GREAT-WEST LIFECO INC.

Management's Discussion and Analysis

For the year 2017

MANAGEMENT'S DISCUSSION AND ANALYSIS

FOR THE PERIOD ENDED DECEMBER 31, 2017

DATED: FEBRUARY 8, 2018

This Management's Discussion and Analysis (MD&A) presents management's view of the financial condition, results of operations and cash flows of Great-West Lifeco Inc. (Lifeco or the Company) for the three and twelve months ended December 31, 2017 and includes a comparison to the corresponding periods in 2016, to the three months ended September 30, 2017, and to the Company's financial condition as at December 31, 2016. This MD&A provides an overall discussion, followed by analysis of the performance of Lifeco's three major reportable segments: Canada, United States (U.S.) and Europe.

BUSINESSES OF LIFECO

Lifeco has operations in Canada, the United States and Europe through The Great-West Life Assurance Company (Great-West Life), London Life Insurance Company (London Life), The Canada Life Assurance Company (Canada Life), Great-West Life & Annuity Insurance Company (Great-West Financial), Putnam Investments, LLC (Putnam) and Irish Life Group Limited (Irish Life).

In Canada, Great-West Life and its operating subsidiaries, London Life and Canada Life (owned through holding companies London Insurance Group Inc. (LIG) and Canada Life Financial Corporation (CLFC) respectively), offer a broad portfolio of financial and benefit plan solutions for individuals, families, businesses and organizations through two primary business units: Individual Customer and Group Customer. Through the Individual Customer business unit, the Company provides life, disability and critical illness insurance products as well as wealth accumulation and annuity products to individual customers. Through the Group Customer business unit, the Company provides life, accidental death and dismemberment, critical illness, health and dental protection, creditor and direct marketing insurance as well as accumulation and annuity products and other specialty products to group customers in Canada. The products are distributed through a multi-channel network of brokers, advisors, managing general agencies and financial institutions including Freedom 55 Financial™ and Wealth and Insurance Solutions Enterprise.

In the U.S., Great-West Financial® is a leading provider of employer-sponsored retirement savings plans in the public/non-profit and corporate sectors. Under the Empower Retirement brand name, Great-West Financial offers employer-sponsored defined contribution plans, individual retirement accounts, enrollment services, communication materials, investment options and education services as well as fund management, investment and advisory services. Its products and services are marketed nationwide through its sales force, brokers, consultants, advisors, third-party administrators and financial institutions. Putnam provides investment management, certain administrative functions and distribution services through a broad range of investment products, including the Putnam Funds, its own family of mutual funds, which are offered to individual and institutional investors.

The Europe segment comprises two distinct business units: Insurance & Annuities, which offers protection and wealth management products, including payout annuity products, through subsidiaries of Canada Life in the United Kingdom (U.K.), the Isle of Man and Germany as well as through Irish Life in Ireland; and Reinsurance, which operates primarily in the U.S., Barbados and Ireland. Reinsurance products are provided through Canada Life, London Life and their subsidiaries.

Lifeco currently has no other material holdings and carries on no business or activities unrelated to its holdings in Great-West Life, London Life, Canada Life, Great-West Financial, Putnam and their subsidiaries. However, Lifeco is not restricted to investing in those companies and may make other investments in the future.

BASIS OF PRESENTATION AND SUMMARY OF ACCOUNTING POLICIES

The consolidated financial statements of Lifeco, which are the basis for data presented in this report, have been prepared in accordance with International Financial Reporting Standards (IFRS) unless otherwise noted and are presented in millions of Canadian dollars unless otherwise indicated. This MD&A should be read in conjunction with the Company's consolidated financial statements for the period ended December 31, 2017.

CAUTIONARY NOTE REGARDING FORWARD-LOOKING INFORMATION

This MD&A may contain forward-looking statements. Forward-looking statements include statements that are predictive in nature, depend upon or refer to future events or conditions, or include words such as "expects", "anticipates", "intends", "plans", "believes", "estimates" and other similar expressions or negative versions thereof. These statements may include, without limitation, statements about the Company's operations, business, financial condition, expected financial performance (including revenues, earnings or growth rates), ongoing business strategies or prospects, and possible future actions by the Company, including statements made with respect to the expected benefits of acquisitions and divestitures. Forward-looking statements are based on expectations, forecasts, predictions, projections and conclusions about future events that were current at the time of the statements and are inherently subject to, among other things, risks, uncertainties and assumptions about the Company, economic factors and the financial services industry generally, including the insurance and mutual fund industries. They are not guarantees of future performance, and the reader is cautioned that actual events and results could differ materially from those expressed or implied by forward-looking statements. Material factors and assumptions that were applied in formulating the forward-looking information contained herein include the assumption that the business and economic conditions affecting the Company’s operations will continue substantially in their current state, including, without limitation, with respect to customer behaviour, the Company's reputation, market prices for products provided, sales levels, premium income, fee income, expense levels, mortality experience, morbidity experience, policy lapse rates, reinsurance arrangements, liquidity requirements, capital requirements, credit ratings, taxes, inflation, interest and foreign exchange rates, investment values, hedging activities, global equity and capital markets, business competition and other general economic, political and market factors in North America and internationally. Many of these assumptions are based on factors and events that are not within the control of the Company and there is no assurance that they will prove to be correct. Other important factors and assumptions that could cause actual results to differ materially from those contained in forward-looking statements include customer responses to new products, impairments of goodwill and other intangible assets, the Company's ability to execute strategic plans and changes to strategic plans, technological changes, breaches or failure of information systems and security (including cyber-attacks), payments required under investment products, changes in local and international laws and regulations, changes in accounting policies and the effect of applying future accounting policy changes, unexpected judicial or regulatory proceedings, catastrophic events, continuity and availability of personnel and third party service providers, the Company's ability to complete strategic transactions and integrate acquisitions and unplanned material changes to the Company's facilities, customer and employee relations or credit arrangements. The reader is cautioned that the foregoing list of assumptions and factors is not exhaustive, and there may be other factors listed in other filings with securities regulators, including factors set out in the Company's 2017 Annual MD&A under "Risk Management and Control Practices" and "Summary of Critical Accounting Estimates", which, along with other filings, is available for review at www.sedar.com. The reader is also cautioned to consider these and other factors, uncertainties and potential events carefully and not to place undue reliance on forward-looking statements. Other than as specifically required by applicable law, the Company does not intend to update any forward-looking statements whether as a result of new information, future events or otherwise.

CAUTIONARY NOTE REGARDING NON-IFRS FINANCIAL MEASURES

This MD&A contains some non-IFRS financial measures. Terms by which non-IFRS financial measures are identified include, but are not limited to, "operating earnings", "adjusted net earnings", "constant currency basis", "premiums and deposits", "sales", "assets under management", "assets under administration" and other similar expressions. Non-IFRS financial measures are used to provide management and investors with additional measures of performance to help assess results where no comparable IFRS measure exists. However, non-IFRS financial measures do not have standard meanings prescribed by IFRS and are not directly comparable to similar measures used by other companies. Refer to the appropriate reconciliations of these non-IFRS financial measures to measures prescribed by IFRS.

