity investments:				
U.S. government direct obligations and agencies	—	5,672	—	5,672
Obligations of U.S. states and their municipalities	—	18,670	—	18,670
Corporate debt securities	—	141,102	1,316	142,418
Asset-backed securities	—	7,828	—	7,828
Commercial mortgage-backed securities	—	2,884	—	2,884
Total fixed maturity investments	—	176,156	1,316	177,472
Equity investments:				
Fixed income mutual funds	21,321	—	—	21,321
Equity mutual funds	11,106	—	—	11,106
Preferred stock	640	—	—	640
Total equity investments	33,067	—	—	33,067
Limited partnership investments [1]	—	—	—	7,022
Money market funds	62,883	—	—	62,883
Total defined benefit plan assets	$ 95,950	$ 176,156	$ 1,316	$ 451,344

[1] Fair values of Common collective trust funds and Limited partnership investments are 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.

The following tables present additional information about assets of the Defined Benefit Retirement Plan 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	
	Corporate debt securities	
	Year Ended December 31,	
	2017	2016
Balance, January 1	$ 1,316	$ —
Unrealized gains relating to instruments still held at reporting period	19	54
Settlements	(227)	(213)
Transfers into Level 3 [1]	—	1,475
Balance, December 31	$ 1,108	$ 1,316

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

The investment objective of the Defined Benefit Pension Plan is to provide a risk-adjusted return that will ensure the payment of benefits while protecting against the risk of substantial investment losses. Correlations among the asset classes are used to identify an asset mix that the Company believes will provide the most attractive returns. Long-term return forecasts for each

asset class using historical data and other qualitative considerations to adjust for projected economic forecasts are used to set the expected rate of return for the entire portfolio.

The Defined Benefit Pension Plan utilizes various investment securities. Generally, investment securities are exposed to various risks, such as interest rate risks, credit risk, and overall market volatility. Due to the level of risk associated with certain investment securities, it is reasonably possible that changes in the values of investment securities will occur and that such changes could materially affect the amounts reported.

The following table presents the target allocation of invested Defined Benefit Pension Plan assets at December 31, 2018:

	December 31, 2018
Equity securities	30%
Debt securities	52%
Other	18%
Total	100%

Management estimates the value of these investments will be recoverable. The Company does not expect any plan assets to be returned to it during the year ended December 31, 2018. The Company expects to make payments of approximately $795 with respect to its Post-Retirement Medical Plan and $2,515 with respect to its Supplemental Executive Retirement Plan during the year ended December 31, 2018.

Other employee benefit plans

The Company offers an unfunded, non-qualified deferred compensation plan to a select group of management and highly compensated individuals. Participants defer a portion of their compensation and realize potential market gains or losses on the invested contributions. The program is not qualified under Section 401 of the Internal Revenue Code. Participant balances, which are included in other liabilities in the accompanying consolidated balance sheets, are $27,284 and $21,758 at December 31, 2017, and December 31, 2016, respectively.

The Company sponsors a qualified defined contribution benefit plan covering all employees. Under this plan, employees may contribute a percentage of their annual compensation to the plan up to certain maximums, as defined by the plan and by the Internal Revenue Service ("IRS"). Currently, the Company matches a percentage of employee contributions in cash. The Company recognized $14,937, $12,364, and $13,016 in expense related to this plan for the years ended December 31, 2017, 2016, and 2015, respectively.

18. Income Taxes

The provision for income taxes is comprised of the following:

	Year Ended December 31,		
	2017	2016	2015
Current	$ 84,445	$ 32,031	$ 76,842
Deferred	(167,059)	53,481	21,682
Total income tax provision	$ (82,614)	$ 85,512	$ 98,524

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

	Year Ended December 31,		
	2017	2016	2015
Statutory federal income tax rate	35.0 %	35.0 %	35.0 %
Income tax effect of:			
Federal tax rate change resulting from tax reform	(61.4)%	— %	— %
Investment income not subject to federal tax	(4.3)%	(3.0)%	(3.0)%
Tax credits	(0.3)%	(6.9)%	(0.2)%
State income taxes, net of federal benefit	2.3 %	2.3 %	3.2 %
Other, net	(0.1)%	(0.4)%	(0.9)%
Effective federal income tax rate	(28.8)%	27.0 %	34.1 %

On December 22, 2017, H.R. 1, the Tax Reconciliation Act (the "Act"), was enacted. The legislation, which is generally effective for tax years beginning on January 1, 2018, represents significant U.S. tax reform and revises the Internal Revenue Code by, among other items, lowering the federal corporate income tax rate from 35% to 21% and modifying how the U.S. taxes multinational entities.

The decrease in the federal corporate income tax rate caused the Company to revalue its deferred tax balances at the new 21% rate, resulting in the recognition of a $175,842 deferred tax benefit and a 61.4% decrease to the Company's 2017 overall effective income tax rate. The impact of tax reform recognized in Accumulated Other Comprehensive Income was $78,145. This balance was transferred to Retained Earnings on the Balance Sheet.

A reconciliation of unrecognized tax benefits is as follows:

	Year Ended December 31,		
	2017	2016	2015
Balance, beginning of year	$ 17,268	$ 23,093	$ 26,890
Additions to tax positions in the current year	13,461	—	1,383
Additions to tax positions in the prior year	—	1,902	50
Reductions to tax positions from statutes expiring	—	(7,727)	(5,230)
Balance, end of year	$ 30,729	$ 17,268	$ 23,093

There were no tax benefits included in the unrecognized tax benefits of $30,729 at December 31, 2017, that would impact the annual effective tax rate. The Company anticipates a decrease in its unrecognized tax benefits of $8,000 to $10,000 in the next twelve months, primarily due to changes in the composition of the consolidated group.

The Company recognizes accrued interest and penalties related to unrecognized tax benefits in current income tax expense. The Company recognized an increase of $553 and decreases of $153, and $193 in interest and penalties related to the uncertain tax positions during the years ended December 31, 2017, 2016, and 2015, respectively. The Company had approximately $1,417 and $864 accrued for the payment of interest and penalties at December 31, 2017, and 2016, respectively.

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 2013 and prior. Tax years 2014 through 2016 are open to federal examination by the I.R.S. The Company does not expect significant increases or decreases to unrecognized tax benefits relating to federal, state, or local audits.

Deferred income taxes represent the tax effect of the differences between the book and tax bases of assets and liabilities. The tax effect of temporary differences, which give rise to the deferred tax assets and liabilities, is as follows:

	December 31,			
	2017		2016	
	Deferred tax asset	Deferred tax liability	Deferred tax asset	Deferred tax liability
Policyholder reserves	$ —	$ 146,294	$ —	$ 278,632
Deferred acquisition costs	—	20,405	—	28,071
Investment assets	—	185,940	—	233,583
Policyholder dividends	5,244	—	8,583	—
Net operating loss carryforward	32,662	—	96,693	—
Pension plan accrued benefit liability	51,289	—	83,562	—
Goodwill	—	23,287	—	35,306
Experience rated refunds	9,988	—	6,654	—
Tax credits	169,692	—	168,597	—
Other	13,848	—	19,592	—
Total deferred taxes	$ 282,723	$ 375,926	$ 383,681	$ 575,592

The deferred tax amounts presented above with respect to investments, future policy benefits, and deferred acquisition costs include $141,458 and $172,405 related to amounts recognized through other comprehensive income at December 31, 2017, and 2016, respectively.

The Company, together with certain of its subsidiaries, and Lifeco U.S. have entered into an income tax allocation agreement whereby Lifeco U.S. files a consolidated federal income tax return. Under the agreement, these companies are responsible for and will receive the benefits of any income tax liability or benefit computed on a separate tax return basis.

As of December 31, 2017, the subsidiaries had net operating loss carry forwards expiring as follows:

Year	Amount
2023	65,209
2028	2,215
Total	$ 67,424

During the years ended December 31, 2017, 2016, and 2015, the Company generated $120, $215, and $3,295 of Guaranteed Federal Low Income Housing tax credit carryforwards, respectively. As of December 31, 2017, the total credit carryforward for Low Income Housing is $142,089. These credits will begin to expire in 2030.

The Company generated $3,474 of foreign tax credit during the year ended December 31, 2017. During the years ended December 31, 2010 through December 31, 2016, the Company generated credit carryforwards of $23,984. The Company determined in 2016 to amend its prior year previously filed federal income tax returns in order to elect to claim foreign tax credits in lieu of foreign tax expense. These credits will begin to expire in 2020.

Included in due from parent and affiliates at December 31, 2017, and 2016 is $41,694 and $35,093, respectively, of income taxes receivable primarily from Lifeco U.S. related to the consolidated income tax return filed by the Company and certain subsidiaries.

Included in the consolidated balance sheets at December 31, 2017, and 2016 is $5,845 and $7,819, respectively, of income taxes receivable in other assets primarily related to the separate state income tax returns filed by certain subsidiaries.

19. 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 recordkeeping 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 GWSC and CLAC ("the GWSC operating segment"), corporate items not directly allocated to the other operating segments, the impact of tax reform 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:

	Year Ended December 31, 2017			
	Individual Markets	Empower Retirement	Other	Total
Revenue:				
Premium income	$ 357,244	$ 2,172	$ 80,315	$ 439,731
Fee income	110,128	943,038	6,956	1,060,122
Other revenue	—	9,611	—	9,611
Net investment income	738,002	434,677	47,374	1,220,053
Realized investments gains (losses), net	32,652	13,752	(1)	46,403
Total revenues	1,238,026	1,403,250	134,644	2,775,920
Benefits and expenses:				
Policyholder benefits	953,371	206,544	81,219	1,241,134
Operating expenses	169,234	998,431	80,619	1,248,284
Total benefits and expenses	1,122,605	1,204,975	161,838	2,489,418
Income (loss) before income taxes	115,421	198,275	(27,194)	286,502
Income tax expense (benefit)	38,605	64,252	(185,471)	(82,614)
Net income	$ 76,816	$ 134,023	$ 158,277	$ 369,116

	December 31, 2017			
	Individual Markets	Empower Retirement	Other	Total
Assets:				
Investments	$ 17,791,097	$ 12,472,906	$ 1,873,279	$ 32,137,282
Other assets	1,465,544	1,027,458	154,312	2,647,314
Separate account assets	8,494,248	19,166,323	—	27,660,571
Assets of continuing operations	$ 27,750,889	$ 32,666,687	$ 2,027,591	62,445,167
Assets of discontinued operations				16,095
Total assets				$ 62,461,262

GREAT-WEST LIFE & ANNUITY INSURANCE COMPANY
Notes to Consolidated Financial Statements
(Dollars in Thousands, Except Share Amounts)

	Year Ended December 31, 2016			
	Individual Markets	Empower Retirement	Other	Total
Revenue:				
Premium income	$ 379,127	$ 1,853	$ 84,369	$ 465,349
Fee income	99,514	851,620	5,683	956,817
Other revenue	—	12,261	—	12,261
Net investment income	798,557	428,327	49,675	1,276,559
Realized investments gains (losses), net	40,899	51,209	774	92,882
Total revenues	1,318,097	1,345,270	140,501	2,803,868
Benefits and expenses:				
Policyholder benefits	969,182	206,143	65,698	1,241,023
Operating expenses	175,016	1,002,129	69,096	1,246,241
Total benefits and expenses	1,144,198	1,208,272	134,794	2,487,264
Income before income taxes	173,899	136,998	5,707	316,604
Income tax expense	58,601	25,144	1,767	85,512
Net income	$ 115,298	$ 111,854	$ 3,940	$ 231,092

	December 31, 2016			
	Individual Markets	Empower Retirement	Other	Total
Assets:				
Investments	$ 16,770,772	$ 12,195,748	$ 1,634,330	$ 30,600,850
Other assets	1,453,717	1,057,148	141,666	2,652,531
Separate account assets	7,521,475	19,516,290	—	27,037,765
Assets of continuing operations	$ 25,745,964	$ 32,769,186	$ 1,775,996	60,291,146
Assets of discontinued operations				17,652
Total assets				$ 60,308,798

	Year Ended December 31, 2015			
	Individual Markets	Empower Retirement	Other	Total
Revenue:				
Premium income	$ 360,783	$ 533	$ 84,234	$ 445,550
Fee income	87,471	853,076	3,979	944,526
Other revenue	—	13,563	—	13,563
Net investment income	801,935	398,639	53,856	1,254,430
Realized investments gains (losses), net	28,864	54,752	94	83,710
Total revenues	1,279,053	1,320,563	142,163	2,741,779
Benefits and expenses:				
Policyholder benefits	931,631	201,791	101,205	1,234,627
Operating expenses	159,719	992,564	65,890	1,218,173
Total benefits and expenses	1,091,350	1,194,355	167,095	2,452,800
Income (loss) before income taxes	187,703	126,208	(24,932)	288,979
Income tax expense (benefit)	64,360	43,058	(8,894)	98,524
Net income (loss)	$ 123,343	$ 83,150	$ (16,038)	$ 190,455

20. Share-Based Compensation

Equity Awards

Lifeco, of which the Company is an indirect wholly-owned subsidiary, maintains the Great-West Lifeco Inc. Stock Option Plan (the "Lifeco plan") that provides for the granting of options on its common shares to certain of its officers and employees and those of its subsidiaries, including the Company. Options are granted with exercise prices not less than the average market price of the shares on the five days preceding the date of the grant. The Lifeco plan provides for the granting of options with varying terms and vesting requirements with vesting commencing on the first anniversary of the grant, exercisable within 10 years from the date of grant.

Termination of employment prior to the vesting of the options results in the forfeiture of the unvested options, unless otherwise determined by Human Resources Committee. At its discretion the Human Resources Committee may vest the unvested options of retiring option holders, with the options exercisable within five years from the date of retirement. In such event, the Company accelerates the recognition period to the date of retirement for any unrecognized share-based compensation cost related thereto and recognizes it in its earnings at that time.

Liability Awards

The Company maintains a Performance Share Unit Plan ("PSU plan") for senior executives of the Company. Under the PSU plan, "performance share units" are granted to certain senior executives of the Company. Each performance unit has a value equal to one share of Lifeco common stock and is subject to adjustment for cash dividends paid to Lifeco stockholders, Company earnings results as well as stock dividends and splits, consolidations and the like that affect shares of Lifeco common stock outstanding.

If the performance share units vest, they are payable in cash equal to the average closing price of Lifeco common stock for the 20 trading days prior to the date following the last day of the three-year performance period. The performance share units generally vest in their entirety at the end of the three years performance period based on continued service. The PSU plan contains a provision that permits all unvested performance share units to become vested upon death or retirement.

Performance share units are settled in cash and are recorded as liabilities until payout is made. Unlike share-settled awards, which have a fixed grant-date fair value, the fair value of unsettled or unvested liabilities awards is remeasured at the end of each reporting period based on the change in fair value of one share of Lifeco common stock. The liability and corresponding expense are adjusted accordingly until the award is settled.

Compensation Expense Related to Share-Based Compensation

The compensation expense related to share-based compensation was as follows:

	Year Ended December 31,		
	2017	2016	2015
Lifeco Stock Plan	$ 1,460	$ 2,190	$ 1,655
Performance Share Unit Plan	7,207	5,318	2,320
Total compensation expense	$ 8,667	$ 7,508	$ 3,975
Income tax benefits	$ 2,832	$ 2,458	$ 1,143

The following table presents the total unrecognized compensation expense related to share-based compensation at December 31, 2017, and the expected weighted average period over which these expenses will be recognized:

	Expense	Weighted average period (years)
Lifeco Stock Plan	$ 1,673	1.6
Performance Share Unit Plan	5,179	1.3

Equity Award Activity

During the year ended December 31, 2017, Lifeco granted 434,300 stock options to employees of the Company. These stock options vest over five - year periods ending in 2022. Compensation expense of $1,195 will be recognized in the Company's financial statements over the vesting period of these stock options using the accelerated method of recognition.

The following table summarizes the status of, and changes in, the Lifeco plan options granted to Company employees which are outstanding. The options granted relate to underlying stock traded in Canadian dollars on the Toronto Stock Exchange; therefore, the amounts, which are presented in United States dollars, will fluctuate as a result of exchange rate fluctuations.