CONSOLIDATED OPERATING RESULTS

Selected consolidated financial information
(in Canadian $ millions, except for per share amounts)

	As at or for the three months ended			For the twelve months ended	
	Dec. 31 2017	Sept. 30 2017	Dec. 31 2016	**Dec. 31 2017**	Dec. 31 2016
Premiums and deposits:					
Amounts reported in the financial statements					
Net premium income (Life insurance, guaranteed annuities and insured health products)	**$ 8,506**	$ 8,304	$ 8,905	**$ 33,947**	$ 31,125
Policyholder deposits (segregated funds):					
Individual products	**5,357**	3,641	3,399	**17,037**	13,512
Group products	**2,009**	1,634	1,875	**7,848**	7,846
Premiums and deposits reported in the financial statements	**15,872**	13,579	14,179	**58,832**	52,483
Self-funded premium equivalents (Administrative services only contracts)[1]	**720**	671	691	**2,827**	2,751
Proprietary mutual funds and institutional deposits[1]	**16,065**	14,272	15,169	**61,490**	62,232
Total premiums and deposits[1]	**32,657**	28,522	30,039	**123,149**	117,466
Fee and other income	**1,403**	1,365	1,345	**5,454**	5,101
Net policyholder benefits, dividends and experience refunds	**7,618**	6,849	7,841	**30,387**	27,714
Earnings					
Net earnings - common shareholders	**$ 392**	$ 581	$ 676	**$ 2,149**	$ 2,641
Adjustments[6]	**342**	1	22	**498**	44
Adjusted net earnings - common shareholders[6]	**734**	582	698	**2,647**	2,685
Per common share					
Net earnings - common shareholders	**0.397**	0.587	0.686	**2.173**	2.668
Adjusted net earnings - common shareholders[6]	**0.742**	0.589	0.709	**2.676**	2.712
Dividends paid	**0.367**	0.367	0.346	**1.468**	1.384
Book value	**20.11**	19.92	19.76		
Return on common shareholders' equity[2]					
Net earnings	**10.9%**	12.4%	13.8%		
Adjusted net earnings[6]	**13.4%**	13.3%	14.1%		
Total assets per financial statements[5]	**$ 419,838**	$ 406,768	$ 399,733		
Proprietary mutual funds and institutional net assets[3]	**278,954**	268,994	259,215		
Total assets under management[3]	**698,792**	675,762	658,948		
Other assets under administration[4]	**651,121**	618,532	589,291		
Total assets under administration	**$1,349,913**	$1,294,294	$1,248,239		
Total equity	**$ 25,536**	$ 25,386	$ 25,008		

(1) In addition to premiums and deposits reported in the financial statements, the Company includes premium equivalents on self-funded group insurance administrative services only (ASO) contracts and deposits on proprietary mutual funds and institutional accounts to calculate total premiums and deposits (a non-IFRS financial measure). This measure provides useful information as it is an indicator of top line growth.

(2) Return on common shareholders' equity is detailed within the "Capital Allocation Methodology" section.

(3) Total assets under management (a non-IFRS financial measure) provides an indicator of the size and volume of the overall business of the Company. Services provided in respect of assets under management include the selection of investments, the provision of investment advice and discretionary portfolio management on behalf of clients. This includes internally and externally managed funds where the Company has oversight of the investment policies.

(4) Other assets under administration (a non-IFRS financial measure) includes assets where the Company only provides administration services for which the Company earns fee and other income. These assets are beneficially owned by clients and the Company does not direct the investing activities. Services provided relating to assets under administration include recordkeeping, safekeeping, collecting investment income, settling of transactions or other administrative services. Administrative services are an important aspect of the overall business of the Company and should be considered when comparing volumes, size and trends.

(5) Comparative figures have been reclassified as described in note 2 and note 34 to the Company's December 31, 2017 annual consolidated financial statements.

(6) Adjusted net earnings attributable to common shareholders and adjusted net earnings per common share are non-IFRS measures of earnings performance and reflect the following adjustments in 2017:

	Segment					
2017 Adjustments:	**Canada**	**United States**	**Europe**	**Total**	**EPS Impact**	**Annual Financial Statement Note Reference**
Q1 Restructuring costs	$ —	$ 11	$ 17	$ 28	$ 0.029	N/A
Q2 Restructuring costs	126	—	1	127	0.128	Note 29
Q3 Restructuring costs	—	—	1	1	0.002	N/A
Q4 Restructuring costs	—	—	4	4	0.004	N/A
Q4 Net charge on sale of equity investment	—	122	—	122	0.124	Note 6
Q4 U.S. tax reform impact	19	251	(54)	216	0.218	Note 27
Total Q4 Adjustments	**19**	**373**	**(50)**	**342**	**0.345**	
Total 2017 Adjustments	**$ 145**	**$ 384**	**$ (31)**	**$ 498**	**$ 0.503**	

The fourth quarter of 2016 included restructuring costs of $22 million related to the U.S. segment ($44 million year-to-date related to the U.S. and Europe segments).

LIFECO 2017 HIGHLIGHTS

Maintained strong capital position and solid financial performance

- The Company maintained its strong capital position as evidenced by a Minimum Continuing Capital and Surplus Requirements (MCCSR) ratio at December 31, 2017 of 241% for Great-West Life, Lifeco's major Canadian operating subsidiary.
- For the twelve months ended December 31, 2017, net earnings attributable to common shareholders were $2,149 million, compared to $2,641 million for the previous year. In 2017, net earnings were impacted by restructuring costs of $160 million, a net charge of $216 million from the impact of U.S. tax reform and the net charge on the disposal of an equity investment in Nissay Asset Management Corporation (Nissay), including the non-cash write-off of an associated intangible asset, in the U.S. segment of $122 million.
- Excluding these items, adjusted net earnings of $2,647 million were down $38 million or 1% compared to 2016 adjusted net earnings of $2,685 million. The third quarter of 2017 also included a $175 million charge related to estimated hurricane-related property catastrophe losses. The 2017 adjusted net earnings, excluding the estimated property catastrophe losses of $175 million, increased 5% compared to 2016 reflecting solid fundamental business results.
- In 2017, Lifeco's quarterly common share dividend increased 6% to $0.367 per share.
- In the second quarter of 2017, through its subsidiary, Great-West Lifeco Finance (Delaware) LP, the Company issued 30 year US$700 million 4.15% senior unsecured notes, its first issuance in the U.S. debt market in over 10 years. The offering achieved the Company's objectives of raising funds at the holding company level and diversifying its sources of capital.
- The Company's financial leverage ratio at December 31, 2017 was 27.1%, providing financial flexibility to invest in organic growth and acquisition strategies.

Executed strategic, transformational and regulatory change while focusing on the customer

- During 2017, the Canadian operations realigned into two business units, Individual Customer and Group Customer, and are progressing well on targeted annual expense reductions of $200 million pre-tax, having achieved $123 million of annualized reductions by December 31, 2017. Focus on the customer continued, as innovative products were launched including a new first-in-Canada student loan retirement and savings pilot program. In recognition of this customer focus, Great-West Life was named the Life and Health Insurer of the Year at the 2017 Insurance Business awards. The acquisition of Financial Horizons Group, a Canadian managing general agency (MGA) was completed, which expanded the Company's investment in distribution in Canada with an ownership stake in the growing independent MGA sector.

- Within the U.S. operations, Great-West Financial completed its integration of the Empower Retirement business in early 2017. As of December 31, 2017, Empower Retirement's participant base grew to over 8.3 million and assets under administration reached approximately US$530 billion. Empower Retirement has maintained the second position in the U.S. defined contribution (DC) recordkeeping market, measured by number of participants and received the Top DC Plan Provider award in 2017. Additionally, Empower Retirement received top rankings in several categories from a key retirement industry journal, including Value for Price, where Empower has achieved the number one ranking for seven years running. Through its Individual Markets line of business, Great-West Financial was the second largest distributor of single premium universal life insurance through bank channels in 2017.
- Putnam completed its restructuring and reduced annual expenses by US$53 million. Putnam received DALBAR's Total Client Experience award recognizing overall mutual fund client service and continued its strong fund investment performance relative to its peers with 93% of fund assets performing at levels above the Lipper median for the one-year period and 85% for the five-year period ended December 31, 2017. In addition, Putnam's ending assets under management increased 13% to US$171 billion as of December 31, 2017 and year-over-year mutual fund sales experienced growth of 16%.
- Europe completed integration of the businesses that were acquired to form Irish Life Health, achieving €17 million of targeted synergies within budget and planned time line. Good progress was also made on the transformation of the Irish Life retail business. Irish Life continued to score well on customer satisfaction with a customer satisfaction index of 87%. The acquisition of Retirement Advantage in the U.K. closed on January 2, 2018 and added over 30,000 customers, more than $3.3 billion of assets under management and brought new products including equity-release mortgages to the Company's product shelf.
- In 2017, regulatory change in Canada involved significant focus on the changing capital regime. Effective January 1, 2018, the Office of the Superintendent of Financial Institutions (OSFI) has replaced the MCCSR guideline with the Life Insurance Capital Adequacy Test (LICAT) guideline, a new regulatory framework for the Canadian life insurance industry. The Company continues implementation preparations and is well-positioned for the new LICAT regulatory capital framework in 2018. The first LICAT reporting period will be the first quarter of 2018.
- On December 22, 2017, the *Tax Reconciliation Act*, was substantively enacted, following the signing by the President of the U.S. The legislation, which was generally effective for tax years beginning on January 1, 2018, results in significant U.S. tax reform and revises the Internal Revenue Code by, among other things, lowering the corporate federal income tax rate from 35% to 21% and modifying how the U.S. taxes multinational entities. As a result, the Company took a charge of $216 million which primarily reflects the net impact of the revaluation of certain deferred tax balances as well as the impact on insurance contract liabilities and expense provisions. The Company expects the lower U.S. corporate tax rate to benefit future net earnings. Based on Management's interpretation of the current legislation, 2017 adjusted net earnings would have been approximately $55 million to $60 million higher under the new tax regime.