		Weighted average		
	Shares under option	Exercise price (Whole dollars)	Remaining contractual term (Years)	Intrinsic value [1]
Outstanding, January 1, 2017	4,062,001	$ 23.25		
Granted	434,300	29.26		
Exercised	(655,384)	24.58		
Cancelled and expired	(393,942)	28.35		
Outstanding, December 31, 2017	3,446,975	24.88	6.3	$ 11,012
Vested and expected to vest, December 31, 2017	3,446,975	$ 24.88	6.3	$ 11,012
Exercisable, December 31, 2017	2,190,591	$ 23.22	5.3	$ 10,327

[1] The aggregate intrinsic value is calculated as the difference between the market price of Lifeco common shares on December 31, 2017, and the exercise price of the option (only if the result is positive) multiplied by the number of options.

The following table presents additional information regarding stock options under the Lifeco plan:

	Year Ended December 31,		
	2017	2016	2015
Weighted average fair value of options granted	$ 2.75	$ 2.74	$ 3.33
Intrinsic value of options exercised [1]	2,869	2,102	4,234
Fair value of options vested	2,203	1,605	1,670

[1] The intrinsic value of options exercised is calculated as the difference between the market price of Lifeco common shares on the date of exercise and the exercise price of the option multiplied by the number of options exercised.

The fair value of the options granted during the years ended December 31, 2017, 2016, and 2015 was estimated on the date of the grant using the Black-Scholes option-pricing model with the following weighted average assumptions:

	Year Ended December 31,		
	2017	2016	2015
Dividend yield	3.98%	3.99%	3.66%
Expected volatility	13.99%	19.03%	19.10%
Risk free interest rate	1.25%	0.80%	0.90%
Expected duration (years)	6.0	6.0	6.0

Liability Award Activity

The following table summarizes the status of, and changes in, the Performance Share Unit Plan units granted to Company employees which are outstanding:

	Performance Units
Outstanding, January 1, 2017	598,911
Granted	290,895
Forfeited	(77,957)
Exercised	(130,339)
Outstanding, December 31, 2017	681,510
Vested and expected to vest, December 31, 2017	681,510

The cash payment in settlement of the Performance Share Unit Plan units was $3,398 and $3,988 for the years ended December 31, 2017, and 2016, respectively.

21. Commitments and Contingencies

Commitments

The following table summarizes the Company's future purchase obligations and commitments:

	Payment due by period				
	Less than one year	One to three years	Three to five years	More than five years	Total
Related party long-term debt - principal [1]	$ —	$ —	$ —	$ 540,400	$ 540,400
Related party long-term debt - interest [2]	26,796	53,591	53,591	468,942	602,920
Investment purchase obligations [3]	312,152	1,090	—	—	313,242
Operating leases [4]	15,467	23,703	7,000	13	46,183
Other liabilities [5]	39,499	33,261	40,487	19,644	132,891
Total	$ 393,914	$ 111,645	$ 101,078	$ 1,028,999	$ 1,635,636

(1) ***Related party long-term debt principal*** - Represents contractual maturities of principal due to the Company's parent, GWL&A Financial, under the terms of three long-term surplus notes. The amounts shown in this table differ from the amounts included in the Company's consolidated balance sheet because the amounts shown above do not consider the discount upon the issuance of one of the surplus notes.

(2) ***Related party long-term debt interest*** - One long-term surplus note bears interest at a fixed rate through maturity. The second surplus note bears a variable interest rate plus the then-current three-month London Interbank Offering Rate ("LIBOR"). The third long-term surplus note bears interest at a fixed rate through maturity. The interest payments shown in this table are calculated based upon the contractual rates in effect on December 31, 2017 and do not consider the impact of future interest rate changes.

(3) ***Investment purchase obligations*** - The Company makes commitments to fund partnership interests, mortgage loans on real estate, and other investments in the normal course of its business. As the timing of the fulfillment of the commitment to fund partnership interests cannot be predicted, such obligations are presented in the less than one year category. The timing of the funding of mortgage loans on real estate is based on the expiration date of the commitment. The amounts of these unfunded commitments at December 31, 2017, and 2016, were as follows:

	December 31, 2017	December 31, 2016
Due in less than one year	$ 312,152	$ 438,458
Due within one to three years	1,090	—
Total	$ 313,242	$ 438,458

Included in the total unfunded commitments at December 31, 2017, and 2016, is $114,726 and $93,440, respectively, related to cost basis limited partnership interests, all of which is due within one year from the dates indicated.

(4) ***Operating leases*** - The Company is obligated to make payments under various non-cancelable operating leases, primarily for office space. Contractual provisions exist that could increase the lease obligations presented, including operating expense escalation clauses. Management does not consider the impact of any such clauses to be material to the Company's operating lease obligations. The Company incurred rent expense, net of sublease income, of $13,433, $12,575, and $12,050 for the years ended December 31, 2017, 2016, and 2015, respectively and is recorded in general insurance expense. The Company's total future operating lease obligation will be reduced by minimum reimbursement of $5,938 due in the future under non-cancelable agreements.

From time to time, the Company enters into agreements or contracts, including capital leases, to purchase goods or services in the normal course of its business. However, these agreements and contracts are not material and are excluded from the table above.

(5) ***Other liabilities*** - Other liabilities include those other liabilities which represent contractual obligations not included elsewhere in the table above. If the timing of the payment of any other liabilities was sufficiently uncertain, the amounts were included in the less than one year category. Other liabilities presented in the table above include:

- Expected contributions to the Company's defined benefit pension plan and benefit payments for the Post-Retirement Medical Plan and Supplemental Executive Retirement Plan.
- Miscellaneous purchase obligations to acquire goods and services.
- Unrecognized tax benefits

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 (both compiled on the unconsolidated statutory accounting basis prescribed by the NAIC), for each quarter ending after December 31, 2016. The Company was in compliance with all covenants at December 31, 2017, and 2016. At December 31, 2017, and 2016 there were no outstanding amounts related to the current and prior credit facilities.

GWL&A Financial has a letter of credit for the benefit of GWSC for capital support in the amount of $70 million and which renews annually until the Company terminates it under the provisions specified in the agreement. Additionally, GWL&A Financial terminated a letter of credit on December 21, 2017 in the amount of $1,141 million which was for the benefit of the Company as collateral under the GWSC and CLAC reinsurance agreement for policy liabilities. This letter of credit was replaced with an excess of loss reinsurance agreement with a third party reinsurer. At December 31, 2017, and 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 December 31, 2017, and 2016, there were no outstanding amounts related to those letters of credit.

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 retirement or fund products. 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.

22. Subsequent Events

On February 1, 2018, the Company's Board of Directors declared dividends of $24,001, payable on March 30, 2018, to its sole shareholder, GWL&A Financial.

GREAT-WEST LIFE & ANNUITY INSURANCE COMPANY
Schedule III
Supplemental Insurance Information
(In Thousands)

	As of and for the Year Ended December 31, 2017			
	Individual Markets Segment	Empower Retirement Segment	Other Segment	Total
Deferred acquisition costs	$ 352,203	$ 146,236	$ —	$ 498,439
Future policy benefits, losses, claims, and expenses	17,200,360	12,432,371	370,098	30,002,829
Unearned premium reserves	46,098	—	—	46,098
Other policy claims and benefits payable	696,778	753	28,684	726,215
Premium income	357,244	2,172	80,315	439,731
Net investment income	738,002	434,677	47,374	1,220,053
Benefits, claims, losses, and settlement expenses	953,371	206,544	81,219	1,241,134
Amortization of deferred acquisition costs	24,683	(3,821)	—	20,862
Other operating expenses	144,551	1,002,252	80,619	1,227,422

	As of and for the Year Ended December 31, 2016			
	Individual Markets Segment	Empower Retirement Segment	Other Segment	Total
Deferred acquisition costs	$ 340,532	$ 127,313	$ —	$ 467,845
Future policy benefits, losses, claims, and expenses	16,420,554	12,019,243	387,181	28,826,978
Unearned premium reserves	45,921	—	—	45,921
Other policy claims and benefits payable	694,965	713	27,229	722,907
Premium income	379,127	1,853	84,369	465,349
Net investment income	798,557	428,327	49,675	1,276,559
Benefits, claims, losses, and settlement expenses	969,182	206,143	65,698	1,241,023
Amortization of deferred acquisition costs	45,944	(16,627)	—	29,317
Other operating expenses	129,072	1,018,756	69,096	1,216,924

	As of and for the Year Ended December 31, 2015			
	Individual Markets Segment	Empower Retirement Segment	Other Segment	Total
Premium income	360,783	533	84,234	445,550
Net investment income	801,935	398,639	53,856	1,254,430
Benefits, claims, losses and settlement expenses	931,631	201,791	101,205	1,234,627
Amortization of deferred acquisition costs	55,876	40,219	—	96,095
Other operating expenses	103,843	952,345	65,890	1,122,078

Item 9.
Changes in and Disagreements With Accountants on Accounting and Financial Disclosure

There has been no change in the Company's independent registered public accounting firm nor have there been any disagreements on accounting or financial disclosure matters.

Item 9A.
Controls and Procedures

Disclosure Controls and Procedures

The Company's management, with the participation of the President and Chief Executive Officer and 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") as of December 31, 2017. Based upon that evaluation, the President and Chief Executive Officer and Principal Financial Officer concluded that these disclosure controls and procedures are effective as of December 31, 2017.

As of December 31, 2017, management has concluded that the consolidated financial statements included in this Annual Report on Form 10-K present fairly, in all material respects, the Company's financial position, results of operations, and cash flows in conformity with generally accepted accounting principles.

Management's Annual Report on Internal Control over Financial Reporting

The Company's management is responsible for establishing and maintaining adequate internal control over financial reporting (as defined in Rules 13a-15(f) and 15d-15(f) under the Exchange Act). Because of its inherent limitations, internal control over financial reporting is not intended to provide absolute assurance that a misstatement of our financial statements would be prevented or detected. Management assessed the effectiveness of the Company's internal control over financial reporting as of December 31, 2017, using criteria set forth in *Internal Control - Integrated Framework (2013)* issued by the Committee of Sponsoring Organizations of the Treadway Commission ("COSO").

Based on the criteria in the COSO (2013) Framework, management has concluded that the Company maintained effective internal control over financial reporting as of December 31, 2017.

As the Company is neither an accelerated filer nor a large accelerated filer, management's internal control over financial reporting is not subject to attestation by the Company's registered public accounting firm pursuant to final rules of the Securities and Exchange Commission that permit the Company to provide only management's assessment in this annual report.

Changes in Internal Control over Financial Reporting

There were no significant changes to the Company's internal control over financial reporting as defined in Exchange Act Rule 13a15(f) during the quarter ended December 31, 2017 that have materially affected, or are reasonably likely to materially affect, the Company's internal control over financial reporting.

Item 9B.
Other Information

None.

Part III
Item 10.
Directors and Executive Officers of the Registrant

10.1 Identification of Directors

Director	Age	Served as a Director from	Principal Occupation(s) for Last Five Years
John L. Bernbach (5) (6)	74	2006	CEO of The Bernbach Group since July 2015; previously Vice Chairman, Engine since January 2015; previously Chief Executive Officer, Engine USA since July 2013; previously Chief Operating Officer, Engine USA
Marcel Coutu (1) (2) (4) (6) (7)	64	2014	Corporate Director since January 2014; previously President and Chief Executive Officer, Canadian Oil Sands Limited
André Desmarais (1) (2) (4) (6) (7) (8)	61	1997	Deputy Chairman, President and Co-Chief Executive Officer, Power Corporation; Executive Co-Chairman, Power Financial Corporation
Paul Desmarais, Jr. (1) (2) (4) (6) (7) (8)	63	1991	Chairman and Co-Chief Executive Officer, Power Corporation; Executive Co-Chairman, Power Financial Corporation
Gary A. Doer (1) (2) (7)	69	2016	Senior Business Advisor, Dentons Canada LLP since August 2016; previously Canada's Ambassador to the United States
Gregory J. Fleming (1) (2) (7)	55	2016	Chief Executive Officer, Rockefeller Capital Management since October 2017; previously Corporate Director since October 2015; previously President of Morgan Stanley Investment Management
Claude Généreux (1) (2) (4) (7)	55	2015	Executive Vice President, Power Corporation and Power Financial Corporation since March 2015; previously Senior Partner of McKinsey & Company
Alain Louvel (3) (5)	72	2006	Corporate Director
Paul A. Mahon (1) (2) (4)	54	2013	President and Chief Executive Officer, Lifeco, Great-West Life, CLAC and London Life
Jerry E.A. Nickerson (3)	81	1994	Chairman of the Board, H.B. Nickerson & Sons Limited
R. Jeffrey Orr (1) (2) (4) (6) (7)	59	2005	Chairman of the Board of the Company since July 2013; Chairman of the Board of Lifeco, Great-West Life, CLAC and London Life since May 2013; President and Chief Executive Officer, Power Financial Corporation
Robert L. Reynolds (1)	65	2014	President and Chief Executive Officer since May 2014; President and Chief Executive Officer of Putnam Investments, LLC
Raymond Royer (3)	79	2009	Corporate Director
T. Timothy Ryan, Jr. (1) (2) (4) (6) (7)	72	2009	Corporate Director since May 2014; previously Vice Chairman of Regulatory Affairs at JP Morgan Chase
Jerome J. Selitto (1) (2) (7)	76	2012	President, Avex Funding Corporation since April 2015; previously Chief Executive Officer of PHH Corporation
Gregory D. Tretiak (1) (2) (3) (7)	62	2012	Executive Vice President and Chief Financial Officer, Power Corporation
Brian E. Walsh (1) (2) (4) (6) (7)	64	1995	Partner and Chief Strategist, Titan Advisors, LLC since July, 2015; previously Chairman and Chief Investment Officer, Saguenay Strathmore Capital, LLC

(1) Member of the Executive Committee.
(2) Member of the Investment and Credit Committee.
(3) Member of the Audit Committee.
(4) Member of the Human Resources Committee.
(5) Member of the Conduct Review Committee.
(6) Member of the Governance and Nominating Committee.
(7) Member of the Risk Committee.

(8) Mr. André Desmarais and Mr. Paul Desmarais, Jr. are brothers.

Unless otherwise indicated, all of the directors have been engaged for not less than five years in their present principal occupations or in another executive capacity with the companies or firms identified.

The appointments of directors are confirmed annually.

The following is a list of directorships currently held or formerly held within the five previous years by the directors of the Company, on companies whose securities are traded publicly in the United States or that are investment companies registered under the Investment Company Act of 1940.

Director	Current Directorships	Former Directorships and Dates
John L. Bernbach		Omnicare, Inc. March 2013 - August 2015
Marcel Coutu	Brookfield Asset Management Inc. Enbridge Inc.	Canadian Oil Sands Limited September 2001 - December 2014
André Desmarais		CITIC Pacific Limited December 1997 - May 2014
Gary Doer	Barrick Gold	
Paul Desmarais, Jr.		Total S.A. May 2002 - May 2017 Lafarge S.A. January 2008 - July 2015
Alain Louvel		World Point Terminals, LP May 2008 - September 2017
R. Jeffrey Orr	PanAgora Asset Management, Inc.	
T. Timothy Ryan, Jr.	Santander Holdings USA, Inc.	Markit June 2013 - October 2014 Lloyds Banking Group April 2009 - April 2013
Gregory D. Tretiak	PanAgora Asset Management, Inc.	

The Company's Governance and Nominating Committee (the "Nominating Committee") is charged with recommending to the Board of Directors the qualifications for Directors, including among other things, the competencies, skills, experience and level of commitment required to fulfill Board responsibilities and the personal qualities that should be sought in candidates for Board membership. The Nominating Committee's duties include identifying and recommending Director candidates to the Board based on a consideration of the competencies and skills that the Board considers appropriate for the Board as a whole to possess, the competencies and skills that the Board considers each existing Director to possess and that each new nominee will bring to the Board, and the appropriate level of representation on the Board by Directors who are independent of management and who are neither officers nor employees of any of the Company's affiliates.

The Company's Directors are elected on an annual basis by the Company's sole shareholder, GWL&A Financial.
The Company's Directors are identified below along with an indication of their experience, qualifications, attributes and skills, which leads the Company to believe that they are qualified to serve on the Board of Directors.

John L. Bernbach

Mr. Bernbach is CEO of The Bernbach Group, a business consulting firm. Prior to July 2015 Mr. Bernbach served as Vice Chairman of Engine, one of the largest privately-owned independent marketing services companies, which he joined in January 2010. He was also a co-founder of NTM (Not Traditional Media) Inc., a marketing and media advisory firm created in 2003 to work with clients and media companies to develop strategies integrating nontraditional marketing solutions and new media models. Prior to that, Mr. Bernbach, as CEO of The Bernbach Group, LLC, led this executive management consulting business concentrating on corporate and communications strategies. From 1995 to 2000 Mr. Bernbach served as Director and then CEO and Chairman of North American Television, which produced and distributed news and entertainment programming. In 1994, Mr. Bernbach launched the publication of luxury goods magazines in China, Japan, France and Spain. Prior to 1994 Mr. Bernbach spent 22 years at the advertising firm Doyle Dane Bernbach, the last eight as President/COO of DDB Needham Worldwide. In 1986 he was one of five founders of Omnicon, which at that time was the largest marketing services and communications groups in the world. Mr. Bernbach currently serves on the Boards of Putnam, Casita Maria, Ai Media Group LLC and as an advisor to The Blackstone Group.

Marcel Coutu

Mr. Coutu is the former Chairman of Syncrude Canada Ltd., one of Canada's largest oil sands projects and is past President and Chief Executive Officer of Canadian Oil Sands Limited. He was previously Senior Vice-President and Chief Financial Officer of Gulf Canada Resources Limited, and prior to that held various positions in the areas of corporate finance, investment banking, and mining and oil and gas exploration and development. Mr. Coutu is a Director of Lifeco, Great-West Life, London Life, CLAC and Putnam. He is also a Director of Power Corporation, IGM Financial Inc. ("IGM"), Investors Group Inc. ("Investors Group"), Mackenzie Inc. ("Mackenzie"), Brookfield Asset Management Inc., Enbridge Inc. and the Calgary Exhibition and Stampede Board and is a past member of the Association of Professional Engineers, Geologists and Geophysicists of Alberta. He has also held board positions with Gulf Indonesia Resources Limited, TransCanada Power Limited Partnership and the Board of Governors of the Canadian Association of Petroleum Producers.

André Desmarais

Mr. Desmarais is Deputy Chairman, President and Co-Chief Executive Officer of Power Corporation and Executive Co-Chairman of Power Financial. Prior to joining Power Corporation in 1983 he was Special Assistant to the Minister of Justice of Canada and an institutional investment counselor at Richardson Greenshields Securities Ltd. He has held a number of senior positions with Power group companies and was named President and Co-Chief Executive Officer of Power Corporation in 1996. Mr. Desmarais is a Director of Lifeco, Great-West Life, London Life, CLAC and Putnam. He is a Director of IGM, Investors Group and Mackenzie. He is also a Director of Power Corporation, Power Financial and Pargesa Holding S.A. ("Pargesa") in Europe. Mr. Desmarais is Honorary Chairman of the Canada China Business Council and is a member of several China-based organizations. Mr. Desmarais is active in cultural, health and other not-for-profit organizations. He is an Officer of the Order of Canada and of the National Order of Québec. He has received Doctorates Honoris Causa from Concordia University, Université de Montréal and McGill University. Mr. Desmarais is a trustee of the Desmarais Family Residuary Trust.

Paul Desmarais, Jr.

Mr. Desmarais is Chairman and Co-Chief Executive Officer of Power Corporation and Executive Co-Chairman of Power Financial. He joined Power Corporation in 1981 and assumed the position of Vice-President the following year. He served as Vice-President of Power Financial from 1984 to 1986, as President and Chief Operating Officer from 1986 to 1989, as Executive Vice-Chairman from 1989 to 1990, as Executive Chairman of the Board from 1990 to 2005, as Chairman of the Executive Committee from 2006 to 2008 and as Executive Co-Chairman from 2008 until today. He also served as Vice-Chairman of Power Corporation from 1991 to 1996. He was named Chairman and Co-Chief Executive Officer of Power Corporation in 1996. From 1982 to 1990, he was a member of the Management Committee of Pargesa; in 1991 he became Executive Vice-Chairman and then Executive Chairman of the Committee; in 2003, he was appointed Co-Chief Executive Officer; and in 2013 was named Chairman of the Board. He has been a director of Pargesa since 1992. He is a Director of many Power group companies in North America, including Power Corporation, Power Financial, Lifeco, Great-West Life, London Life, CLAC, Putnam, IGM, Investors Group and Mackenzie. In Europe, he is Vice-Chairman of the Board of Groupe Bruxelles Lambert and a Director of LafargeHolcim Ltd and SGS SA. He was Vice-Chairman of the Board and a Director of Imerys until 2008, a Director of GDF Suez until 2014, and a Director of Total SA until 2017. Mr. Desmarais is past Chairman and a member of The Business Council of Canada. He is also active on a number of philanthropic advisory councils. In 2005, he was named an Officer of the Order of Canada, in 2009 an Officer of the National Order of Québec and, in 2012 Chevalier de la Légion d'honneur in France. He has received a number of honorary doctorates. Mr Desmarais is a Trustee of the Desmarais Family Residuary Trust.

Gary A. Doer

Mr. Doer has served as a Senior Business Advisor at Dentons Canada LLP, a global law firm, since August 2016. He previously served as Canada's Ambassador to the United States from October 2009 to January 2016. He was the Premier of Manitoba from 1999 to 2009, and served in a number of positions as a member of the Legislative Assembly of Manitoba from 1986 to 2009, including Minister of Urban Affairs from 1986 to 1988 and Minister of Crown Investments from 1987 to 1988. Mr. Doer is a Director of Great-West Life, London Life, CLAC and Putnam. He is also a Director of Power Corporation, Power Financial, IGM, Investors Group, and Mackenzie. In 2017 Mr. Doer joined the Trilateral Commission as a member of the North American Group. He is a volunteer Co-Chair of the Wilson Centre's Canada Institute, a non-partisan public policy forum focused on Canada-U.S. relations. He received a distinguished diplomatic service award from the World Affairs Council in 2011 and was inducted into the Order of Manitoba in 2010.

Gregory J. Fleming

Mr. Fleming is the Chief Executive Officer of Rockefeller Capital Management since October 2017. He is the former President of Morgan Stanley Wealth Management and Morgan Stanley Investment Management. Mr. Fleming is a leading authority in the global financial services industry. He joined Morgan Stanley in February 2010 as President of Morgan Stanley Investment Management, a role he held until October 2015. He assumed the additional role leading Wealth Management in January 2011. Prior to joining Morgan Stanley, Mr. Fleming served as President and Chief Operating Officer of Merrill Lynch from June of 2007 to early 2009. Previously Mr. Fleming ran Merrill Lynch's Global Investment Banking business and joined Merrill Lynch as an investment banker in 1992. He also has been a principal at Booz Allen Hamilton. After leaving Merrill Lynch in January of 2009 after 17 years, Mr. Fleming was a Senior Research Scholar and Distinguished Visiting Fellow of the Center for the Study of Corporate Law at Yale Law School. Mr. Fleming is a director of Colgate University, a member of the Board of Advisors for the Yale Law School Center for the Study of Corporate Law, the Council on Foreign Relations, the Economic Club of New York, a Director on Turn 2 Foundation Board, a Trustee at Deerfield Academy and a member of the Ronald McDonald House Board of Directors. He is a Phi Beta Kappa, summa cum laude graduate in economics from Colgate University and received his J.D. from Yale Law School. Mr. Fleming is also a director of Putnam.

Claude Généreux

Mr. Généreux is Executive Vice-President of Power Corporation and Power Financial, positions he has held since March 2015. He is Senior Partner Emeritus of McKinsey & Company ("McKinsey"), a global management consulting firm. During his 28 years at McKinsey, Mr. Généreux focused on serving leading global companies in financial services, resources and energy. He has held various leadership positions including Global Sector Leadership in energy, Office Leadership in Montreal, Global Personal Committees for partner election and evaluation, and Global Recruiting for non-MBA candidates. He has been posted in Montreal, Paris, Toronto and Stockholm. Mr. Généreux is a Director of Lifeco, Great-West Life, London Life, CLAC and Putnam. He is also a Director of IGM, Investors Group and Mackenzie. Mr. Généreux is the Vice-Chairman of the Board of Governors at McGill University and serves on the Boards of the Jeanne Sauvé Foundation, the Loran Scholars Foundation, Michaëlle Jean Foundation and the Rhodes Scholarships in Canada. He graduated from McGill University and Oxford University where he studied as a Rhodes Scholar.

Alain Louvel

After receiving an MBA from Columbia University, and a masters in Economics and Political Sciences from the Paris University, Mr. Louvel began his professional career in 1970 as an advisor to the Department of Industry and Trade of the Quebec Government. In 1972 he joined Bank Paribas ("Paribas") and for the next 33 years held various executive positions with Paribas in France, Canada and the United States. He completed his banking career as the Head of Risk Management for the Americas of BNP Paribas, with overall responsibilities over credit, market, counterparty and operational risk. Mr. Louvel serves as a Director of Putnam and Mountain Asset Management. He is also a Honorary Trustee of the French Institute Alliance Francaise and a French Foreign Trade Counselor. Mr. Louvel is a permanent resident of the United States with dual French and Canadian citizenship.

Paul A. Mahon

Mr. Mahon is President and Chief Executive Officer of Lifeco, Great-West Life, London Life and CLAC, a position he has held since May 2013. Prior to that he was President and Chief Operating Officer, Canada of Lifeco, Great-West Life, London Life and CLAC. Mr. Mahon has been with Great-West Life since 1986, and is a Director of Lifeco, Great-West Life, London Life, CLAC and Putnam. He is a member of the Canadian Council of Chief Executives. Mr. Mahon is a director and Chair of the

board of the Canadian Life and Health Insurance Association and also serves on the board of the Misericordia Health Centre Corporation and is a member of the United Way Resource Development Standing Committee.

Jerry E.A. Nickerson

Mr. Nickerson is Chairman of the Board of H.B. Nickerson & Sons Limited, a management and holding company based in North Sydney, Nova Scotia. He is also a Director of Putnam. He has also served on the boards of various organizations, federal and provincial Crown corporations, and other public and private companies.

R. Jeffrey Orr

Mr. Orr has been Chairman of the Board of the Company since July 2013 and of Lifeco, Great-West Life, London Life and CLAC since May 2013. He is also President and Chief Executive Officer of Power Financial, a position he has held since May 2005. From May 2001 until May 2005, Mr. Orr was President and Chief Executive Officer of IGM. Previously, he was Chairman and Chief Executive Officer of BMO Nesbitt Burns Inc. and Vice-Chairman, Investment Banking Group, Bank of Montreal. He is a Director of Lifeco, Great-West Life, London Life, CLAC, PanAgora Asset Management Inc. (“PanAgora”), and is a Director and Chairman of Putnam since June 2008. Mr. Orr is also a Director and Chairman of IGM, Investors Group and Mackenzie, and a Director of Power Financial and Power Corporation. He is active in a number of community and business organizations.

Robert L. Reynolds

Mr. Reynolds was appointed president and chief executive officer of the Company in May 2014. He provides leadership and strategic direction for the company's Empower Retirement, Great-West Financial and Great-West Investments business. In addition, Reynolds serves as president and chief executive officer of Great-West Lifeco U.S. LLC. He is also president and chief executive officer of Putnam Investments since 2008 and is a Director of Putnam. Mr. Reynolds has more than 30 years of financial services and investments experience. Before joining Putnam, he spent 24 years at Fidelity Investments, serving as vice chairman and chief operating officer from 2000 to 2007. Among many awards and recognitions, Reynolds received a Lifetime Achievement Award from PLANSPONSOR magazine in 2005 for his contributions to the retirement services industry and was awarded a President's Medal of Excellence from Boston College. He earned a bachelor's degree in business administration/ finance from West Virginia University, from which he also received an honorary doctorate in business administration and a Distinguished Alumni Award. Mr. Reynolds serves on the executive committee of the Massachusetts High Technology Council board. Mr. Reynolds serves on the boards of several nonprofits, including West Virginia University Foundation, Concord Museum, Dana-Farber Cancer Institute and the U.S. Ski and Snowboard Team Foundation. He is chairman of the Boston Advisory Board of American Ireland Fund and a member of the Chief Executives Club of Boston and the Council on Competitiveness.

Raymond Royer

Mr. Royer was President and Chief Executive Officer and a Director of Domtar Inc. from 1996 until December, 2008. He was previously President and Chief Operating Officer of Bombardier Inc. Mr. Royer is a Director of Lifeco, Great-West Life, London Life, CLAC and Putnam. Mr. Royer is also a Director of Power Financial. He was a Director of Shell Canada Limited until 2007. He is Chairman of the Board of the Research Institute of the McGill University Health Centre and a Member of the International Advisory Board of École des Hautes Études Commerciales of Montréal. He is an Officer of the Order of Canada and of the National Order of Québec.

T. Timothy Ryan, Jr.

Mr. Ryan served as a Vice-Chairman of Regulatory Affairs at JPMorgan Chase & Co. (“JPMorgan”), a global financial services firm, from 2013 to 2014. Prior to joining JPMorgan, he was President and Chief Executive Officer of the Securities and Financial Markets Association from 2008 to 2013. He is a director of Lifeco, Great-West Life, London Life, CLAC, Putnam, Power Corporation and Power Financial. He previously served as a director of the Company from May 2010 to May 2013. Mr. Ryan is also non-executive Chairman of the Board of Directors of Santander Holdings USA, Inc., Santander Bank, N.A. and Banco Santander International. He previously served as a Director of Markit and Lloyds Banking Group plc. He was a private sector member of the Global Markets Advisory Committee for the National Intelligence Council from 2007 to 2011. Mr. Ryan is a graduate of Villanova University and the American University Law School.

Jerome J. Selitto

Mr. Selitto is the President of Avex Funding Corporation, a technology focused mortgage lender, a position he has held since April 2015. Mr. Selitto served as a Director and as the President and Chief Executive Officer of PHH Corporation ("PHH"), a provider of mortgage lending and servicing solutions, from October 2009 to January 2012. Prior to joining PHH, Mr. Selitto most recently worked at Ellie Mae, Inc. ("Ellie Mae"), a provider of enterprise solutions for the residential mortgage industry. While at Ellie Mae, Mr. Selitto initially served as a senior consultant beginning in 2007 and, later in 2007 through 2009, as Executive Vice-President, Lender Division. He has over 40 years experience in the mortgage industry and in capital markets. Mr. Selitto is a Director of Lifeco, Great-West Life, London Life, CLAC and Putnam. He is also Director and President of One Zero Mortgage. Mr. Selitto holds a Bachelor of Science degree in Economics and Marketing from the University of South Florida.

Gregory D. Tretiak

Mr. Tretiak is Executive Vice-President and Chief Financial Officer of Power Corporation and Power Financial, positions he has held since May 2012. From 1988 to May 2012, he held various positions with IGM and Investors Group, most recently the position of Executive Vice President and Chief Financial Officer of IGM from April 1999 to May 2012. Mr. Tretiak is a Director of Lifeco, Great-West Life, London Life, CLAC, Putnam and PanAgora. He also serves as a Director of IGM, Investors Group and Mackenzie. He holds a Bachelor of Arts in Economics and Political Science from the University of Winnipeg and is a Chartered Professional Accountant, a Fellow of the Chartered Professional Accountants and has been a Certified Financial Planner. Throughout his career, Mr. Tretiak has been active in professional industry groups and associations including the Chartered Professional Accountants, Financial Executives International, the Certified Financial Planners, the Institute of Internal Auditors, the Investment Funds Institute of Canada and the Canadian Chamber of Commerce Economic and Taxation Committee.

Brian E. Walsh

Mr. Walsh is Partner and Chief Strategist of Titan Advisors LLC, an asset management firm, a position he has held since July 2015. Prior to that, Mr. Walsh was Chairman and Chief Investment Officer of Saguenay Strathmore Capital, LLC, a money management and investment advisory company, a position that he held from September 2011 to June 2015. He was previously Managing Partner of Saguenay Capital, LLC from January 2001 to September 2011. Mr. Walsh has over 30 years of investment banking, international capital markets and investment management experience. He had a long career at Bankers Trust culminating in his appointment as Co-head of Global Investment Banking and as a member of the Management Committee. Mr. Walsh is a Director of Lifeco, Great-West Life, London Life, CLAC and Putnam. He also serves on the International Advisory Board of École des Hautes Études Commerciales of Montréal. Mr. Walsh holds a Masters in Business Administration and Bachelor of Arts degree from Queen's University.