Outlook for 2018

- Lifeco is focused on investing strategically - both organically and through acquisitions - to drive growth and productivity, while maintaining a strong risk and expense discipline, to deliver long-term value to its customers and shareholders. The Company will continue to review its businesses and products and assess market opportunities for capital deployment, similar to recent transactions like the Financial Horizons Group and Retirement Advantage acquisitions in 2017 and the development of the Irish Life health business. In 2018, there will continue to be a focus on regulatory change across the Company as LICAT is fully implemented and focus turns to preparing for the adoption of accounting changes from IFRS 17, *Insurance Contracts* which is effective on or after January 1, 2021 and impacts the recognition, measurement, presentation and disclosures of insurance contracts.

- In Canada, the transformation program initiated in the second quarter of 2017 will continue through to 2019. The program focuses on a customer centric approach, transforming the cost base and enhancing the distribution model.
- In the U.S., Empower Retirement is expected to grow, gain efficiencies and improve the overall customer experience. In early 2018, Empower Retirement launched the PlanVisualizer tool which will enhance plan sponsors' ability to further improve their employees' retirement readiness. At Putnam, the focus will continue to be on driving growth and market share through strong investment performance and service excellence. The Department of Labor's (DOL) additional rules regarding fiduciary duties for retirement consultants is not expected to have a material impact on the business in 2018. The DOL has issued an 18-month delay for full compliance with the rule to July 1, 2019.
- In Europe, development of U.K. bulk annuity capabilities as well as the equity-release mortgage and wider product capability acquired with Retirement Advantage will continue to complement the Company's strong position in the U.K. retirement and payout annuity markets. Investment in digital opportunities and attention given to income protection pricing will be a focus to grow the Company's market leading U.K. group risk business. In Ireland, deepening and broadening the market leading retail, corporate and investment management businesses, while managing costs, will continue to be the focus. In Germany, investments will continue in technology to drive processing efficiencies and lay the foundation for enhanced future capabilities. Reinsurance will build on its diversified multi-niche base to continue to meet client needs.

NET EARNINGS

Consolidated net earnings of Lifeco include the net earnings of Great-West Life and its operating subsidiaries, London Life, Canada Life and Irish Life; Great-West Financial and Putnam; together with Lifeco's Corporate operating results.

Lifeco's net earnings attributable to common shareholders (net earnings) for the three month period ended December 31, 2017 were $392 million compared to $676 million a year ago and $581 million in the previous quarter. On a per share basis, this represents $0.397 per common share ($0.396 diluted) for the fourth quarter of 2017 compared to $0.686 per common share ($0.685 diluted) a year ago and $0.587 per common share ($0.587 diluted) in the previous quarter. Excluding the impact of U.S. tax reform, the net charge on the sale of an equity investment and restructuring costs, which totaled $342 million, adjusted net earnings for the fourth quarter of 2017 were $734 million or $0.742 per common share compared to adjusted net earnings of $698 million or $0.627 per common share a year ago.

For the twelve months ended December 31, 2017, Lifeco's net earnings were $2,149 million compared to $2,641 million a year ago. On a per share basis, this represents $2.173 per common share ($2.170 diluted) for 2017 compared to $2.668 per common share ($2.663 diluted) a year ago. Excluding the impact of U.S. tax reform, net charge on the sale of an equity investment and restructuring costs, which totaled $498 million, adjusted net earnings for the twelve months ended December 31, 2017 were $2,647 million or $2.676 per common share compared to $2,685 million or $2.712 per common share a year ago. Lifeco's net earnings for the twelve months ended December 31, 2017 also included a loss estimate of $175 million after-tax relating to estimated claims resulting from the impact of in-year Atlantic hurricane activity which reduced earnings per common share by $0.177.

Net earnings - common shareholders	For the three months ended			For the twelve months ended	
	Dec. 31 2017	Sept. 30 2017	Dec. 31 2016[1]	**Dec. 31 2017**	Dec. 31 2016[1]
Canada					
Individual Customer[1]	**$ 162**	$ 141	$ 179	**$ 589**	$ 617
Group Customer[1]	**193**	155	154	**641**	564
Canada Corporate[2]	**(17)**	—	(7)	**(156)**	37
	338	296	326	**1,074**	1,218
United States					
Financial Services	**80**	104	80	**357**	333
Asset Management	**(5)**	6	(3)	**(21)**	(52)
U.S. Corporate[2]	**(373)**	—	(22)	**(386)**	(32)
	(298)	110	55	**(50)**	249
Europe					
Insurance & Annuities	**250**	233	225	**947**	927
Reinsurance	**67**	(41)	86	**190**	277
Europe Corporate[2]	**41**	(8)	(4)	**15**	(4)
	358	184	307	**1,152**	1,200
Lifeco Corporate	**(6)**	(9)	(12)	**(27)**	(26)
Net earnings - common shareholders	**$ 392**	$ 581	$ 676	**$ 2,149**	$ 2,641
Adjustments[2]					
Restructuring costs	**4**	1	22	**160**	**44**
Net charge on sale of equity investment	**122**	—	—	**122**	**—**
U.S. tax reform impact	**216**	—	—	**216**	**—**
Adjusted net earnings - common shareholders	**$ 734**	$ 582	$ 698	**$ 2,647**	**$ 2,685**

(1) Comparative figures have been reclassified to reflect presentation adjustments, related to the realignment of the Canada segment operations into two business units.
(2) Adjustments to net earnings are included in the Corporate business units of the Canada, Europe and U.S. segments.

The information in the table above is a summary of results for net earnings of the Company. Additional commentary regarding net earnings is included in the "Segmented Operating Results" section.

MARKET IMPACTS

Interest Rate Environment

Interest rates in countries where the Company operates mostly increased during 2017, except in the U.K., where rates mostly decreased. The net change in interest rates did not impact the range of interest rate scenarios tested through the valuation process and had no material impact on net earnings. The net change in interest rates for the quarter and year-to-date did not have a material impact on Great-West Life's MCCSR ratio.

In order to mitigate the Company's exposure to interest rate fluctuations, the Company follows disciplined processes for matching asset and liability cash flows. As a result, the impact of changes in fair values of bonds backing insurance contract liabilities recorded through profit or loss is mostly offset by a corresponding change in the insurance contract liabilities.

The Company's sensitivity to interest rate fluctuations is detailed in the "Accounting Policies - Summary of Critical Accounting Estimates" section.

Equity Markets

In the regions where the Company operates, average equity market levels in the fourth quarter of 2017 and year-to-date were mostly up compared to the same periods in 2016 and ended the quarter at higher market levels compared to September 30, 2017. Relative to the Company's expectation, the change in average market levels and market volatility had a positive impact of $4 million on net earnings during the fourth quarter of 2017 and $13 million year-to-date in 2017 (negligible impact in the fourth quarter of 2016 and $10 million negative impact year-to-date in 2016), related to asset-based fee income and the costs related to guarantees of death, maturity or income benefits within certain wealth management products offered by the Company. In addition, the impact on net earnings was positive $7 million in the fourth quarter of 2017 and $26 million year-to-date in 2017 (negligible impact in the fourth quarter of 2016 and $4 million positive impact year-to-date in 2016), related to seed money investments held in the Asset Management and Canada Corporate business units.