10.2 Identification of Executive Officers

Executive	Age	Officer from	Principal Occupation(s) for Last Five Years
Robert L. Reynolds President and Chief Executive Officer	65	2014	President and Chief Executive Officer of the Company since May 2014; also President and Chief Executive Officer, Putnam Investments, LLC
Edmund F. Murphy III President, Empower Retirement	56	2014	President, Empower Retirement of the Company since September 2014; previously Head of Defined Contribution, Putnam Investments, LLC
Scott C. Sipple President, Great-West Investments	56	2017	President, Great-West Investments of the Company since October 2017; previously Head of Global Investment Strategies, Putnam Investments, LLC
Robert K. Shaw President, Individual Markets	62	2008	President, Individual Markets of the Company
Andra S. Bolotin Executive Vice President and Chief Financial Officer	55	2015	Executive Vice President and Chief Financial Officer of the Company since July 2016; previously Senior Vice President and Chief Financial Officer of the Company since July 2015; previously Head of Corporate Finance and Controller, Putnam Investments, LLC
Ernie P. Friesen Chief Investment Officer, General Account	55	2013	Chief Investment Officer, General Account of the Company
Richard H. Linton Jr. Executive Vice President, Empower Operations	50	2016	Executive Vice President, Empower Operations of the Company since May 2016; previously President, Retail Wealth at Voya Financial.
Jack E. Brown Senior Vice President, Separate Accounts	44	2015	Senior Vice President, Separate Accounts of the Company since July 2017; previously Vice President, Investments, since October 2015; previously Vice President, Oppenheimer Funds, Inc.
Jeffrey W. Knight Senior Vice President and Chief Technology Officer	60	2014	Senior Vice President and Chief Technology Officer of the Company
Suzanne M. Sanchez Chief Human Resources Officer	43	2011	Chief Human Resources Officer of the Company
Richard G. Schultz General Counsel and Chief Legal Officer	57	2008	General Counsel and Chief Legal Officer of the Company

Unless otherwise indicated, all of the executive officers have been engaged for not less than five years in their present principal occupations or in another executive capacity with the companies or firms identified.

The appointments of executive officers are confirmed annually.

10.3 Code of Ethics

The Company has adopted a Code of Conduct (the "Code") that is applicable to its senior financial officers, as well as to other officers and employees. All of the items identified as elements of a "code of ethics" as defined in Securities and Exchange Commission regulations adopted pursuant to the Sarbanes-Oxley Act of 2002 are substantively covered by the Code. A copy of the Code is available without charge upon written request to Kenneth I. Schindler, Chief Compliance Officer, 8525 East Orchard Road, Greenwood Village, Colorado 80111.

10.4 Security Holder Communications

As a wholly-owned subsidiary, the Board of Directors of the Company does not have a process for security holders to send communications to the Board of Directors.

10.5 Audit Committee Financial Expert

The Board of Directors has reviewed the qualifications and backgrounds of the members of the Audit Committee and determined that, although no one member of the Audit Committee is an "audit committee financial expert" within the meaning of the Rules under the Securities Exchange Act of 1934, the combined qualifications and experience of the members of the Audit Committee give the Committee collectively the financial expertise necessary to discharge its responsibilities.

Item 11.
Executive Compensation

11.1 Compensation Discussion and Analysis

1. Compensation of the President and Chief Executive Officer

Robert L. Reynolds is President and Chief Executive Officer of the Company. Mr. Reynolds is also President and Chief Executive Officer of Putnam Investments, LLC ("Putnam"), an affiliate of the Company.

Mr. Reynolds' compensation is paid by Putnam under Putnam's compensation program. A portion of Mr. Reynolds' base salary and annual bonus is allocated to, and reimbursed by, the Company for services provided to the Company. The allocation is determined by the Company's Human Resources Committee and Putnam's Human Resources Committee. The portion of Mr. Reynolds' base salary and annual bonus allocated to the Company is reflected in the Summary Compensation Table (Section 11.4).

The information in this Item 11 relates to the executive compensation program of the Company and does not apply to Mr. Reynolds.

2. Overview and Objectives of the Company's Executive Compensation Program

This section provides an overview and describes the objectives of the Company's compensation program for executives, including the Chief Financial Officer and the three other most highly compensated executive officers of the Company during 2017 (the "Named Executive Officers").

The executive compensation program adopted by the Company and applied to the Named Executive Officers has been designed to:

- support the Company's objective of generating value for shareholders and policyholders over the long term;
- attract, retain and reward qualified and experienced executives who will contribute to the success of the Company;
- motivate executive officers to meet annual corporate, divisional, and individual performance goals;
- promote the achievement of goals in a manner consistent with the Company's Code of Conduct; and
- align with regulatory requirements.

More specifically, the executive compensation program rewards:

- excellence in developing and executing strategies that will produce significant value for shareholders and policyholders over the long term;
- management vision and an entrepreneurial approach;
- quality of decision-making;
- strength of leadership;
- record of performance over the long term; and
- initiating and implementing transactions and activities that create shareholder and policyholder value.

The Human Resources Committee of the Board of Directors of the Company oversees the executive compensation program. The Board and the Human Resources Committee recognize the importance of executive compensation decisions and remain

committed to awarding compensation that reflects leadership's ability to deliver on the Company's strategic goals and to drive strong performance and sustainable value for shareholders and policyholders.

In designing and administering the individual elements of the executive compensation program, the Human Resources Committee strives to balance short-term and long-term incentive objectives and to apply prudent judgment in establishing performance criteria, evaluating performance, and determining actual incentive awards. Total compensation of each Named Executive Officer is reviewed by the Human Resources Committee from time to time for market competitiveness, and reflects each Named Executive Officer's job responsibilities, experience and proven performance.

The executive compensation programs consist of five primary components:

- base salary;
- annual incentive bonus;
- share units;
- options for Lifeco common shares; and
- retirement benefits.

The primary role of each of these components is presented in the table below:

Base Salary	Reflect skills, competencies, experience and performance of the Named Executive Officers
Annual Incentive Bonus	Reflect performance for the year
Share Units	More closely align the medium term interests of the Named Executive Officers with the interests of the shareholders
Stock Options	More closely align the long term interests of the Named Executive Officers with the interests of the shareholders
Retirement Benefits	Provide for appropriate replacement income upon retirement based on years of service with the Company

Base salary, annual incentive bonus, share units and retirement benefits are determined by the Human Resources Committee for the Named Executive Officers. The long-term compensation component in the form of options for Lifeco common shares is determined and administered by Lifeco's Human Resources Committee.

The President and Chief Executive Officer participates in the compensation setting process for the other Named Executive Officers by evaluating individual performance, establishing individual performance targets and objectives and recommending salary levels.

3. Base Salary

Base salaries for the Named Executive Officers are set annually, taking into account the individual's job responsibilities, experience and proven performance, as well as market conditions. The Company gathers market data in relation to the insurance and financial services industries and also considers surveys prepared by external professional compensation consultants with regard to peer groups in these industries. However, the Human Resources Committee does not routinely "benchmark" or review the Company's salary levels against a consistent group of its peers and does not have any formal policy of matching its salaries to those of certain competitors.

4. Bonuses

(a) Annual Incentive Bonus Plan

To relate the compensation of the Named Executive Officers to the performance of the Company, an annual incentive bonus plan (the "Annual Incentive Bonus Plan") is provided. Target objectives are set annually and may include earnings, expense or sales targets of the Company and/or a business unit of the Company or specific individual objectives related to strategic initiatives.

See Section 11.5 below for information on the participation of the Named Executive Officers in the Annual Incentive Bonus Plan and a further description of the terms of the Annual Incentive Bonus Plan.

(b) Special Bonuses

From time to time, special bonuses may be provided related to significant projects such as acquisitions or dispositions or for sign-on or retention purposes.

5. Share Units

To provide a medium term component to the executive compensation program, the Named Executive Officers participate in the Company's Share Unit Plan for Senior Executives (the "Executive Share Unit Plan").

The Company's Human Resources Committee is responsible for the granting of share units to participants under the Executive Share Unit Plan. Share Units are not granted based on the timing of the disclosure of non-public material information with respect to Lifeco or the Company.

The granting of share units is considered annually by the Human Resources Committee. Officer levels are taken into account when new share unit grants are considered. The granting of share units is subject to the terms and conditions contained in the Executive Share Unit Plan and any additional terms and conditions fixed by the Human Resources Committee at the time of the grant.

See Section 11.5 below for information on the participation of the Named Executive Officers in the Executive Share Unit Plan and a further description of the terms of the Executive Share Unit Plan.

6. Stock Options

To provide a long-term component to the executive compensation program, the Named Executive Officers participate in Lifeco's Stock Option Plan (the "Lifeco Option Plan").

While the Company's Human Resources Committee makes recommendations with respect to the granting of Lifeco options, Lifeco's Human Resources Committee is responsible for the granting of options to participants under the Lifeco Option Plan. Options are not granted based on the timing of the disclosure of non-public material information with respect to Lifeco or the Company.

The granting of Lifeco options is considered annually by the Lifeco Human Resources Committee. Officer levels are taken into account when new option grants are considered. The granting of options is subject to the terms and conditions contained in the Lifeco Stock Option Plan and any additional terms and conditions fixed by the Lifeco Human Resources Committee at the time of the grant.

See Section 11.5 below for information on the participation of the Named Executive Officers in the Lifeco Option Plan and a further description of the terms of the Lifeco Option Plan.

7. Retirement Benefits

(a) Defined Benefit Plan

GWL&A Financial has a qualified defined benefit pension plan (the "Defined Benefit Plan") which is available to all employees of the Company hired before January 1, 1999. See Section 11.8 below for information on the participation of the Named Executive Officers in the Defined Benefit Plan and a description of the terms of the Defined Benefit Plan.

(b) SERP

To provide a competitive retirement benefit to certain key executives, the Company also has a nonqualified supplemental executive retirement plan (the "SERP"), which provides benefits above the compensation limits applicable to the Defined Benefit Plan. See Section 11.8 below for information on the participation of the Named Executive Officers in the SERP and a description of the terms of the SERP.

(c) 401(k) Plan

All employees, including the Named Executive Officers, may participate in the Company's qualified defined contribution 401 (k) Plan (the "401(k) Plan"). Under the 401(k) Plan, employees may make contributions of between 1% and 50% of base salary and annual bonus (collectively "Salary"), subject to applicable Internal Revenue Service ("IRS") limits. All new employees are automatically enrolled in the 401(k) Plan at a 34% contribution rate unless the employee elects out or elects a different contribution rate.

For 2017, for employees who participated in the Defined Benefit Plan, the Company matched 50% of the first 5% of Salary contributed as pre-tax and/or Roth contributions. For employees who did not participate in the Defined Benefit Plan, the Company matched 100% of the first 4% of Salary contributed as pre-tax and/or Roth contributions. Beginning January 1, 2018, the Company matches 100% of the first 5% of Salary contributed as pre-tax and/or Roth contributions for all employees.

The 401(k) Plan offers a variety of investment options, including variable funds, collective funds, a stable value fund, Lifeco common shares (company matching contributions only) and a self-directed investment option.

8. Nonqualified Deferred Compensation

To provide market competitive compensation to certain key executives, the Company also has a nonqualified deferred compensation plan ("NQDCP") and a nonqualified executive deferred compensation plan ("EDCP"). See Section 11.9 below for information on the participation of the Named Executive Officers in these plans and a description of the terms of the plans.

11.2 Human Resource Committee Report

The Human Resources Committee has reviewed and discussed the Compensation Discussion and Analysis with management of the Company and based on such review and discussions, recommends to the Board of Directors that the Compensation Discussion and Analysis be included in this Form 10-K.

Human Resources Committee Members:

C. Généreux (Chairman)
M.R. Coutu
A. Desmarais
P. Desmarais, Jr.
P.A. Mahon
R. J. Orr
T.T. Ryan, Jr.
B.E. Walsh

11.3 Human Resources Committee Interlocks and Insider Participation

None.

11.4 Summary Compensation Table

The following table sets out the portion of Robert L. Reynolds' base salary and annual bonus allocated to the Company for 2017 (See Section 11.1(1) above for further information on this allocation). The table also sets out compensation earned in 2017 by the other Named Executive Officers.

Name and Principal Position	Year	Salary ($)	Bonus ($) (2)	Stock Awards ($)(3)	Option Awards ($)(4)	Non-Equity Incentive Plan Compensation ($)(5)	Change in Pension Value and Nonqualified Deferred Compensation Earnings ($)(7)	All Other Compensation ($)(8)	Total ($)
Robert L. Reynolds	2017	300,000	—	—	—	3,000,000	—	116,039	3,416,039
President and	2016	300,000	—	—	—	3,000,000	—	120,039	3,420,039
Chief Executive Officer	2015	300,000	—	—	—	3,000,000	—	124,039	3,424,039
Andra S. Bolotin	2017	476,923	—	269,999	66,783	1,144,615	—	11,443	1,969,763
Executive Vice President and	2016	423,077	—	249,998	134,808	900,000	—	25,994	1,733,877
Chief Financial Officer	2015	172,308	—	—	—	850,000(6)	—	28,431	1,050,739
Robert K. Shaw	2017	543,000	588,667	218,983	54,175	855,225	1,820,465	7,393	4,087,908
President,	2016	539,942	—	244,357	87,954	675,000	1,749,030	7,655	3,303,938
Individual Markets	2015	527,100	—	213,852	115,509	660,000	1,014,784	16,225	2,547,470
Edmund F. Murphy	2017	800,000	1,177,333	599,993	148,538	1,840,000	—	10,800	4,576,664
President,	2016	761,538	—	499,995	269,616	1,444,000	—	10,268	2,985,417
Empower Retirement	2015	581,538	—	450,827	364,458	1,540,000	—	9,000	2,945,823
Richard H. Linton Jr. (1)	2017	500,000	450,000	300,014	74,269	950,000	—	263,158	2,537,441
Executive Vice President,									
Empower Operations									

(1) Mr. Linton joined the Company as Executive Vice President, Empower Operations in May of 2016.

(2) This column sets forth special bonuses for (a) Mr. Shaw and Mr. Murphy in relation to the integration of certain large case defined contribution business acquired from J.P. Morgan, and (b) Mr. Linton in connection with his joining the Company.

(3) This column sets forth the value of share units granted to each Named Executive Officer under the Executive Share Unit Plan. The amounts shown represent the aggregate grant date fair value of awards computed in accordance with FASB ASC Topic 718.

(4) This column sets forth the value of Lifeco options granted to each Named Executive Officer under the Lifeco Option Plan. The amounts shown represent the aggregate grant date fair value of awards computed in accordance with FASB ASC Topic 718. For further information, see Note 20 to the Company's December 31, 2017 Financial Statements contained in Item 8 of this Form 10-K.

(5) For Ms. Bolotin and Messrs. Murphy, Shaw and Linton, these amounts represent cash bonuses earned under the Company's Annual Incentive Bonus Plan and paid in February of 2018.

(6) Ms. Bolotin's 2015 cash bonus was in respect of her work for Putnam during the first half of 2015 and for the Company during the second half of 2015.

(7) Mr. Shaw had a change in actuarial present value under the Defined Benefit Plan of $126,035, a change in actuarial present value under the SERP of $1,689,140, and above market earnings under the EDCP of $5,290. Above average earnings under the EDCP equaled the difference between the actual interest earned in 2017 and the amount of interest that would have been earned at a rate of 3.17% (3.17% being 120% of the applicable federal long-term rate at December 31, 2017).

(8) The components of 2017 other compensation reported for each of the Named Executive Officers are as follows:

(a) Mr. Reynolds received $116,039 in respect of directors' fees.

(b) Ms. Bolotin received (i) a 401(k) Plan employer contribution of $10,800; and (ii) a cell phone stipend of $643.

(c) Mr. Murphy received a 401(k) Plan employer contribution of $10,800.

(d) Mr. Shaw received (i) a 401(k) Plan employer contribution of $6,750; and (ii) a cell phone stipend of $643.

(e) Mr. Linton received (i) a 401(k) plan employer contribution of $10,800; and (ii) a relocation benefit payment of $252,358.

11.5 Grants of Plan-Based Awards for 2017

1. Table

The following table sets out information with respect to grants to the Named Executive Officers under the Annual Incentive Bonus Plan, Executive Share Unit Plan and Lifeco Option Plan.

Name	Thresholds ($)	Target ($)	Maximum ($)	All Other Stock Awards: Number of Shares of Stock or Units (#)(1)	All Other Option Awards: Number of Securities Underlying Options (#)(2)	Exercise or Base Price of Option Awards ($/Share)(3)	Grant Date Fair Value of Stock and Option Awards ($)
A.S. Bolotin	—	953,846	—	7,637	33,900	28.47	336,782
R.K. Shaw	—	814,500	—	6,194	27,500	28.47	273,158
E.F. Murphy	—	1,600,000	—	16,971	75,400	28.47	748,531
R.H. Linton	—	800,000	—	8,486	37,700	28.47	374,283

(1) These are Executive Share Units granted under the Executive Share Unit Plan. The grant date was January 1, 2017. The Company's Human Resources Committee approved the grants on February 7, 2017.

(2) These are Lifeco options granted under the Lifeco Option Plan. The grant date was March 1, 2017. The Lifeco Human Resources Committee approved the grants on February 7, 2017.

(3) Lifeco options are issued with an exercise price in Canadian dollars, which have been translated to U.S. dollars at 1.00/1.295 which was Lifeco's average rate for 2017 (the "Conversion Rate").

2. Narrative Description of the Annual Incentive Bonus Plan

Under the Annual Incentive Bonus Plan, a bonus pool is established if the Company meets certain earnings targets. The target bonus opportunity for individuals varies by office and is expressed as a percentage of base salary or as a flat amount. Bonus amounts are determined based on each Named Executive Officer's performance against established objectives. Bonus amounts of greater or lesser than the established target may be awarded. For the Named Executive Officers, there is no minimum or maximum bonus amount.

For 2017:

(i) Ms. Bolotin had an opportunity to earn up to 200% of base salary earned in 2017 based on the Company's financial performance and individual objectives, and an additional amount on a discretionary basis based on individual performance;

(ii) Mr. Murphy had an opportunity to earn up to 200% of base salary earned in in 2017 based on the Company's financial performance and individual objectives, and an additional amount on a discretionary basis based on individual performance;

(iii) Mr. Shaw had an opportunity to earn up to 150% of base salary earned in 2017 based on the Company's financial performance and individual objectives, and an additional amount on a discretionary basis based on individual performance; and

(iv) Mr. Linton had an opportunity to earn a target bonus of $800,000 in 2017 based on the Company's financial performance and individual objectives, and an additional amount on a discretionary basis based on individual performance.

3. Narrative Description of the Executive Share Unit Plan

Under the Executive Share Unit Plan, notional share units ("Executive Share Units") may be granted to the Named Executive Officers by the Company's Human Resources Committee. The value of an Executive Share Unit on a grant date is based on the average closing price of Lifeco common shares on the Toronto Stock Exchange for the preceding 20 days (the "Market Value").

The number of Executive Share Units granted is generally related to the base salaries of the Named Executive Officers. Each grant of Executive Share Units has a three year vesting period during which certain conditions (including continued employment) must be satisfied.

The number of Executive Share Units granted is increased during the three year vesting period based on dividends declared on Lifeco common shares, and may be increased or decreased based on Company performance.

Subject to satisfaction of the vesting conditions, the Executive Share Units become payable in cash during the fourth year following the date of the award, at the Market Value as of the vesting date.

4. Narrative Description of the Lifeco Option Plan

Under the Lifeco Option Plan, the Lifeco Human Resources Committee sets the exercise price of the options but under no circumstances can it be less than the weighted average trading price per Lifeco common share on the Toronto Stock Exchange for the five trading days preceding the date of the grant.

Options are either regular options or contingent options. Regular options are generally granted in multi-year allotments. Regular options become exercisable at the rate of 20% per year commencing one year after the date of the grant. Contingent options do not become exercisable unless and until conditions prescribed by the Lifeco Human Resources Committee have been satisfied.

Options generally expire ten years after the date of the grant, except that if options would otherwise expire during a blackout period or within ten business days of the end of a blackout period, the expiry date for the options is extended to the tenth business day after the expiry date of the blackout period.

In the event of the death of a participant or the termination of a participant's employment, then the period within which the options may be exercised is generally reduced depending on the circumstances surrounding the death or termination of employment. Options are not assignable by participants otherwise than by will or pursuant to the laws of succession. Lifeco does not provide any financial assistance to participants to facilitate the purchase of common shares under the Lifeco Option Plan. Subject to any regulatory or shareholder approval required by law, the Lifeco Board of Directors may amend the Lifeco Option Plan or the terms of a grant.

11.6 Outstanding Equity Awards at 2017 Fiscal Year End

The following table sets out Lifeco options held by the Named Executive Officers under the Lifeco Option Plan, and Executive Share Units held by the Named Executive Officers under the Executive Share Unit Plan, as of December 31, 2017.

	Option Awards					Stock awards		
Name	Number of Securities Underlying Unexercised Options (#) Exercisable	Number of Securities Underlying Unexercised Options (#) Unexercisable		Option Exercise Price ($)(6)	Option Expiration Date	Number of Shares or Units of Stock That Have Not Vested (#)		Market Value of Shares or Units of Stock That Have Not Vested ($)(9)
A.S. Bolotin	9,840	39,360	(4)	26.78	February 28, 2026	7,960	(7)	215,756
	—	33,900	(5)	28.47	February 28, 2027	10,677	(8)	289,385
R.K. Shaw	26,600	—		20.97	February 28, 2021	6,456	(7)	174,989
	37,600	—		17.89	February 28, 2022	10,436	(8)	282,856
	25,200	6,300	(1)	20.95	February 28, 2023			
	15,720	10,480	(2)	24.04	February 29, 2024			
	11,080	16,620	(3)	27.51	February 28, 2025			
	6,420	25,680	(4)	26.78	February 28, 2026			
	—	27,500	(5)	28.47	February 28, 2027			
E.F. Murphy	34,960	52,440	(3)	27.51	February 28, 2025	17,689	(7)	578,770
	19,680	78,720	(4)	26.78	February 28, 2026	21,353	(8)	479,455
	—	75,400	(5)	28.47	February 28, 2027			
R.H. Linton	—	37,700	(5)	28.47	February 28, 2027	8,845	(7)	239,742
						15,172	(8)	411,229

(1) These options vest 20% of the total grant on March 1, 2018.

(2) These options vest 20% of the total grant on each of March 1, 2018 and 2019.

(3) These options vest 20% of the total grant on each of March 1, 2018, 2019 and 2020.

(4) These options vest 20% of the total grant on each of March 1, 2018, 2019, 2020 and 2021.

(5) These options vest 20% of the total grant on each of March 1, 2018, 2019, 2020, 2021 and 2022.

(6) Lifeco options are issued with an exercise price in Canadian dollars, which have been translated to U.S. dollars at the Conversion Rate.

(7) These Executive Share Unit grants vest on December 31, 2019.

(8) These Executive Share Unit grants vest on December 31, 2018.

(9) The market value of Executive Share Units held as of December 31, 2017 is based on the year-end closing price of Lifeco common shares on the Toronto Stock Exchange, translated into U.S. dollars at the Conversion Rate.

11.7 Option Exercises and Stock Vested for 2017

The following table sets out Lifeco options exercised by, and Executive Share Units vested for, the Named Executive Officers in 2017.

	Option Awards		Stock Awards	
	Number of Shares Acquired on Exercise (#)	Value Realized on Exercise ($)	Number of Shares Acquired on Vesting (#)	Value Realized on Vesting ($)
R.K. Shaw	—	—	9,108	249,679
E.F. Murphy	—	—	19,202	526,354

11.8 Pension Benefits for 2017

1. Table

The following table sets out information with respect to the participation of the Named Executive Officers in the Defined Benefit Plan and the SERP.

Name	Plan Name	Number of Years of Credited Service	Present Value of Accumulated Benefit ($) (1)	Payments During Last Fiscal Year ($)
R.K. Shaw	Defined Benefit Plan	40	2,258,000	—
	SERP	40	8,303,529	—

(1) The amounts shown in the table are calculated according to the terms of the plans based on age and years of service as of December 31, 2017. These amounts are based on pay through December 31, 2017. The present value of accumulated benefit under the plans equals the actuarial present value of the annuity earned as of December 31, 2017, payable at age 65 for the Defined Benefit Plan and age 62 for the SERP, discounted to December 31, 2017 at the applicable discount rate for December 31, 2017. Benefits calculated under the SERP are the termination benefit.

2. Narrative Description of the Defined Pension Plan

The Defined Benefit Plan is designed to provide regular income at retirement to eligible employees. In general, an eligible employee is any employee hired prior to January 1, 1999. Participants in the Defined Benefit Plan are entitled to benefits at age 65 if they have 5 or more years of service.

The benefit formula for participants hired before January 1, 1992 is 1.5% for each of the first 30 years of service multiplied by the participant's average annual compensation, plus 0.5% for each of the next 5 years of service multiplied by the participant's average annual compensation, plus 0.5% for each year of service to retirement up to a maximum of 35 years multiplied by the participant's average annual compensation minus the covered compensation amount (as determined by the IRS). If a participant made required or voluntary contributions to the Defined Benefit Plan prior to July 1, 1979, the participant's benefit is increased to reflect these contributions and interest accrued thereon, so long as the employee contributions plus interest have not been withdrawn in a lump sum.

The benefit formula for participants hired on and after January 1, 1992 is 1.0% for each of the first 30 years of service multiplied by the participant's average annual compensation, plus 0.5% for each of the next 5 years of service multiplied by the participant's average annual compensation, plus 0.5% for each year of service to retirement up to a maximum of 35 years multiplied by the participant's average annual compensation minus the covered compensation amount (as determined by the IRS).

Average annual compensation is the highest average of compensation paid during 5 consecutive years of service out of the last 7 years of service.

Participants who have terminated service prior to age 65 and who have at least 5 years of service may begin receiving benefits as early as age 55. Benefits that begin prior to age 65 are reduced by approximately 5% for each year prior to age 65.

The normal form of benefit for a married participant is a joint and 50% survivor annuity. The normal form of benefit for an unmarried participant is a life only annuity. Other optional forms of pension payment are available on an actuarially equivalent basis.

Effective December 31, 2017, the Company amended the Defined Benefit Plan to freeze future benefit accruals. Final benefits are calculated as of December 31, 2017 and will not increase as a result of future service or compensation with the Company. Participants retain all benefits accrued through December 31, 2017. Participants received a full year of service for their anniversary year that began in 2017 regardless whether they had completed the requisite 1,000 hours of service.

3. Narrative Description of the SERP

The SERP is designed to provide retirement benefits to certain key executive officers who are subject to qualified plan compensation limits. At the Company's discretion, executive officers may be designated to participate in the SERP. Participants in the SERP are generally entitled to benefits if they have 15 or more years of service.

The following describes the retirement benefit amount under the SERP based on age at the time of separation of service.

(1) For participants who separate from service at or after age 62, the normal retirement benefit is equal to 60% of final average compensation if the participant has 30 years of service. The benefit is prorated for less than 30 years of service. Final average compensation is the average of the highest 60 consecutive months of compensation during the last 84 months of employment. Compensation includes salary, bonuses and commissions prior to any deferrals to other benefit plans. Benefits are offset by benefits under the Defined Benefit Plan and 50% of estimated social security benefits as of retirement.

(2) For participants who separate from service between ages 57 and 62, the early retirement benefit is calculated by reducing the bonus used in determining final average compensation by 5/6% for each month prior to age 62 and by further reducing the early retirement benefit by 5/12% for each month prior to age 62. Benefits are offset by benefits under the Defined Benefit Plan and 50% of estimated social security benefits as of age 62.

(3) For participants who separate from service prior to age 57, the termination benefit is equal to 60% of final average salary if the participant has 30 years of service. The benefit is prorated for less than 30 years of service. If the participant has less than 35 years of service, the termination benefit is also reduced by 5% for each of the first three years of service below 35. Final average salary is the average of the highest 60 consecutive months of salary during the last 84 months of employment. Salary includes deferrals of any salary to other benefit plans. Benefits are offset by benefits under the Defined Benefit Plan and 50% of estimated social security benefits payable as of age 62.

Payments under the normal retirement benefit and the early retirement benefit commence upon retirement. Payments under the termination benefit commence at age 62.

The normal form of benefit under the SERP is a life only annuity. Other optional forms of payment are available on an actuarially equivalent basis.

11.9 Nonqualified Deferred Compensation for 2017

1. Table

The following table sets out information with respect to the participation of the Named Executive Officers in the NQDCP and/ or EDCP.

Name	Plan Name	Executive Contributions in Last Fiscal Year ($)(1)	Aggregate Earnings in Last Fiscal Year ($)	Aggregate Withdrawls or Distributions ($)	Aggregate Balance at Last Fiscal Year End ($)
R.K. Shaw	NQDCP	—	99,995	32,566	594,415
	EDCP	128,400	17,410	—	421,165

(1) Amounts contributed are included in the Salary column of the Summary Compensation Table.

2. Narrative Description of the Nonqualified Deferred Compensation Plan and Executive Deferred Compensation Plan

All officers and certain senior employees of the Company, and others at the discretion of the Company, are eligible to participate in the NQDCP. At the Company's discretion, executive officers may be designated to participate in the EDCP.

In 2017, under the NQDCP and EDCP, a participant could defer (i) a minimum of the greater of $2,500 or 5% of base salary (including sales related compensation) and a maximum of 90% of base salary; and (ii) a minimum of 5% and a maximum of 90% of bonus. Beginning January 1, 2018, under the NQDCP, a participant may defer between 1% and 90% of their base salary (including sales related compensation) and bonus.

Under the NQDCP, participants specify one or more investment preferences in which deferrals are deemed to be invested. Participant accounts are adjusted for interest, earnings or losses equal to the actual results of the deemed investment(s). Under the EDCP, participant deferrals earn an interest rate equal to the Moody's Average Annual Corporate Bond Index rate plus .45% for active participants and fixed rates ranging from 6.37% to 7.91% for participants receiving benefits.

Amounts deferred under both plans and the earnings from the plans are distributed to a participant upon termination of employment, if not distributed earlier. Amounts distributed under the plans are generally paid in either a lump sum or installments over 3, 5, 10 or 15 years at the election of the participant.

Following a change in control of the Company, the Board of Directors may terminate one or both plans in its discretion and pay all amounts due under a terminated plan to participants. Certain payments following termination of employment or after a change in control may be delayed to comply with requirements under the Internal Revenue Code.

11.10 Compensation of Company Directors for 2017

1. Table

The Company compensates Directors who are not also Directors of Lifeco or Great-West Life ("Company Directors"). The following sets out compensation earned in 2017 by the Company Directors.

Name	Fees Earned or Paid in Cash ($)(2)	Stock Awards ($)(3)	All Other Compensation ($)(4)	Total ($)
J.L. Bernbach	52,883	50,000	120	103,003
G.J. Fleming	91,883	50,000	120	142,003
A. Louvel	82,883	50,000	120	133,003
J.E.A. Nickerson	60,914	38,610	120	99,644
R.L. Reynolds	65,883	50,000	120	116,003
R. Royer (1)	—	108,089	120	108,209

(1) Mr. Royer became a Company Director effective May 4, 2017 in connection with his resignation from the Board of Directors of Lifeco. Mr. Royer's full 2017 compensation for service on the Company's Board is included in the table.

(2) Messrs. Bernbach, Fleming, Louvel, Nickerson and Reynolds elected to receive this portion of their compensation for serving as directors in cash. Amounts payable to Company Directors are paid in the currency of the country of residence. Amounts earned in Canadian dollars have been translated to U.S. dollars at the Conversion Rate.

(3) For Messrs. Bernbach, Fleming, Louvel, Nickerson and Reynolds, these amounts represent the value of Deferred Share Units granted under the mandatory component of the DSUP. For Mr. Royer, this amount represents the value of Deferred Share Units granted under the mandatory and the voluntary components of the DSUP. See the Narrative Description of Company Director Compensation below for additional information regarding the DSUP. The value of these Deferred Share Units is the aggregate grant date fair value computed in accordance with FASB ASC Topic 718.

As of December 31, 2017, Mr. Bernbach held 27,725 Deferred Share Units, Mr. Fleming held 2,725 Deferred Share Units, Mr. Louvel held 27,502 Deferred Share Units, Mr. Nickerson held 28,499 Deferred Share Units, Mr. Reynolds held 7,215 Deferred Share Units and Mr. Royer held 66,590 Deferred Share Units.

(4) These amounts are life insurance premiums paid under the Great-West Life Director's Group Life Insurance Plan. Payments are made in Canadian dollars and have been translated to U.S. dollars at the Conversion Rate.