Comparing the fourth quarter of 2017 to the fourth quarter of 2016, average equity market levels were up by 7% in Canada (as measured by S&P TSX), 19% in the U.S. (as measured by S&P 500), 8% in the U.K. (as measured by FTSE 100), and 16% in broader Europe (as measured by Eurostoxx 50). The major equity indices finished the fourth quarter up 4% in Canada, 6% in the U.S., 4% in the U.K. and down 3% in broader Europe, compared to September 30, 2017.

Foreign Currency

Throughout this document, a number of terms are used to highlight the impact of foreign exchange on results, such as: "constant currency basis", "impact of currency movement" and "effect of currency translation fluctuations". These measures have been calculated using the average or period end rates, as appropriate, in effect at the date of the comparative period. This non-IFRS measure provides useful information as it facilitates the comparability of results between periods.

The average currency translation rate for the fourth quarter of 2017 decreased for the U.S. dollar, and increased for the British pound and the euro compared to the fourth quarter of 2016. The overall impact of currency movement on the Company’s net earnings for the three month period ended December 31, 2017 was an increase of $18 million ($43 million decrease year-to-date) compared to translation rates a year ago.

From September 30, 2017 to December 31, 2017, the market rate at the end of the reporting period used to translate U.S. dollar, British pound and euro assets and liabilities to the Canadian dollar increased. The movements in end-of-period market rates resulted in unrealized foreign exchange gains from the translation of foreign operations, including related hedging activities, of $294 million in-quarter ($495 million net unrealized loss year-to-date) recorded in other comprehensive income.

Translation rates for the reporting period and comparative periods are detailed in the "Translation of Foreign Currency" section.

Credit Markets

Credit markets impact on common shareholders' net earnings (after-tax)

	For the three months ended December 31, 2017			For the twelve months ended December 31, 2017		
	Impairment (charges) / recoveries	**Changes in provisions for future credit losses in insurance contract liabilities**	**Total**	**Impairment (charges) / recoveries**	**Changes in provisions for future credit losses in insurance contract liabilities**	**Total**
Canada	$ 1	$ (1)	$ —	$ 1	$ (2)	$ (1)
United States	(1)	1	—	(3)	1	(2)
Europe	(1)	7	6	(1)	8	7
Total	**$ (1)**	**$ 7**	**$ 6**	**$ (3)**	**$ 7**	**$ 4**

In the fourth quarter of 2017, the Company experienced net charges on impaired investments, including dispositions, which negatively impacted net earnings by $1 million ($4 million net recovery in the fourth quarter of 2016). Changes in credit ratings in the Company's fixed income portfolio resulted in a net decrease to provisions for future credit losses in insurance contract liabilities, which positively impacted net earnings by $7 million in the quarter ($2 million net positive impact in the fourth quarter of 2016).

For the twelve months ended December 31, 2017, the Company experienced net charges on impaired investments, including dispositions, which negatively impacted net earnings by $3 million ($17 million net charge in 2016). Prior year charges were primarily driven by impairment charges on mortgage loans as a result of the insolvency of British Home Stores (BHS), a U.K. retailer. Changes in credit ratings in the Company's fixed income portfolio resulted in a net decrease to provisions for future credit losses in insurance contract liabilities, which positively impacted net earnings by $7 million year-to-date ($12 million net positive impact in 2016).

ACTUARIAL ASSUMPTION CHANGES

During the fourth quarter of 2017, the Company updated a number of actuarial assumptions resulting in a positive net earnings impact of $35 million including the impacts noted in the "Actuarial Standards Update" section, compared to $115 million for the same quarter last year and $134 million for the previous quarter.

In Europe, net earnings were positively impacted by $42 million, primarily due to the impact of updated economic, annuitant mortality and morbidity assumptions, partially offset by updated mortality assumptions, updated tax assumptions mainly due to U.S. tax reform, and modeling refinements. In Canada, net earnings were positively impacted by $19 million, primarily due to the impact of updated mortality and morbidity assumptions, partially offset by updated economic, annuitant mortality, expense and tax assumptions. In the U.S., net earnings were negatively impacted by $26 million, primarily due to the impact of updated tax assumptions due to U.S. tax reform and updated economic assumptions, partially offset by updated mortality assumptions.

For the twelve months ended December 31, 2017, actuarial assumption changes resulted in a positive net earnings impact of $243 million, compared to $446 million for the same period in 2016.

ACTUARIAL STANDARDS UPDATE

In July 2017, the Canadian Actuarial Standards Board published the changes to the standards, effective for 2017 year-end reporting. The changes to the standards relate to prescribed mortality improvement rates and associated margins for adverse deviations, ultimate reinvestment rates, calibration criteria for stochastic risk-free interest rates and calibration criteria for equity investment returns, which are all used in the valuation of insurance contract liabilities.

The prescribed mortality improvement rates and associated margins for adverse deviation reflect recent mortality improvement trends in the Canadian population, revisions to the shape of expected future mortality improvements and the corresponding margins for adverse deviation including recognition of diversification of risk. For business in Canada, the adoption of this standard change in the fourth quarter of 2017 resulted in a positive net earnings impact of $72 million. During 2017, the Company has reviewed the mortality improvement rates used in all regions. While not directly related to the standards change, these resulted in a positive net earnings impact of $3 million in the fourth quarter of 2017, mainly in the U.S., partially offset by impacts within Europe.

Decreases in ultimate reinvestment rates and revised calibration criteria for stochastic risk-free interest rates were prescribed. The Company adopted these standard changes in the fourth quarter of 2017, resulting in a charge to net earnings of $27 million.

Criteria for the volatility of returns were added to the calibration criteria for equity investment returns. The Company’s current models already met these criteria; as a result, there was no impact on net earnings.

PREMIUMS AND DEPOSITS AND SALES

Total premiums and deposits (a non-IFRS financial measure) include premiums on risk-based insurance and annuity products net of ceded reinsurance (as defined under IFRS), premium equivalents on self-funded group insurance administrative services only (ASO) contracts, deposits on individual and group segregated fund products as well as deposits on proprietary mutual funds and institutional accounts. This measure provides an indicator of top-line growth.

Sales (a non-IFRS financial measure) for risk-based insurance and annuity products include 100% of single premium and annualized premiums expected in the first twelve months of the plan. Group insurance and ASO sales reflect annualized premiums and premium equivalents for new policies and new benefits covered or expansion of coverage on existing policies. For individual wealth management products, sales include deposits on segregated fund products, proprietary mutual funds and institutional accounts as well as deposits on non-proprietary mutual funds. For group wealth management products, sales include assets transferred from previous plan providers and the expected annual contributions from the new plan. This measure provides an indicator of new business growth.

Premiums and deposits

	For the three months ended			For the twelve months ended	
	Dec. 31 2017	Sept. 30 2017	Dec. 31 2016[1]	**Dec. 31 2017**	Dec. 31 2016[1]
Canada					
Individual Customer[1]	**$ 2,809**	$ 2,499	$ 2,769	**$ 10,880**	$ 10,040
Group Customer[1]	**4,038**	3,659	3,912	**15,665**	14,621
	6,847	6,158	6,681	**26,545**	24,661
United States					
Financial Services	**3,134**	3,140	3,525	**12,950**	14,156
Asset Management	**11,016**	10,404	11,119	**45,499**	45,471
	14,150	13,544	14,644	**58,449**	59,627
Europe					
Insurance & Annuities	**8,665**	5,983	4,984	**25,426**	22,276
Reinsurance	**2,995**	2,837	3,730	**12,729**	10,902
	11,660	8,820	8,714	**38,155**	33,178
Total premiums and deposits	**$ 32,657**	$ 28,522	$ 30,039	**$ 123,149**	$ 117,466

Sales

	For the three months ended			For the twelve months ended	
	Dec. 31 2017	Sept. 30 2017	Dec. 31 2016	**Dec. 31 2017**	Dec. 31 2016
Canada	**$ 3,772**	$ 2,940	$ 3,871	**$ 13,608**	$ 12,933
United States	**19,162**	21,173	18,384	**81,621**	98,218
Europe - Insurance & Annuities	**7,325**	5,362	4,410	**21,938**	19,179
Total sales	**$ 30,259**	$ 29,475	$ 26,665	**$ 117,167**	$ 130,330

(1) Comparative figures have been reclassified to reflect presentation adjustments, related to the realignment of the Canada segment operations into two business units.