2. Narrative Description of Company Director Compensation

The Company pays Company Directors an annual retainer fee in the amount of $100,000. A Company Director serving on the Audit Committee receives an additional annual retainer fee in the amount of $3,000. The Chair of the Audit Committee receives an additional annual retainer fee in the amount of $20,000. In addition, the Company pays each Company Director a meeting fee in the amount of $2,000 for each meeting of the Board of Directors or a committee thereof that the Company Director attends.

In order to promote greater alignment of interests between the Company Directors and shareholders, the Company has implemented a Director Deferred Share Unit Plan, or DSUP, pursuant to which Company Directors are required to receive $50,000 of their annual retainer fee in Deferred Share Units. Under the voluntary portion of the DSUP, each Company Director may elect to receive the balance of his or her annual retainer, as well as committee retainer fees and attendance fees, entirely in form the of Deferred Share Units, entirely in cash, or equally in cash and Deferred Share Units.

Under both the mandatory and voluntary components of the DSUP, the number of Deferred Share Units granted is determined by dividing the amount of remuneration payable to the Company Director by the weighted average Canadian dollar trading price per Lifeco common share on the Toronto Stock Exchange for the last five trading days of the preceding fiscal quarter (such weighted average trading price being the "value of a Deferred Share Unit") prior to the award grant date. Directors receive additional Deferred Share Units in respect of dividends payable on the Lifeco common shares based on the value of a Deferred Share Unit at that time. Deferred Share Units are redeemable at the time that an individual ceases to be a Director by a lump sum cash payment, based on the value of the Deferred Share Units on the date of redemption.

Item 11.11 Compensation Policies and Risk Management

The Company has evaluated its compensation policies and practices applicable to all employees and believes that they do not create risks that are reasonably likely to have a material adverse effect on the Company.

Item 12.
Security Ownership of Certain Beneficial Owners and Management

12.1 Security Ownership of Certain Beneficial Owners

Set forth below is certain information, as of January 1, 2018, concerning beneficial ownership of the voting securities of the Company by entities and persons who beneficially own more than 5% of the voting securities of the Company. The determinations of "beneficial ownership" of voting securities are based upon Rule 13d-3 under the Securities Exchange Act of 1934, as amended (the "Exchange Act"). This rule provides that securities will be deemed to be "beneficially owned" where a person has, either solely or in conjunction with others, (1) the power to vote or to direct the voting of securities and/or the power to dispose or to direct the disposition of the securities or (2) the right to acquire any such power within 60 days after the date such "beneficial ownership" is determined.

(1) 100% of the Company's 7,320,176 outstanding common shares are owned by GWL&A Financial Inc., 8515 East Orchard Road, Greenwood Village, Colorado 80111.

(2) 100% of the outstanding common shares of GWL&A Financial Inc. are owned by Great-West Lifeco U.S. LLC, 8515 East Orchard Road, Greenwood Village, Colorado 80111.

(3) 100% of the outstanding common shares of Great-West Lifeco U.S. LLC are owned by Great-West Financial (Nova Scotia) Co., Suite 800, 1959 Upper Water Street, Halifax, Nova Scotia, Canada B3J 2X2.

(4) 100% of the outstanding common shares of Great-West Financial (Nova Scotia) Co. are owned by Great-West Financial (Canada) Inc., 100 Osborne Street North, Winnipeg, Manitoba, Canada R3C 3A5.

(5) 100% of the outstanding common shares of Great-West Financial (Canada) Inc. are owned by Great-West Lifeco Inc., 100 Osborne Street North, Winnipeg, Manitoba, Canada R3C 3A5.

(6) 71.74% of the outstanding common shares of Great-West Lifeco Inc. are controlled, directly or indirectly, by Power Financial Corporation, 751 Victoria Square, Montréal, Québec, Canada H2Y 2J3, representing approximately 65% of the voting rights attached to all outstanding voting shares of Great-West Lifeco Inc.

(7) 65.59% of the outstanding common shares of Power Financial Corporation are owned by 171263 Canada Inc., 751 Victoria Square, Montréal, Québec, Canada H2Y 2J3.

(8) 100% of the outstanding common shares of 171263 Canada Inc. are owned by Power Corporation of Canada, 751 Victoria Square, Montréal, Québec, Canada H2Y 2J3.

(9) The Desmarais Family Residuary Trust, c/o San Palo Investments Corporation, 759 Victoria Square, Suite 520, Montréal, Québec, Canada H2Y 2J7, directly and through a group of private holding companies which it controls, has voting control of Power Corporation of Canada.

As a result of the chain of ownership described in paragraphs (1) through (9) above, each of the entities and persons listed in paragraphs (1) through (9) would be considered under Rule 13d-3 of the Exchange Act to be a "beneficial owner" of 100% of the outstanding voting securities of the Company.

12.2 Security Ownership of Management

The following tables set out the number of equity securities and exercisable options for equity securities of the Company or any of its parents or subsidiaries, beneficially owned, as of January 1, 2018, by (i) the directors of the Company (ii) the Named Executive Officers and (iii) the directors and executive officers of the Company as a group.

Directors	Great-West Lifeco Inc. (1)	Power Financial Corporation (2)	Power Corporation of Canada (3)
J.L. Bernbach	—	—	—
M.R. Coutu	10,000	—	—
A. Desmarais	350,000	43,200 197,843 options	15,111,159 3,830,275 options
P. Desmarais, Jr.	100,000	197,843 options	15,090,337 3,830,275 options
G. A. Doer	—	—	—
G. J. Fleming	—	—	—
C. Généreux	—	121,245 options	3,047 14,857 options
A. Louvel	—	—	—
P.A. Mahon	146,820	—	—
J.E.A. Nickerson	20,000	40,000	40,000
R.J. Orr	20,000	400,200 3,413,414 options	20,000
R.L. Reynolds	—	—	—
R. Royer	15,000	174,000	—
T. Timothy Ryan, Jr.	—	13,590	15,425
J.J. Selitto	—	—	—
G.D. Tretiak	—	109,070 options	10,522 108,738 options
B.E. Walsh	—	—	—

Named Executive Officers	Great-West Lifeco Inc. (1)	Power Financial Corporation (2)	Power Corporation of Canada (3)
R.L. Reynolds	—	—	—
A.S. Bolotin	9,840 options	—	—
R.H. Linton	—	—	—
E.F. Murphy	54,640 options	—	—
R.K. Shaw	6,049 122,620 options	—	—

Directors and Executive Officers as a Group	Great-West Lifeco Inc. (1)	Power Financial Corporation (2)	Power Corporation of Canada (3)
	672,207 187,100 options	670,990 4,039,415options	30,290,490 7,784,145 options

(1) All holdings are common shares, or where indicated, exercisable options for common shares of Great-West Lifeco Inc.

(2) All holdings are common shares, or where indicated, exercisable options for common shares of Power Financial Corporation.

(3) All holdings are subordinate voting shares, or where indicated, exercisable options for subordinate voting shares of Power Corporation of Canada.

The number of subordinate voting shares and exercisable options for subordinate voting shares of Power Corporation of Canada held by the directors and executive officers as a group represents 7.0% of the total number of subordinate voting shares and exercisable options for subordinate voting shares of Power Corporation of Canada outstanding.

None of the remaining holdings set out above exceeds 1% of the total number of shares and exercisable options for shares of the class outstanding.

Item 13.
Transactions with Related Persons, Promoters and Certain Control Persons

(a) There are no transactions to report.

(b) The Company's Board of Directors has a Conduct Review Committee which acts pursuant to a written Charter and procedures (together, the "procedures"). Messrs. Bernbach and Louvel serve on the Conduct Review Committee.

The Conduct Review Committee, in accordance with the procedures, considers and approves transactions between the Company or its subsidiaries and (i) the directors and senior officers of the Company or its affiliates, including their spouses and minor children; (ii) its affiliates; and (iii) companies controlled by a director or senior officer of the Company or its affiliates, or their spouses or minor children. Control and affiliation is defined as a 10% voting interest or 25% ownership interest, but does not include subsidiaries of the Company.

Among other criteria, the Conduct Review Committee considers whether such transactions were on market terms and conditions, including interest rates and fees, as those prevailing at the time for comparable transactions with third parties. Such review also considers the Company's established conflict of interest guidelines with respect to the transaction, as set forth in the Company's Code.

There were no reportable related party transactions during the Registrant's most recently completed fiscal year where the aforementioned procedures did not require review, approval or ratification or where the procedures were not followed.

Item 14.
Principal Accounting Fees and Services

14.1 Principal Accounting Fees

For the years ended December 31, 2017 and 2016, professional services were performed by Deloitte & Touche LLP ("D&T"). The total fees for these services were $9,606,400 and $8,779,200 for the years ended December 31, 2017 and 2016, respectively, and were composed of the following:

Audit fees - The aggregate fees billed for the audit of the Company's and its subsidiaries' annual financial statements for the fiscal years ended December 31, 2017 and 2016, and for the review of the financial statements included in the Company's quarterly reports on Form 10-Q, were $7,907,600 and $7,569,700, respectively.

Audit related fees - The aggregate fees billed for audit related services for the fiscal years ended December 31, 2017 and 2016 were $1,469,500 and $1,209,500, respectively. These services included Statement on Standards for Attestation Engagements No. 18, Reporting on Controls at a Service Organization internal control reports, amended product filings with the SEC on Form N-4 and N-6, initial product registrations with the SEC on Form S-1, compliance with Rule 17f-2 'Custody of Investments by Registered Management Investment Companies' of the Investment Company Act of 1940, Information Barriers audit, Derivative Use Plan audits, and audits of the Company's employee benefit plans.

Tax fees - The aggregate fees billed for tax services for the fiscal years ended December 31, 2017 and 2016 were $24,300 and $0, respectively. These services were for tax services related to procedures performed on a reinsurance agreement.

All other fees - The aggregate fees for services not included above were $205,000 and $0 for the years ended December 31, 2017 and 2016, respectively. These services were for Global Investment Performance Standard (GIPS) Readiness.

14.2 Pre-approval Policies and Procedures

The Audit Committee pre-approves all services, including both audit and non-audit services, provided by D&T. Each year, the Audit Committee receives a schedule of the audit, audit-related and tax services that it is asked to approve for the year before D&T may be engaged.

None of the services described in this Item 14 were approved by the Committee pursuant to paragraph (c)(7)(i)(C) of Rule 2-01 of Regulation S-X, the de minimis safe harbor exemption from pre-approval requirements. The amount of hours expended on D&T's audit of the Company's financial statements for 2017 attributable to work performed by persons other than D&T's full-time, permanent employees was less than 50%.

Part IV

Item 15.

Exhibits and Financial Statement Schedules

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

15.1 Index to Financial Statements

	Page
Consolidated Balance Sheets as of December 31, 2017 and 2016	45
Consolidated Statements of Income for the Years Ended December 31, 2017, 2016 and 2015	47
Consolidated Statements of Comprehensive Income for the Years Ended December 31, 2017, 2016, and 2015	48
Consolidated Statements of Stockholder's Equity for the Years Ended December 31, 2017, 2016, and 2015	49
Consolidated Statements of Cash Flows for the Years Ended December 31, 2017, 2016, and 2015	50
Notes to Consolidated Financial Statements for the Years Ended December 31, 2017, 2016, and 2015	52
Schedule III - Supplemental Insurance Information	105

All other schedules and separate financial statements of the Registrant are omitted because they are not applicable, or not required, or because the required information is included in the financial statements or notes thereto.

15.2 Index to Exhibits

Exhibit Number	Title
3(i)	Amended and Restated Articles of Incorporation of Great-West Life & Annuity Insurance Company Filed as Exhibit 3 (i) to Registrant's Form 10-K for the year ended December 31, 2006
3(ii)	Bylaws of Great-West Life & Annuity Insurance Company Filed as Exhibit 3(ii) to Registrant's Form 10-Q for the quarter ended June 30, 2017
10	Material Contracts
10.1	Great-West Lifeco Inc. Stock Option Plan filed as Exhibit 10.1 to Registrant's Form 10-K for the year ended December 31, 2013 and incorporated herein by reference
10.2	Supplemental Executive Retirement Plan Filed as Exhibit 10.2 to Registrant's Form 10-K for the year ended December 31, 2009 and incorporated herein by reference
10.3	Executive Deferred Compensation Plan Filed as Exhibit 10.3 to Registrant's Form 10-K for the year ended December 31, 2009 and incorporated herein by reference
10.4	Deferred Share Unit Plan Filed as Exhibit 10.4 to Registrant's Form 10-K for the year ended December 31, 2009 and incorporated herein by reference
10.5	Executive Long-Term Disability Plan Filed as Exhibit 10.6 to Registrant's Form 10-K for the year ended December 31, 2002 and incorporated herein by reference
10.6	Nonqualified Deferred Compensation Plan Filed as Exhibit 10.6 to Registrant's Form 10-K for the year ended December 31, 2009; amended by filing on Form 10-Q as Exhibit 10.6 for the period ending March 31, 2012 and incorporated herein by reference
10.7	Share Unit Plan effective January 1, 2011 Filed as Exhibit 10.9 to Registrant's Form 10-K for the year ended December 31, 2010 and incorporated herein by reference
10.8	Amendment No. 1 and Amendment No. 2 Filed as Exhibit 10.10 to the Registrant's Form 10-K for the year ended December 31, 2015 and incorporated herein by reference to the Supplemental Executive Retirement Plan Filed as Exhibit 10.2 to the Registrant;'s Form 10-K for the year ended December 31, 2009
10.9	Amendment No. 1 and Amendment No. 2 Filed as Exhibit 10.11 to the Registrant's Form 10-K for the year ended December 31, 2015 and incorporated herein by reference to the Share Unit Plan Filed as Exhibit 10.9 to the Registrant's Form 10-K for the year ended December 31, 2010
21	Subsidiaries of Great-West Life & Annuity Insurance Company filed herewith
24	Directors' Power of Attorney filed herewith and filed as Exhibit 24 to Registrant's Form 10-K for the year ended December 31, 2016 and incorporated by reference herein.
31.1	Section 302 Certification of the Chief Executive Officer filed herewith
31.2	Section 302 Certification of the Chief Financial Officer filed herewith
32	Section 906 Certification of the Chief Executive Officer and Chief Financial Officer filed herewith
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

Signatures

Pursuant to the requirements of Section 13 or 15(d) 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

/s/ Robert L. Reynolds

Robert L. Reynolds
President and Chief Executive Officer

Date: February 28, 2018

Pursuant to the requirements of the Securities Exchange Act of 1934, this report has been signed below by the following persons on behalf of the registrant and in the capacities and on the dates indicated.