The information in the table above is a summary of results for the Company's total premiums and deposits and sales. Additional commentary regarding premiums and deposits and sales is included in the "Segmented Operating Results" section.

NET INVESTMENT INCOME

Net investment income	For the three months ended			For the twelve months ended	
	Dec. 31 2017	Sept. 30 2017	Dec. 31 2016	**Dec. 31 2017**	Dec. 31 2016
Investment income earned (net of investment properties expenses)	**$ 1,537**	$ 1,545	$ 1,522	**$ 6,143**	$ 6,229
Allowances for credit losses on loans and receivables	**(6)**	(3)	(13)	**(7)**	(35)
Net realized gains	**66**	5	25	**127**	165
Regular investment income	**1,597**	1,547	1,534	**6,263**	6,359
Investment expenses	**(33)**	(30)	(27)	**(122)**	(107)
Regular net investment income	**1,564**	1,517	1,507	**6,141**	6,252
Changes in fair value through profit or loss	**1,415**	(988)	(3,943)	**1,466**	3,903
Net investment income	**$ 2,979**	$ 529	$ (2,436)	**$ 7,607**	$ 10,155

Net investment income in the fourth quarter of 2017, which includes changes in fair value through profit or loss, increased by $5,415 million compared to the same quarter last year. The changes in fair value in the fourth quarter of 2017 were an increase of $1,415 million compared to a decrease of $3,943 million for the fourth quarter of 2016. In the fourth quarter of 2017, the increase was primarily due to a decline in long duration Canadian bond yields as well as a decline in U.K. bond yields. In the fourth quarter of 2016, the decrease was primarily due to an increase in bond yields across all geographies.

Regular net investment income in the fourth quarter of 2017, which excludes changes in fair value through profit or loss, increased by $57 million compared to the fourth quarter of 2016. The increase was primarily due to higher net realized gains. Net realized gains include gains on available-for-sale securities of $13 million for the fourth quarter of 2017 compared to $14 million for the same quarter last year.

For the twelve months ended December 31, 2017, net investment income decreased by $2,548 million compared to the same period last year. The changes in fair value for the twelve month period in 2017 were an increase of $1,466 million compared to an increase of $3,903 million during the same period in 2016. Fair values increased less in 2017 compared to 2016 primarily due to mixed bond yield movement in the U.K. in the current year, compared to a decline in U.K. bond yields and a larger increase in Canadian equity markets during 2016.

Regular net investment income for the twelve months ended December 31, 2017 decreased by $111 million compared to the same period last year. The decrease was primarily due to the impact of currency movement as the Canadian dollar was stronger against the British pound in 2017 compared to 2016, as well as lower net realized gains. Net realized gains include gains on available-for-sale securities of $30 million for the twelve months ended December 31, 2017, compared to $84 million for the same period last year.

Net investment income in the fourth quarter of 2017 increased by $2,450 million compared to the previous quarter, primarily due to net increases in fair values of $1,415 million in the fourth quarter of 2017 compared to net decreases in fair values of $988 million in the previous quarter. The net increase in fair values during the fourth quarter was primarily due to a decline in long duration Canadian bond yields as well as a decline in U.K. bond yields, while the net decrease in fair values during the previous quarter was primarily due to an increase in bond yields across all geographies.

FEE AND OTHER INCOME

In addition to providing traditional risk-based insurance products, the Company also provides certain products on a fee-for-service basis. The most significant of these products are segregated funds and mutual funds, for which the Company earns investment management fees on assets managed and other fees, as well as ASO contracts, under which the Company provides group benefit plan administration on a cost-plus basis.

Fee and other income

	For the three months ended			For the twelve months ended	
	Dec. 31 2017	Sept. 30 2017	Dec. 31 2016	**Dec. 31 2017**	Dec. 31 2016
Canada					
Segregated funds, mutual funds and other	**$ 375**	$ 371	$ 345	**$ 1,444**	$ 1,329
ASO contracts	**44**	40	41	**172**	165
	419	411	386	**1,616**	1,494
United States					
Segregated funds, mutual funds and other	**616**	606	619	**2,452**	2,311
Europe					
Segregated funds, mutual funds and other	**368**	348	340	**1,386**	1,296
Total fee and other income	**$ 1,403**	$ 1,365	$ 1,345	**$ 5,454**	$ 5,101

The information in the table above is a summary of gross fee and other income for the Company. Additional commentary regarding fee and other income is included in the "Segmented Operating Results" section.

NET POLICYHOLDER BENEFITS, DIVIDENDS AND EXPERIENCE REFUNDS

Net policyholder benefits, dividends and experience refunds

	For the three months ended			For the twelve months ended	
	Dec. 31 2017	Sept. 30 2017	Dec. 31 2016	**Dec. 31 2017**	Dec. 31 2016
Canada	**$ 2,319**	$ 2,209	$ 2,280	**$ 9,373**	$ 9,049
United States	**1,156**	912	1,161	**4,228**	4,119
Europe	**4,143**	3,728	4,400	**16,786**	14,546
Total	**$ 7,618**	$ 6,849	$ 7,841	**$ 30,387**	$ 27,714

Net policyholder benefits, dividends and experience refunds include life and health claims, policy surrenders, maturities, annuity payments, segregated fund guarantee payments, policyholder dividends and experience refund payments. The amounts do not include benefit payments for ASO contracts, segregated funds or mutual funds.

For the three months ended December 31, 2017, net policyholder benefits, dividends and experience refunds were $7.6 billion, a decrease of $0.2 billion from the same period in 2016. The decrease in benefit payments was primarily due to lower volumes relating to existing business and the impact of currency movement.

For the twelve months ended December 31, 2017, net policyholder benefits, dividends and experience refunds were $30.4 billion, an increase of $2.7 billion from the same period in 2016. The increase in benefit payments was primarily due to new and restructured reinsurance treaties.

Compared to the previous quarter, net policyholder benefits, dividends and experience refunds increased by $0.8 billion, primarily due to higher volumes relating to existing business and the impact of currency movement.

OTHER BENEFITS AND EXPENSES

Other benefits and expenses	For the three months ended			For the twelve months ended	
	Dec. 31 2017	Sept. 30 2017	Dec. 31 2016	**Dec. 31 2017**	Dec. 31 2016
Operating and administrative expenses	**$ 1,272**	$ 1,143	$ 1,250	**$ 4,833**	$ 4,799
Commissions	**587**	521	853	**2,410**	2,602
Premium taxes	**115**	118	112	**463**	411
Financing charges	**74**	71	75	**300**	302
Restructuring and acquisition expenses	**5**	1	35	**259**	63
Amortization of finite life intangible assets	**29**	47	44	**168**	177
Total	**$ 2,082**	$ 1,901	$ 2,369	**$ 8,433**	$ 8,354

Other benefits and expenses for the fourth quarter of 2017 of $2,082 million decreased by $287 million compared to the fourth quarter of 2016, primarily due to lower commissions, driven by lower sales in Canada.

For the twelve months ended December 31, 2017, other benefits and expenses increased by $79 million to $8,433 million compared to the same period last year, primarily due to higher restructuring and acquisition expenses, partially offset by lower commissions as discussed for the in-quarter results.

Other benefits and expenses for the fourth quarter of 2017 increased by $181 million compared to the previous quarter, primarily due to higher operating and administrative expenses, primarily due to less favourable impacts of changes to certain income tax estimates and a prior quarter non-recurring pension curtailment gain in the U.S. as well as higher commissions, driven by higher sales in Canada.

INCOME TAXES

The Company's effective income tax rate is generally lower than the statutory income tax rate of 26.75% due to benefits related to non-taxable investment income and lower income tax in foreign jurisdictions.

In the fourth quarter of 2017, the Company had an effective income tax rate of 30%, up from 18% in the fourth quarter of 2016. On December 22, 2017, the *Tax Reconciliation Act*, was substantively enacted, following the signing by the President of the U.S. The legislation, which was generally effective for tax years beginning on January 1, 2018, results in significant U.S. tax reform and revises the Internal Revenue Code by, among other things, lowering the corporate federal income tax rate from 35% to 21% and modifying how the U.S. taxes multinational entities. As a result of these changes, the Company revalued certain deferred tax balances and insurance contract liabilities and updated certain expense provisions. The impact of these items was a net charge of $216 million to net earnings, which increased the Company's fourth quarter of 2017 effective income tax rate by 21 points. Excluding the impact of this U.S. tax reform, the Company had an effective income tax rate of 9% for the fourth quarter of 2017, down from 18% in the prior year as a result of the favourable impact of items taxed outside of Canada and tax exempt investment income as well as changes in certain tax estimates, partially offset by the impact of a corporate tax rate increase in British Columbia.

The Company had an effective income tax rate of 15% for the twelve months ended December 31, 2017. Excluding the impact of U.S. tax reform discussed for the in-quarter results, the effective tax rate was 11% for the twelve months ended December 31, 2017 and was comparable to 12% for the same period last year.

Excluding the impact of U.S. tax reform discussed for the in-quarter results, the fourth quarter effective income tax rate of 9% was lower than the third quarter rate of 13%. The decrease in the effective income tax rate was primarily due to the favourable impact of items taxed outside of Canada as well as changes in certain tax estimates, partially offset by the impact of the British Columbia corporate tax rate increase.

Effective Income Tax Rate - Impact of U.S. Tax Reform

	Net earnings impact	For the three months ended Dec. 31, 2017	For the twelve months ended Dec. 31, 2017
Effective income tax rate before non-controlling interests		30 %	15 %
Increase (decrease) from revaluation of deferred tax balances:			
Canada	$ (19)	(3)%	(1)%
United States	(223)	(36)	(11)
Europe	88	14	4
	(154)	(25)	(8)
Increase (decrease) related to insurance contract liabilities and expenses:			
Canada	—	—	—
United States	(47)	13	13
Europe	(34)	(9)	(9)
	(81)	4	4
Net impact of U.S. tax reform before non-controlling interests	**$ (235)**	**(21)%**	**(4)%**
Effective income tax rate excluding U.S. tax reform impact before non-controlling interests		**9 %**	**11 %**
Attributable to non-controlling interests	19		
Net impact of U.S. tax reform	**$ (216)**		

The revaluation of deferred tax balances, which are based on management's best estimates, may require further adjustments as additional guidance from the U.S. Department of the Treasury is provided, the Company's assumptions change, and as further information and interpretations become available. Changes in these estimates will impact the 2018 fiscal year.

CONSOLIDATED FINANCIAL POSITION

ASSETS

Assets under administration

	December 31, 2017			
	Canada	**United States**	**Europe**	**Total**
Assets				
Invested assets	$ **73,110**	$ **44,263**	$ **50,562**	$ **167,935**
Goodwill and intangible assets	**5,447**	**1,975**	**2,489**	**9,911**
Other assets	**2,804**	**3,787**	**18,044**	**24,635**
Segregated funds net assets	**80,399**	**34,038**	**102,920**	**217,357**
Total assets	**161,760**	**84,063**	**174,015**	**419,838**
Proprietary mutual funds and institutional net assets	**6,810**	**232,623**	**39,521**	**278,954**
Total assets under management	**168,570**	**316,686**	**213,536**	**698,792**
Other assets under administration	**11,580**	**597,596**	**41,945**	**651,121**
Total assets under administration	$ **180,150**	$ **914,282**	$ **255,481**	$ **1,349,913**

	December 31, 2016			
	Canada	United States	Europe	Total
Assets				
Invested assets	$ 70,311	$ 44,904	$ 47,940	$ 163,155
Goodwill and intangible assets	5,133	2,388	2,428	9,949
Other assets[(1)]	3,178	4,351	18,697	26,226
Segregated funds net assets	74,909	35,414	90,080	200,403
Total assets	153,531	87,057	159,145	399,733
Proprietary mutual funds and institutional net assets	5,852	219,699	33,664	259,215
Total assets under management	159,383	306,756	192,809	658,948
Other assets under administration	15,911	534,428	38,952	589,291
Total assets under administration	$ 175,294	$ 841,184	$ 231,761	$ 1,248,239

(1) Comparative figures have been reclassified as described in note 2 and note 34 to the Company's December 31, 2017 annual consolidated financial statements.

Total assets under administration at December 31, 2017 increased by $101.7 billion to $1.3 trillion compared to December 31, 2016, primarily due to the impact of positive market movement and new business growth, partially offset by the impact of currency movement. The decrease in Canada other assets under administration of $4.3 billion is primarily due to the transition of $5.5 billion of real estate assets from GWL Realty Advisors to British Columbia Investment Management Corporation (bcIMC) in the third quarter of 2017. The remaining bcIMC real estate assets of approximately $0.8 billion are expected to transition in the first quarter of 2018.

INVESTED ASSETS

The Company manages its general fund assets to support the cash flow, liquidity and profitability requirements of the Company's insurance and investment products. The Company follows prudent and conservative investment policies, so that assets are not unduly exposed to concentration, credit or market risks. The Company implements strategies within the overall framework of the Company’s policies, reviewing and adjusting them on an ongoing basis in light of liability cash flows and capital market conditions. The majority of investments of the general fund are in medium-term and long-term fixed-income investments, primarily bonds and mortgages, reflecting the characteristics of the Company’s liabilities.

Invested asset distribution

	December 31, 2017				
	Canada	**United States**	**Europe**	**Total**	
Bonds					
Government & related	**$ 22,600**	**$ 5,848**	**$ 21,449**	**$ 49,897**	**30%**
Corporate & other	**23,704**	**26,342**	**20,261**	**70,307**	**42**
Sub-total bonds	**46,304**	**32,190**	**41,710**	**120,204**	**72**
Mortgages	**13,142**	**5,447**	**3,596**	**22,185**	**13**
Stocks	**8,324**	**112**	**428**	**8,864**	**5**
Investment properties	**1,960**	**5**	**2,886**	**4,851**	**3**
Sub-total portfolio investments	**69,730**	**37,754**	**48,620**	**156,104**	**93**
Cash and cash equivalents	**701**	**1,017**	**1,833**	**3,551**	**2**
Loans to policyholders	**2,679**	**5,492**	**109**	**8,280**	**5**
Total invested assets	**$ 73,110**	**$ 44,263**	**$ 50,562**	**$ 167,935**	**100%**

	December 31, 2016				
	Canada	United States	Europe	Total	
Bonds					
Government & related	$ 23,580	$ 8,384	$ 18,905	$ 50,869	31%
Corporate & other	21,138	24,589	20,177	65,904	41
Sub-total bonds	44,718	32,973	39,082	116,773	72
Mortgages	12,892	5,169	3,590	21,651	13
Stocks	7,903	160	602	8,665	5
Investment properties	1,574	5	2,761	4,340	3
Sub-total portfolio investments	67,087	38,307	46,035	151,429	93
Cash and cash equivalents	615	852	1,792	3,259	2
Loans to policyholders	2,609	5,745	113	8,467	5
Total invested assets	$ 70,311	$ 44,904	$ 47,940	$ 163,155	100%

At December 31, 2017, total invested assets were $167.9 billion, an increase of $4.8 billion from December 31, 2016. The increase in invested assets was primarily due to regular business activity as well as a net increase in the fair value of bonds. The distribution of assets has not changed significantly and remains heavily weighted to bonds and mortgages.

Bond portfolio – It is the Company's policy to acquire only investment grade bonds subject to prudent and well-defined investment policies. The total bond portfolio, including short-term investments, was $120.2 billion or 72% of invested assets at December 31, 2017 and $116.8 billion or 72% at December 31, 2016. The overall quality of the bond portfolio remained high, with 99% of the portfolio rated investment grade and 81% rated A or higher.

Bond portfolio quality

	December 31, 2017		December 31, 2016	
AAA	**$ 24,889**	**21 %**	$ 27,762	24%
AA	**32,405**	**27**	29,816	26
A	**40,328**	**33**	37,787	32
BBB	**21,449**	**18**	20,116	17
BB or lower	**1,133**	**1**	1,292	1
Total	**$ 120,204**	**100 %**	$ 116,773	100%

At December 31, 2017, non-investment grade bonds were $1.1 billion or 0.9% of the bond portfolio compared to $1.3 billion or 1.1% of the bond portfolio at December 31, 2016.