Signature and Title	Date
/s/ Robert L. Reynolds Robert L. Reynolds President and Chief Executive Officer and a Director	February 28, 2018
/s/ Andra S. Bolotin Andra S. Bolotin Executive Vice President, Chief Financial Officer, and Principal Financial Officer	February 28, 2018
/s/ John L. Bernbach * John L. Bernbach, Director	February 28, 2018
/s/ Marcel R. Coutu * Marcel R. Coutu, Director	February 28, 2018
/s/ André Desmarais * André Desmarais, Director	February 28, 2018

Signature and Title		Date
/s/	Paul Desmarais, Jr. *	February 28, 2018
	Paul Desmarais, Jr., Director	
/s/	Gary A. Doer *	February 28, 2018
	Gary A. Doer, Director	
/s/	Gregory J. Fleming*	February 28, 2018
	Gregory J. Fleming, Director	
/s/	Claude Généreux *	February 28, 2018
	Claude Généreux , Director	
/s/	Alain Louvel *	February 28, 2018
	Alain Louvel, Director	
/s/	Paul A. Mahon*	February 28, 2018
	Paul A. Mahon, Director	
/s/	Jerry E.A. Nickerson *	February 28, 2018
	Jerry E.A. Nickerson, Director	
/s/	R. Jeffrey Orr *	February 28, 2018
	R. Jeffrey Orr, Chairman of the Board	
/s/	Raymond Royer*	February 28, 2018
	Raymond Royer, Director	
/s/	T. Timothy Ryan, Jr. *	February 28, 2018
	T. Timothy Ryan, Jr., Director	
/s/	Jerome J. Selitto *	February 28, 2018
	Jerome J. Selitto, Director	
/s/	Gregory D. Tretiak *	February 28, 2018
	Gregory D. Tretiak, Director	
/s/	Brian E. Walsh *	February 28, 2018
	Brian E. Walsh, Director	
* By:	/s/ Richard G. Schultz	February 28, 2018
	Richard G. Schultz Attorney-in-fact pursuant to filed Power of Attorney	

Exhibit 21

SUBSIDIARIES OF GREAT-WEST LIFE & ANNUITY INSURANCE COMPANY

Subsidiary	Jurisdiction of Incorporation or Organization
Advised Assets Group, LLC	Colorado
Emjay Corporation	Wisconsin
Empower Securities, LLC	Colorado
FASCore, LLC	Colorado
Great-West Capital Management, LLC	Colorado
Great-West Financial Retirement Plan Services, LLC	Delaware
GWFS Equities, Inc.	Delaware
Great-West Life & Annuity Insurance Company of New York	New York
Great-West Life & Annuity Insurance Company of South Carolina	South Carolina
Great-West Trust Company, LLC	Colorado
Lottery Receivable Company One LLC	Delaware
LR Company II, L.L.C.	Delaware
Singer Collateral Trust IV	Delaware
Singer Collateral Trust V	Delaware

GREAT-WEST LIFE & ANNUITY INSURANCE COMPANY **Exhibit 24**
POWER OF ATTORNEY

KNOW ALL MEN BY THESE PRESENTS, that I, John L. Bernbach, a member of the Board of Directors of Great-West Life & Annuity Insurance Company (the "Company"), a Colorado corporation, do hereby constitute and appoint Richard G. Schultz and Ryan L. Logsdon, and each of them (with full power to each of them to act alone), as my true and lawful attorney-in-fact and agent, with full power of substitution and re-substitution, for me and in my name, place and stead, in any and all capacities to execute and file any and all reports (and amendments thereto) by the Company under the Securities Exchange Act of 1934 (including but not limited to any report on Form 10-K) and any and all registration statements by the Company or its separate accounts relating to annuity contracts and life insurance policies under the Securities Act of 1933 and/or the Investment Company Act of 1940, and any and all amendments thereto, including the "Registration Statements," as defined below, with all exhibits, instruments, and other documents necessary or appropriate in connection therewith, and to file with the Securities and Exchange Commission or any other regulatory authority as may be necessary or desirable, hereby ratifying and confirming all and every act and thing requisite to all intents and purposes that said attorney in fact and agent or his or her substitute, may lawfully do or cause to be done by virtue hereof. This Power of Attorney does not revoke any prior power of attorney.

The "Registration Statements" covered by the Power of Attorney are defined to include the registration statements listed below:

Registration Statement Name	Securities Act File Number
COLI VUL 2 Series Account (811-09201)	333-70963
FutureFunds Series Account (811-03972)	002-89550
FutureFunds Series Account -- FutureFunds Select (811-03972)	333-158546
Variable Annuity-1 Series Account -- Schwab OneSource Annuity (811-07549)	333-52956
Variable Annuity-1 Series Account -- Schwab OneSource Choice Variable Annuity (811-07549)	333-194043
Variable Annuity-1 Series Account -- Schwab Advisor Choice Variable Annuity (811-07549)	333-194099
Variable Annuity-2 Series Account -- Great-West Smart Track Variable Annuity (811-05817)	333-176926
Variable Annuity-2 Series Account -- Great-West Smart Track II Variable Annuity (811-05817)	333-189114
Variable Annuity-2 Series Account -- Great-West Smart Track II – 5 Year Variable Annuity (811-05817)	333-203262
Variable Annuity-2 Series Account -- Great-West Smart Track Advisor Variable Annuity (811-05817)	333-212090
Variable Annuity-8 Series Account – Great-West SecureFoundation II Variable Annuity (811-23050)	333-203627
Variable Annuity-8 Series Account – Great-West SecureFoundation II Variable Annuity (811-23050)	333-203628
Great-West Secure-Foundation Group Fixed Deferred Annuity Certificate	333-194437
Great-West Secure-Foundation Group Fixed Deferred Annuity Contract	333-194436
Great-West Secure-Foundation Group Fixed Deferred Annuity Certificate	333-209902
Great-West Capital Choice Index-Linked Annuity Version 1	333-219410
Great-West Capital Choice Index-Linked Annuity Version 2	333-219412
New Form S-1, S-3 or N-4 Registration Statements to be filed, as necessary, for index-linked investment options to be offered in connection with the Great-West Capital Choice™ line of index-linked annuity products.	333-
New Form S-1, S-3 or N-4 Registration Statements to be filed, as necessary, for future iterations of the Great-West Capital Choice™ line of index-linked annuity products or similar index-linked annuity products.	333-
Form S-1, S-3, N-3, N-4 or N-6 Registration Statements to be filed, as necessary, including but not limited to any Registration Statement filed to continue the offering of, and/or register more securities for, any securities offered by the Registration Statements identified above.	333-

IN WITNESS WHEREOF, I have hereunto set my hand this 1st day of November, 2017.

/s/ John L. Bernbach
John L. Bernbach

Member, Board of Directors
Great-West Life & Annuity Insurance Company

GREAT-WEST LIFE & ANNUITY INSURANCE COMPANY
POWER OF ATTORNEY

KNOW ALL MEN BY THESE PRESENTS, that I, Marcel R. Coutu, a member of the Board of Directors of Great-West Life & Annuity Insurance Company (the "Company"), a Colorado corporation, do hereby constitute and appoint Richard G. Schultz and Ryan L. Logsdon, and each of them (with full power to each of them to act alone), as my true and lawful attorney-in-fact and agent, with full power of substitution and re-substitution, for me and in my name, place and stead, in any and all capacities to execute and file any and all reports (and amendments thereto) by the Company under the Securities Exchange Act of 1934 (including but not limited to any report on Form 10-K) and any and all registration statements by the Company or its separate accounts relating to annuity contracts and life insurance policies under the Securities Act of 1933 and/or the Investment Company Act of 1940, and any and all amendments thereto, including the "Registration Statements," as defined below, with all exhibits, instruments, and other documents necessary or appropriate in connection therewith, and to file with the Securities and Exchange Commission or any other regulatory authority as may be necessary or desirable, hereby ratifying and confirming all and every act and thing requisite to all intents and purposes that said attorney in fact and agent or his or her substitute, may lawfully do or cause to be done by virtue hereof. This Power of Attorney does not revoke any prior power of attorney.

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IN WITNESS WHEREOF, I have hereunto set my hand this 1st day of November, 2017.

/s/ Marcel R. Coutu
Marcel R. Coutu
Member, Board of Directors
Great-West Life & Annuity Insurance Company

GREAT-WEST LIFE & ANNUITY INSURANCE COMPANY
POWER OF ATTORNEY

KNOW ALL MEN BY THESE PRESENTS, that I, Paul G. Desmarais, Jr., a member of the Board of Directors of Great-West Life & Annuity Insurance Company (the "Company"), a Colorado corporation, do hereby constitute and appoint Richard G. Schultz and Ryan L. Logsdon, and each of them (with full power to each of them to act alone), as my true and lawful attorney-in-fact and agent, with full power of substitution and re-substitution, for me and in my name, place and stead, in any and all capacities to execute and file any and all reports (and amendments thereto) by the Company under the Securities Exchange Act of 1934 (including but not limited to any report on Form 10-K) and any and all registration statements by the Company or its separate accounts relating to annuity contracts and life insurance policies under the Securities Act of 1933 and/or the Investment Company Act of 1940, and any and all amendments thereto, including the "Registration Statements," as defined below, with all exhibits, instruments, and other documents necessary or appropriate in connection therewith, and to file with the Securities and Exchange Commission or any other regulatory authority as may be necessary or desirable, hereby ratifying and confirming all and every act and thing requisite to all intents and purposes that said attorney in fact and agent or his or her substitute, may lawfully do or cause to be done by virtue hereof. This Power of Attorney does not revoke any prior power of attorney.

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IN WITNESS WHEREOF, I have hereunto set my hand this 1st day of November, 2017.

/s/ Paul G. Desmarais, Jr.
Paul G. Desmarais, Jr.
Member, Board of Directors
Great-West Life & Annuity Insurance Company

GREAT-WEST LIFE & ANNUITY INSURANCE COMPANY
POWER OF ATTORNEY

KNOW ALL MEN BY THESE PRESENTS, that I, Gary A. Doer, a member of the Board of Directors of Great-West Life & Annuity Insurance Company (the "Company"), a Colorado corporation, do hereby constitute and appoint Richard G. Schultz and Ryan L. Logsdon, and each of them (with full power to each of them to act alone), as my true and lawful attorney-in-fact and agent, with full power of substitution and re-substitution, for me and in my name, place and stead, in any and all capacities to execute and file any and all reports (and amendments thereto) by the Company under the Securities Exchange Act of 1934 (including but not limited to any report on Form 10-K) and any and all registration statements by the Company or its separate accounts relating to annuity contracts and life insurance policies under the Securities Act of 1933 and/or the Investment Company Act of 1940, and any and all amendments thereto, including the "Registration Statements," as defined below, with all exhibits, instruments, and other documents necessary or appropriate in connection therewith, and to file with the Securities and Exchange Commission or any other regulatory authority as may be necessary or desirable, hereby ratifying and confirming all and every act and thing requisite to all intents and purposes that said attorney in fact and agent or his or her substitute, may lawfully do or cause to be done by virtue hereof. This Power of Attorney does not revoke any prior power of attorney.

The "Registration Statements" covered by the Power of Attorney are defined to include the registration statements listed below:

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IN WITNESS WHEREOF, I have hereunto set my hand this 1st day of November, 2017.

/s/ Gary A. Doer
Gary A. Doer
Member, Board of Directors
Great-West Life & Annuity Insurance Company

GREAT-WEST LIFE & ANNUITY INSURANCE COMPANY
POWER OF ATTORNEY

KNOW ALL MEN BY THESE PRESENTS, that I, Gregory J. Fleming, a member of the Board of Directors of Great-West Life & Annuity Insurance Company (the "Company"), a Colorado corporation, do hereby constitute and appoint Richard G. Schultz and Ryan L. Logsdon, and each of them (with full power to each of them to act alone), as my true and lawful attorney-in-fact and agent, with full power of substitution and re-substitution, for me and in my name, place and stead, in any and all capacities to execute and file any and all reports (and amendments thereto) by the Company under the Securities Exchange Act of 1934 (including but not limited to any report on Form 10-K) and any and all registration statements by the Company or its separate accounts relating to annuity contracts and life insurance policies under the Securities Act of 1933 and/or the Investment Company Act of 1940, and any and all amendments thereto, including the "Registration Statements," as defined below, with all exhibits, instruments, and other documents necessary or appropriate in connection therewith, and to file with the Securities and Exchange Commission or any other regulatory authority as may be necessary or desirable, hereby ratifying and confirming all and every act and thing requisite to all intents and purposes that said attorney in fact and agent or his or her substitute, may lawfully do or cause to be done by virtue hereof. This Power of Attorney does not revoke any prior power of attorney.

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New Form S-1, S-3 or N-4 Registration Statements to be filed, as necessary, for index-linked investment options to be offered in connection with the Great-West Capital Choice™ line of index-linked annuity products.	333-
New Form S-1, S-3 or N-4 Registration Statements to be filed, as necessary, for future iterations of the Great-West Capital Choice™ line of index-linked annuity products or similar index-linked annuity products.	333-
Form S-1, S-3, N-3, N-4 or N-6 Registration Statements to be filed, as necessary, including but not limited to any Registration Statement filed to continue the offering of, and/or register more securities for, any securities offered by the Registration Statements identified above.	333-

IN WITNESS WHEREOF, I have hereunto set my hand this 1st day of November, 2017.

/s/ Gregory J. Fleming
Gregory J. Fleming
Member, Board of Directors
Great-West Life & Annuity Insurance Company

GREAT-WEST LIFE & ANNUITY INSURANCE COMPANY
POWER OF ATTORNEY

KNOW ALL MEN BY THESE PRESENTS, that I, Claude Généreux, a member of the Board of Directors of Great-West Life & Annuity Insurance Company (the "Company"), a Colorado corporation, do hereby constitute and appoint Richard G. Schultz and Ryan L. Logsdon, and each of them (with full power to each of them to act alone), as my true and lawful attorney-in-fact and agent, with full power of substitution and re-substitution, for me and in my name, place and stead, in any and all capacities to execute and file any and all reports (and amendments thereto) by the Company under the Securities Exchange Act of 1934 (including but not limited to any report on Form 10-K) and any and all registration statements by the Company or its separate accounts relating to annuity contracts and life insurance policies under the Securities Act of 1933 and/or the Investment Company Act of 1940, and any and all amendments thereto, including the "Registration Statements," as defined below, with all exhibits, instruments, and other documents necessary or appropriate in connection therewith, and to file with the Securities and Exchange Commission or any other regulatory authority as may be necessary or desirable, hereby ratifying and confirming all and every act and thing requisite to all intents and purposes that said attorney in fact and agent or his or her substitute, may lawfully do or cause to be done by virtue hereof. This Power of Attorney does not revoke any prior power of attorney.

The "Registration Statements" covered by the Power of Attorney are defined to include the registration statements listed below:

Registration Statement Name	Securities Act File Number
COLI VUL 2 Series Account (811-09201)	333-70963
FutureFunds Series Account (811-03972)	002-89550
FutureFunds Series Account -- FutureFunds Select (811-03972)	333-158546
Variable Annuity-1 Series Account -- Schwab OneSource Annuity (811-07549)	333-52956
Variable Annuity-1 Series Account -- Schwab OneSource Choice Variable Annuity (811-07549)	333-194043
Variable Annuity-1 Series Account -- Schwab Advisor Choice Variable Annuity (811-07549)	333-194099
Variable Annuity-2 Series Account -- Great-West Smart Track Variable Annuity (811-05817)	333-176926
Variable Annuity-2 Series Account -- Great-West Smart Track II Variable Annuity (811-05817)	333-189114
Variable Annuity-2 Series Account -- Great-West Smart Track II – 5 Year Variable Annuity (811-05817)	333-203262
Variable Annuity-2 Series Account -- Great-West Smart Track Advisor Variable Annuity (811-05817)	333-212090
Variable Annuity-8 Series Account – Great-West SecureFoundation II Variable Annuity (811-23050)	333-203627
Variable Annuity-8 Series Account – Great-West SecureFoundation II Variable Annuity (811-23050)	333-203628
Great-West Secure-Foundation Group Fixed Deferred Annuity Certificate	333-194437
Great-West Secure-Foundation Group Fixed Deferred Annuity Contract	333-194436
Great-West Secure-Foundation Group Fixed Deferred Annuity Certificate	333-209902
Great-West Capital Choice Index-Linked Annuity Version 1	333-219410
Great-West Capital Choice Index-Linked Annuity Version 2	333-219412
New Form S-1, S-3 or N-4 Registration Statements to be filed, as necessary, for index-linked investment options to be offered in connection with the Great-West Capital Choice™ line of index-linked annuity products.	333-
New Form S-1, S-3 or N-4 Registration Statements to be filed, as necessary, for future iterations of the Great-West Capital Choice™ line of index-linked annuity products or similar index-linked annuity products.	333-
Form S-1, S-3, N-3, N-4 or N-6 Registration Statements to be filed, as necessary, including but not limited to any Registration Statement filed to continue the offering of, and/or register more securities for, any securities offered by the Registration Statements identified above.	333-

IN WITNESS WHEREOF, I have hereunto set my hand this 1st day of November, 2017.

/s/ Claude Généreux
Claude Généreux
Member, Board of Directors
Great-West Life & Annuity Insurance Company

GREAT-WEST LIFE & ANNUITY INSURANCE COMPANY
POWER OF ATTORNEY

KNOW ALL MEN BY THESE PRESENTS, that I, Alain Louvel, a member of the Board of Directors of Great-West Life & Annuity Insurance Company (the "Company"), a Colorado corporation, do hereby constitute and appoint Richard G. Schultz and Ryan L. Logsdon, and each of them (with full power to each of them to act alone), as my true and lawful attorney-in-fact and agent, with full power of substitution and re-substitution, for me and in my name, place and stead, in any and all capacities to execute and file any and all reports (and amendments thereto) by the Company under the Securities Exchange Act of 1934 (including but not limited to any report on Form 10-K) and any and all registration statements by the Company or its separate accounts relating to annuity contracts and life insurance policies under the Securities Act of 1933 and/or the Investment Company Act of 1940, and any and all amendments thereto, including the "Registration Statements," as defined below, with all exhibits, instruments, and other documents necessary or appropriate in connection therewith, and to file with the Securities and Exchange Commission or any other regulatory authority as may be necessary or desirable, hereby ratifying and confirming all and every act and thing requisite to all intents and purposes that said attorney in fact and agent or his or her substitute, may lawfully do or cause to be done by virtue hereof. This Power of Attorney does not revoke any prior power of attorney.