Mortgage portfolio – It is the Company's practice to acquire only high quality commercial mortgages meeting strict underwriting standards and diversification criteria. The Company has a well-defined risk-rating system, which it uses in its underwriting and credit monitoring processes for commercial loans. Residential loans are originated by the Company's mortgage specialists in accordance with well-established underwriting standards and are well diversified across each geographic region, including specific diversification requirements for non-insured mortgages.

Mortgage portfolio

	December 31, 2017				December 31, 2016	
Mortgage loans by type	**Insured**	**Non-insured**	**Total**		Total	
Single family residential	**$ 656**	**$ 1,483**	**$ 2,139**	**10%**	$ 2,075	9%
Multi-family residential	**3,549**	**3,217**	**6,766**	**30**	5,987	28
Commercial	**328**	**12,952**	**13,280**	**60**	13,589	63
Total	**$ 4,533**	**$ 17,652**	**$ 22,185**	**100%**	$ 21,651	100%

The total mortgage portfolio was $22.2 billion or 13% of invested assets at December 31, 2017, compared to $21.7 billion or 13% of invested assets at December 31, 2016. Total insured loans were $4.5 billion or 20% of the mortgage portfolio.

Commercial mortgages

	December 31, 2017				December 31, 2016			
	Canada	**U.S.**	**Europe**	**Total**	Canada	U.S.	Europe	Total
Retail & shopping centres	**$ 3,185**	**$ 628**	**$ 1,337**	**$ 5,150**	$ 3,353	$ 633	$ 1,263	$ 5,249
Office buildings	**1,862**	**888**	**658**	**3,408**	1,845	657	729	3,231
Industrial	**1,411**	**1,322**	**855**	**3,588**	1,570	1,534	842	3,946
Other	**382**	**419**	**333**	**1,134**	340	450	373	1,163
Total	**$ 6,840**	**$ 3,257**	**$ 3,183**	**$ 13,280**	$ 7,108	$ 3,274	$ 3,207	$ 13,589

Single family residential mortgages

Region	**December 31, 2017**		December 31, 2016	
Ontario	**$ 1,054**	**49%**	$ 1,005	49%
Quebec	**458**	**22**	436	21
Alberta	**135**	**6**	140	7
British Columbia	**120**	**6**	127	6
Newfoundland	**112**	**5**	113	5
Saskatchewan	**94**	**5**	86	4
Nova Scotia	**63**	**3**	65	3
New Brunswick	**50**	**2**	46	2
Manitoba	**49**	**2**	53	3
Other	**4**	**—**	4	—
Total	**$ 2,139**	**100%**	$ 2,075	100%

During the twelve months ended December 31, 2017, single family mortgage originations, including renewals, were $618 million, of which 24% were insured. Insured mortgages include mortgages where insurance is provided by a third party and protects the Company in the event that the borrower is unable to fulfill their mortgage obligations. Loans that are insured are subject to the requirements of the mortgage default insurance provider. For new originations of non-insured residential mortgages, the Company's investment policies limit the amortization period to a maximum of 25 years and the loan-to-value to a maximum of 80% of the purchase price or current appraised value of the property. The weighted average remaining amortization period for the single family residential mortgage portfolio was 21 years as at December 31, 2017.

Equity portfolio

	December 31, 2017		December 31, 2016	
Equity portfolio by type				
Publicly traded stocks	**$ 8,465**	**62%**	$ 7,988	62%
Privately held stocks	**399**	**3**	677	5
Sub-total	**8,864**	**65**	8,665	67
Investment properties	**4,851**	**35**	4,340	33
Total	**$ 13,715**	**100%**	$ 13,005	100%

Investment properties

	December 31, 2017				December 31, 2016			
	Canada	**U.S.**	**Europe**	**Total**	Canada	U.S.	Europe	Total
Office buildings	**$ 872**	**$ —**	**$ 635**	**$ 1,507**	$ 702	$ —	$ 625	$ 1,327
Industrial	**340**	**—**	**676**	**1,016**	293	—	596	889
Retail	**222**	**—**	**1,167**	**1,389**	207	—	1,114	1,321
Other	**526**	**5**	**408**	**939**	372	5	426	803
Total	**$ 1,960**	**$ 5**	**$ 2,886**	**$ 4,851**	$ 1,574	$ 5	$ 2,761	$ 4,340

Equity portfolio – The total equity portfolio was $13.7 billion or 8% of invested assets at December 31, 2017 compared to $13.0 billion or 8% of invested assets at December 31, 2016. The equity portfolio consists of publicly traded stocks, privately held stocks and investment properties. The increase in public stocks of $0.5 billion was primarily due to an increase in the Canadian equity markets, while the decrease in private stocks of $0.3 billion was primarily due to the sale of an equity investment holding in Allianz Ireland. The increase in investment properties of $0.5 billion was mainly the result of purchases in the Canadian division as well as net market value increases.

Impaired investments – Impaired investments include bonds in default, mortgages in default or in the process of foreclosure, investment properties acquired by foreclosure and other assets where management no longer has reasonable assurance that all contractual cash flows will be received.

Impaired investments

	December 31, 2017				December 31, 2016			
	Gross amount	**Impairment recovery**	**Impairment provision**	**Carrying amount**	Gross amount	Impairment recovery	Impairment provision	Carrying amount
Fair value through profit or loss	**$ 213**	**$ 20**	**$ —**	**$ 233**	$ 231	$ 53	$ (1)	$ 283
Available-for-sale	**16**	**2**	**(1)**	**17**	8	3	(1)	10
Loans and receivables	**81**	**—**	**(40)**	**41**	122	—	(43)	79
Total	**$ 310**	**$ 22**	**$ (41)**	**$ 291**	$ 361	$ 56	$ (45)	$ 372

The gross amount of impaired investments totaled $310 million or 0.2% of invested assets at December 31, 2017 compared with $361 million or 0.2% at December 31, 2016, a net decrease of $51 million. The decrease in impaired investments was primarily due to dispositions and repayments.

The impairment recovery at December 31, 2017 was $22 million, which reflects the improvement in market values of certain impaired investments from the date at which they became impaired. The impairment provision at December 31, 2017 was $41 million, compared to $45 million at December 31, 2016. The decrease was primarily due to the restructuring of impaired bonds as well as the disposal of impaired mortgage loans. While the fair values have improved on certain impaired assets, these assets remain impaired based on other impairment factors as described in the "Summary of Critical Accounting Estimates" section of this document and in note 2 of the Company's December 31, 2017 annual consolidated financial statements.

Provision for future credit losses

As a component of insurance contract liabilities, the total actuarial provision for future credit losses is determined consistent with the Canadian Institute of Actuaries' Standards of Practice and includes provisions for adverse deviation.

At December 31, 2017, the total actuarial provision for future credit losses in insurance contract liabilities was $2,891 million compared to $2,946 million at December 31, 2016, a decrease of $55 million, primarily due to the impact of basis changes, partially offset by normal business activity.

The aggregate of impairment provisions of $41 million ($45 million at December 31, 2016) and actuarial provisions for future credit losses in insurance contract liabilities of $2,891 million ($2,946 million at December 31, 2016) represents 2.0% of bond and mortgage assets, including funds held by ceding insurers, at December 31, 2017 (2.0% at December 31, 2016).

United Kingdom Property Related Exposures

Holdings of United Kingdom Mortgages and Investment Properties

	December 31, 2017						December 31, 2016
	Multi-Family Residential	**Retail & shopping centres**	**Office buildings**	**Industrial**	**Other**	**Total**	Total
Mortgages	**$ 361**	**$ 1,636**	**$ 650**	**$ 941**	**$ 333**	**$ 3,921**	$ 3,772
Investment properties	**—**	**1,144**	**631**	**676**	**401**	**2,852**	2,729
Total	**$ 361**	**$ 2,780**	**$ 1,281**	**$ 1,617**	**$ 734**	**$ 6,773**	$ 6,501

At December 31, 2017, the Company's holdings of property related investments in the U.K. were $6.8 billion ($6.5 billion at December 31, 2016) or 4.0% of invested assets. Holdings in Central London were $2.1 billion ($1.9 billion at December 31, 2016) or 1.2% of invested assets, while holdings in other regions of the U.K. were $4.7 billion ($4.6 billion at December 31, 2016) or 2.8% of invested assets. These holdings were well diversified across property type - Retail (41%), Industrial/Other (35%), Office (19%) and Multi-family (5%). The weighted average loan-to-value ratio of the mortgages was 51% and the weighted average debt-service coverage ratio was 2.4 at December 31, 2017. At December 31, 2017, the weighted average mortgage and property lease term exceeded 12 years.