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IN WITNESS WHEREOF, I have hereunto set my hand this 1st day of November, 2017.

/s/ Alain Louvel
Alain Louvel
Member, Board of Directors
Great-West Life & Annuity Insurance Company

GREAT-WEST LIFE & ANNUITY INSURANCE COMPANY
POWER OF ATTORNEY

KNOW ALL MEN BY THESE PRESENTS, that I, Paul A. Mahon, a member of the Board of Directors of Great-West Life & Annuity Insurance Company (the "Company"), a Colorado corporation, do hereby constitute and appoint Richard G. Schultz and Ryan L. Logsdon, and each of them (with full power to each of them to act alone), as my true and lawful attorney-in-fact and agent, with full power of substitution and re-substitution, for me and in my name, place and stead, in any and all capacities to execute and file any and all reports (and amendments thereto) by the Company under the Securities Exchange Act of 1934 (including but not limited to any report on Form 10-K) and any and all registration statements by the Company or its separate accounts relating to annuity contracts and life insurance policies under the Securities Act of 1933 and/or the Investment Company Act of 1940, and any and all amendments thereto, including the "Registration Statements," as defined below, with all exhibits, instruments, and other documents necessary or appropriate in connection therewith, and to file with the Securities and Exchange Commission or any other regulatory authority as may be necessary or desirable, hereby ratifying and confirming all and every act and thing requisite to all intents and purposes that said attorney in fact and agent or his or her substitute, may lawfully do or cause to be done by virtue hereof. This Power of Attorney does not revoke any prior power of attorney.

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IN WITNESS WHEREOF, I have hereunto set my hand this 1st day of November, 2017.

/s/ Paul A. Mahon

Paul A. Mahon
Member, Board of Directors
Great-West Life & Annuity Insurance Company

GREAT-WEST LIFE & ANNUITY INSURANCE COMPANY
POWER OF ATTORNEY

KNOW ALL MEN BY THESE PRESENTS, that I, Jerry E.A. Nickerson, a member of the Board of Directors of Great-West Life & Annuity Insurance Company (the "Company"), a Colorado corporation, do hereby constitute and appoint Richard G. Schultz and Ryan L. Logsdon, and each of them (with full power to each of them to act alone), as my true and lawful attorney-in-fact and agent, with full power of substitution and re-substitution, for me and in my name, place and stead, in any and all capacities to execute and file any and all reports (and amendments thereto) by the Company under the Securities Exchange Act of 1934 (including but not limited to any report on Form 10-K) and any and all registration statements by the Company or its separate accounts relating to annuity contracts and life insurance policies under the Securities Act of 1933 and/or the Investment Company Act of 1940, and any and all amendments thereto, including the "Registration Statements," as defined below, with all exhibits, instruments, and other documents necessary or appropriate in connection therewith, and to file with the Securities and Exchange Commission or any other regulatory authority as may be necessary or desirable, hereby ratifying and confirming all and every act and thing requisite to all intents and purposes that said attorney in fact and agent or his or her substitute, may lawfully do or cause to be done by virtue hereof. This Power of Attorney does not revoke any prior power of attorney.

The "Registration Statements" covered by the Power of Attorney are defined to include the registration statements listed below:

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IN WITNESS WHEREOF, I have hereunto set my hand this 1st day of November, 2017.

/s/ Jerry E.A. Nickerson
Jerry E.A. Nickerson
Member, Board of Directors
Great-West Life & Annuity Insurance Company

GREAT-WEST LIFE & ANNUITY INSURANCE COMPANY
POWER OF ATTORNEY

KNOW ALL MEN BY THESE PRESENTS, that I, R. Jeffrey Orr, a member of the Board of Directors of Great-West Life & Annuity Insurance Company (the "Company"), a Colorado corporation, do hereby constitute and appoint Richard G. Schultz and Ryan L. Logsdon, and each of them (with full power to each of them to act alone), as my true and lawful attorney-in-fact and agent, with full power of substitution and re-substitution, for me and in my name, place and stead, in any and all capacities to execute and file any and all reports (and amendments thereto) by the Company under the Securities Exchange Act of 1934 (including but not limited to any report on Form 10-K) and any and all registration statements by the Company or its separate accounts relating to annuity contracts and life insurance policies under the Securities Act of 1933 and/or the Investment Company Act of 1940, and any and all amendments thereto, including the "Registration Statements," as defined below, with all exhibits, instruments, and other documents necessary or appropriate in connection therewith, and to file with the Securities and Exchange Commission or any other regulatory authority as may be necessary or desirable, hereby ratifying and confirming all and every act and thing requisite to all intents and purposes that said attorney in fact and agent or his or her substitute, may lawfully do or cause to be done by virtue hereof. This Power of Attorney does not revoke any prior power of attorney.

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IN WITNESS WHEREOF, I have hereunto set my hand this 1st day of November, 2017.

/s/ R. Jeffrey Orr
R. Jeffrey Orr
Member, Board of Directors
Great-West Life & Annuity Insurance Company

GREAT-WEST LIFE & ANNUITY INSURANCE COMPANY
POWER OF ATTORNEY

KNOW ALL MEN BY THESE PRESENTS, that I, Raymond Royer, a member of the Board of Directors of Great-West Life & Annuity Insurance Company (the "Company"), a Colorado corporation, do hereby constitute and appoint Richard G. Schultz and Ryan L. Logsdon, and each of them (with full power to each of them to act alone), as my true and lawful attorney-in-fact and agent, with full power of substitution and re-substitution, for me and in my name, place and stead, in any and all capacities to execute and file any and all reports (and amendments thereto) by the Company under the Securities Exchange Act of 1934 (including but not limited to any report on Form 10-K) and any and all registration statements by the Company or its separate accounts relating to annuity contracts and life insurance policies under the Securities Act of 1933 and/or the Investment Company Act of 1940, and any and all amendments thereto, including the "Registration Statements," as defined below, with all exhibits, instruments, and other documents necessary or appropriate in connection therewith, and to file with the Securities and Exchange Commission or any other regulatory authority as may be necessary or desirable, hereby ratifying and confirming all and every act and thing requisite to all intents and purposes that said attorney in fact and agent or his or her substitute, may lawfully do or cause to be done by virtue hereof. This Power of Attorney does not revoke any prior power of attorney.

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IN WITNESS WHEREOF, I have hereunto set my hand this 1st day of November, 2017.

/s/ Raymond Royer
Raymond Royer
Member, Board of Directors
Great-West Life & Annuity Insurance Company

GREAT-WEST LIFE & ANNUITY INSURANCE COMPANY
POWER OF ATTORNEY

KNOW ALL MEN BY THESE PRESENTS, that I, T. Timothy Ryan, Jr., a member of the Board of Directors of Great-West Life & Annuity Insurance Company (the "Company"), a Colorado corporation, do hereby constitute and appoint Richard G. Schultz and Ryan L. Logsdon, and each of them (with full power to each of them to act alone), as my true and lawful attorney-in-fact and agent, with full power of substitution and re-substitution, for me and in my name, place and stead, in any and all capacities to execute and file any and all reports (and amendments thereto) by the Company under the Securities Exchange Act of 1934 (including but not limited to any report on Form 10-K) and any and all registration statements by the Company or its separate accounts relating to annuity contracts and life insurance policies under the Securities Act of 1933 and/or the Investment Company Act of 1940, and any and all amendments thereto, including the "Registration Statements," as defined below, with all exhibits, instruments, and other documents necessary or appropriate in connection therewith, and to file with the Securities and Exchange Commission or any other regulatory authority as may be necessary or desirable, hereby ratifying and confirming all and every act and thing requisite to all intents and purposes that said attorney in fact and agent or his or her substitute, may lawfully do or cause to be done by virtue hereof. This Power of Attorney does not revoke any prior power of attorney.

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IN WITNESS WHEREOF, I have hereunto set my hand this 1st day of November, 2017.

/s/ T. Timothy Ryan, Jr.
T. Timothy Ryan, Jr.
Member, Board of Directors
Great-West Life & Annuity Insurance Company

GREAT-WEST LIFE & ANNUITY INSURANCE COMPANY
POWER OF ATTORNEY

KNOW ALL MEN BY THESE PRESENTS, that I, Jerome J. Selitto, a member of the Board of Directors of Great-West Life & Annuity Insurance Company (the "Company"), a Colorado corporation, do hereby constitute and appoint Richard G. Schultz and Ryan L. Logsdon, and each of them (with full power to each of them to act alone), as my true and lawful attorney-in-fact and agent, with full power of substitution and re-substitution, for me and in my name, place and stead, in any and all capacities to execute and file any and all reports (and amendments thereto) by the Company under the Securities Exchange Act of 1934 (including but not limited to any report on Form 10-K) and any and all registration statements by the Company or its separate accounts relating to annuity contracts and life insurance policies under the Securities Act of 1933 and/or the Investment Company Act of 1940, and any and all amendments thereto, including the "Registration Statements," as defined below, with all exhibits, instruments, and other documents necessary or appropriate in connection therewith, and to file with the Securities and Exchange Commission or any other regulatory authority as may be necessary or desirable, hereby ratifying and confirming all and every act and thing requisite to all intents and purposes that said attorney in fact and agent or his or her substitute, may lawfully do or cause to be done by virtue hereof. This Power of Attorney does not revoke any prior power of attorney.

The "Registration Statements" covered by the Power of Attorney are defined to include the registration statements listed below:

Registration Statement Name	Securities Act File Number
COLI VUL 2 Series Account (811-09201)	333-70963
FutureFunds Series Account (811-03972)	002-89550
FutureFunds Series Account -- FutureFunds Select (811-03972)	333-158546
Variable Annuity-1 Series Account -- Schwab OneSource Annuity (811-07549)	333-52956
Variable Annuity-1 Series Account -- Schwab OneSource Choice Variable Annuity (811-07549)	333-194043
Variable Annuity-1 Series Account -- Schwab Advisor Choice Variable Annuity (811-07549)	333-194099
Variable Annuity-2 Series Account -- Great-West Smart Track Variable Annuity (811-05817)	333-176926
Variable Annuity-2 Series Account -- Great-West Smart Track II Variable Annuity (811-05817)	333-189114
Variable Annuity-2 Series Account -- Great-West Smart Track II – 5 Year Variable Annuity (811-05817)	333-203262
Variable Annuity-2 Series Account -- Great-West Smart Track Advisor Variable Annuity (811-05817)	333-212090
Variable Annuity-8 Series Account – Great-West SecureFoundation II Variable Annuity (811-23050)	333-203627
Variable Annuity-8 Series Account – Great-West SecureFoundation II Variable Annuity (811-23050)	333-203628
Great-West Secure-Foundation Group Fixed Deferred Annuity Certificate	333-194437
Great-West Secure-Foundation Group Fixed Deferred Annuity Contract	333-194436
Great-West Secure-Foundation Group Fixed Deferred Annuity Certificate	333-209902
Great-West Capital Choice Index-Linked Annuity Version 1	333-219410
Great-West Capital Choice Index-Linked Annuity Version 2	333-219412
New Form S-1, S-3 or N-4 Registration Statements to be filed, as necessary, for index-linked investment options to be offered in connection with the Great-West Capital Choice™ line of index-linked annuity products.	333-
New Form S-1, S-3 or N-4 Registration Statements to be filed, as necessary, for future iterations of the Great-West Capital Choice™ line of index-linked annuity products or similar index-linked annuity products.	333-
Form S-1, S-3, N-3, N-4 or N-6 Registration Statements to be filed, as necessary, including but not limited to any Registration Statement filed to continue the offering of, and/or register more securities for, any securities offered by the Registration Statements identified above.	333-

IN WITNESS WHEREOF, I have hereunto set my hand this 1st day of November, 2017.

/s/ Jerome J. Selitto
Jerome J. Selitto
Member, Board of Directors
Great-West Life & Annuity Insurance Company

GREAT-WEST LIFE & ANNUITY INSURANCE COMPANY
POWER OF ATTORNEY

KNOW ALL MEN BY THESE PRESENTS, that I, Gregory D. Tretiak, a member of the Board of Directors of Great-West Life & Annuity Insurance Company (the "Company"), a Colorado corporation, do hereby constitute and appoint Richard G. Schultz and Ryan L. Logsdon, and each of them (with full power to each of them to act alone), as my true and lawful attorney-in-fact and agent, with full power of substitution and re-substitution, for me and in my name, place and stead, in any and all capacities to execute and file any and all reports (and amendments thereto) by the Company under the Securities Exchange Act of 1934 (including but not limited to any report on Form 10-K) and any and all registration statements by the Company or its separate accounts relating to annuity contracts and life insurance policies under the Securities Act of 1933 and/or the Investment Company Act of 1940, and any and all amendments thereto, including the "Registration Statements," as defined below, with all exhibits, instruments, and other documents necessary or appropriate in connection therewith, and to file with the Securities and Exchange Commission or any other regulatory authority as may be necessary or desirable, hereby ratifying and confirming all and every act and thing requisite to all intents and purposes that said attorney in fact and agent or his or her substitute, may lawfully do or cause to be done by virtue hereof. This Power of Attorney does not revoke any prior power of attorney.

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IN WITNESS WHEREOF, I have hereunto set my hand this 1st day of November, 2017.

/s/ Gregory D. Tretiak
Gregory D. Tretiak
Member, Board of Directors
Great-West Life & Annuity Insurance Company

GREAT-WEST LIFE & ANNUITY INSURANCE COMPANY
POWER OF ATTORNEY

KNOW ALL MEN BY THESE PRESENTS, that I, Brian E. Walsh, a member of the Board of Directors of Great-West Life & Annuity Insurance Company (the "Company"), a Colorado corporation, do hereby constitute and appoint Richard G. Schultz and Ryan L. Logsdon, and each of them (with full power to each of them to act alone), as my true and lawful attorney-in-fact and agent, with full power of substitution and re-substitution, for me and in my name, place and stead, in any and all capacities to execute and file any and all reports (and amendments thereto) by the Company under the Securities Exchange Act of 1934 (including but not limited to any report on Form 10-K) and any and all registration statements by the Company or its separate accounts relating to annuity contracts and life insurance policies under the Securities Act of 1933 and/or the Investment Company Act of 1940, and any and all amendments thereto, including the "Registration Statements," as defined below, with all exhibits, instruments, and other documents necessary or appropriate in connection therewith, and to file with the Securities and Exchange Commission or any other regulatory authority as may be necessary or desirable, hereby ratifying and confirming all and every act and thing requisite to all intents and purposes that said attorney in fact and agent or his or her substitute, may lawfully do or cause to be done by virtue hereof. This Power of Attorney does not revoke any prior power of attorney.

The "Registration Statements" covered by the Power of Attorney are defined to include the registration statements listed below:

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Form S-1, S-3, N-3, N-4 or N-6 Registration Statements to be filed, as necessary, including but not limited to any Registration Statement filed to continue the offering of, and/or register more securities for, any securities offered by the Registration Statements identified above.	333-

IN WITNESS WHEREOF, I have hereunto set my hand this 1st day of November, 2017.

/s/ Brian E. Walsh
Brian E. Walsh
Member, Board of Directors
Great-West Life & Annuity Insurance Company

Exhibit 31.1

CERTIFICATION

I, Robert L. Reynolds, certify that:

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

2. Based on my knowledge, this annual 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 annual report;

3. Based on my knowledge, the financial statements, and other financial information included in this annual 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 annual 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 annual 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 annual report our conclusion about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this annual report based on such evaluation; and

d) Disclosed in this annual 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: 2/28/2018

/s/ Robert L. Reynolds

Robert L. Reynolds
President and Chief Executive Officer

Exhibit 31.2

CERTIFICATION

I, Andra S. Bolotin, certify that:

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

2. Based on my knowledge, this annual 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 annual report;

3. Based on my knowledge, the financial statements, and other financial information included in this annual 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 annual 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 annual 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 annual report our conclusion about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this annual report based on such evaluation; and

d) Disclosed in this annual 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: 2/28/2018

/s/ Andra S. Bolotin

Andra S. 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 Annual Report on Form 10-K for the year ended December 31, 2017 (the "Form 10-K") 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-K fairly presents, in all material respects, the financial condition and results of operations of the Company.

Dated: 2/28/2018

/s/ Robert L. Reynolds

Robert L. Reynolds
President and Chief Executive Officer

Dated: 2/28/2018

/s/ Andra S. Bolotin

Andra S. 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-K or as a separate disclosure document.