DERIVATIVE FINANCIAL INSTRUMENTS

There were no major changes to the Company's policies and procedures with respect to the use of derivative financial instruments in 2017. The Company’s derivative transactions are generally governed by International Swaps and Derivatives Association, Inc. (ISDA) Master Agreements, which provide for legally enforceable set-off and close-out netting of exposure to specific counterparties in the event of an early termination of a transaction, which includes, but is not limited to, events of default and bankruptcy. In the event of an early termination, the Company is permitted to set off receivables from a counterparty against payables to the same counterparty, in the same legal entity, arising out of all included transactions. The Company’s ISDA Master Agreements may include Credit Support Annex provisions, which require both the pledging and accepting of collateral in connection with its derivative transactions.

At December 31, 2017, total financial collateral, including initial margin and overcollateralization, received on derivative assets was $77 million ($159 million at December 31, 2016) and pledged on derivative liabilities was $437 million ($475 million at December 31, 2016). Collateral received on derivative assets declined as a result of a decrease in derivative assets, primarily driven by the impact of the strengthening British pound against the U.S. dollar on cross-currency swaps that pay British pounds and receive U.S. dollars. Collateral pledged on derivative liabilities decreased in 2017 as a result of a decrease in derivative liabilities, primarily driven by the impact of the strengthening Canadian dollar against the U.S. dollar on cross-currency swaps that pay U.S. and receive Canadian dollars.

During the twelve month period ended December 31, 2017, the outstanding notional amount of derivative contracts decreased by $0.6 billion to $16.6 billion. The decrease was primarily due to the expiration and settlement of foreign exchange contracts that were cash flow hedges for the $1.0 billion of the Company's subordinated debentures redeemed June 21, 2017, partially offset by an increase in regular hedging activities.

The Company’s exposure to derivative counterparty credit risk, which reflects the current fair value of those instruments in a gain position, decreased to $384 million at December 31, 2017 from $528 million at December 31, 2016. The decrease is primarily due to the strengthening of the British pound against the U.S. dollar on cross-currency swaps that pay British pounds and receive U.S. dollars and the expiration and settlement of foreign exchange contracts that paid euro and received British pounds.

Goodwill and intangible assets

Goodwill and intangible assets	December 31	
	2017	2016
Goodwill	**$ 6,179**	$ 5,977
Indefinite life intangible assets	**2,662**	3,030
Finite life intangible assets	**1,070**	942
Total	**$ 9,911**	$ 9,949

The Company's goodwill and intangible assets relate primarily to its acquisitions of London Life, Canada Life, Putnam and Irish Life. Goodwill and intangible assets of $9,911 million at December 31, 2017 were comparable to December 31, 2016. Goodwill increased by $202 million to $6,179 million, primarily due to the acquisition of Financial Horizons Group and the impact of currency movements. Indefinite life intangible assets decreased by $368 million, primarily due to a reduction in customer contract related intangibles and the impacts of currency movement, partially offset by the reversal of an impairment charge related to Putnam brands and trademarks. Customer contract related indefinite life intangible assets of $290 million were transferred to assets held for sale as a result of the disposal of an associated equity investment. Finite life intangible assets increased by $128 million during 2017, primarily due to additions of customer contracts related to the acquisition of Financial Horizons Group and net additions to computer software, partially offset by currency movement.

IFRS principles require the Company to assess at the end of each reporting period whether there is any indication that an asset may be impaired and to perform an impairment test on goodwill and indefinite life intangible assets at least annually or more frequently if events indicate that impairment may have occurred. Intangible assets that were previously impaired are reviewed at each reporting date for evidence of reversal. Finite life intangible assets are reviewed annually to determine if there are indications of impairment and assess whether the amortization periods and methods are appropriate. In the fourth quarter of 2017, the Company conducted its annual impairment testing of goodwill and intangible assets based on September 30, 2017 asset balances. It was determined that the recoverable amounts of cash generating unit groupings were in excess of their carrying values and there was no evidence of impairment. The recoverable amount is the higher of the asset's fair value less costs of disposal and value-in-use. In the second quarter of 2017, the Company recognized an impairment loss of $16 million ($12 million after-tax) to finite life intangible assets related to software assets included in the provision for the Canadian business transformation.

Refer to note 10 in the Company's December 31, 2017 annual consolidated financial statements for further details of the Company's goodwill and intangible assets. Also, refer to the "Summary of Critical Accounting Estimates" section of this document for details on impairment testing of these assets.

Other general fund assets

Other general fund assets

	December 31	
	2017	2016[1]
Funds held by ceding insurers	**$ 9,893**	$ 10,781
Reinsurance assets	**5,045**	5,627
Premiums in course of collection, accounts and interest receivable	**4,647**	4,311
Other assets	**2,424**	2,263
Deferred tax assets[1]	**930**	1,593
Owner occupied properties	**706**	649
Derivative financial instruments	**384**	528
Fixed assets	**303**	304
Assets held for sale[2]	**169**	—
Current income taxes[1]	**134**	170
Total	**$ 24,635**	$ 26,226

(1) Comparative figures have been reclassified as described in note 2 and note 34 to the Company's December 31, 2017 annual consolidated financial statements.
(2) For additional details on assets held for sale, refer to note 6 in the Company's December 31, 2017 annual consolidated financial statements.

Total other general fund assets at December 31, 2017 were $24.6 billion, a decrease of $1.6 billion from December 31, 2016. The decrease was primarily due to a $0.9 billion decrease in funds held by ceding insurers, a $0.7 billion decrease in deferred tax assets and a $0.6 billion decrease in reinsurance assets, partially offset by an increase of $0.3 billion in premiums in course of collection, accounts and interest receivable, an increase of $0.2 million in assets held for sale and an increase of $0.1 billion in other assets. The decrease in deferred tax assets is primarily due to the impact of U.S. tax reform.

Other assets comprise several items including prepaid expenses and accounts receivable. Refer to note 12 in the Company's December 31, 2017 annual consolidated financial statements for a breakdown of other assets.

Investments on account of segregated fund policyholders

Segregated funds

	December 31		
	2017	2016	2015
Stock and units in unit trusts	**$ 93,465**	$ 81,033	$ 80,829
Mutual funds	**54,658**	51,726	50,101
Bonds	**42,270**	41,619	42,160
Investment properties	**11,520**	11,019	10,839
Cash and other	**11,232**	10,837	10,279
Mortgage loans	**2,610**	2,622	2,596
Sub-total	**$ 215,755**	$ 198,856	$ 196,804
Non-controlling mutual funds interest	**1,602**	1,547	1,390
Total	**$ 217,357**	$ 200,403	$ 198,194
Year-over-year growth	**8%**	1%	13%

Investments on account of segregated fund policyholders, which are measured at fair value, increased by $17.0 billion to $217.4 billion at December 31, 2017 compared to December 31, 2016, primarily due to the combined impact of market value gains and investment income of $13.4 billion, the impact of currency movement of $2.5 billion and net deposits of $1.1 billion.

Proprietary mutual funds

Proprietary mutual funds and institutional net assets

	December 31	
	2017	2016
Mutual funds		
Blend equity	**$ 30,828**	$ 31,328
Growth equity	**15,045**	13,252
Equity value	**23,590**	23,163
Fixed-income	**35,593**	33,999
Money market	**156**	164
Great-West Financial Funds[1]	**16,585**	15,856
Sub-total	**$ 121,797**	$ 117,762
Institutional accounts		
Equity	**$ 103,001**	$ 84,257
Fixed-income	**46,799**	48,700
Other	**7,357**	8,496
Sub-total	**$ 157,157**	$ 141,453
Total proprietary mutual funds and institutional accounts	**$ 278,954**	$ 259,215

[1] At December 31, 2017, mutual funds exclude $13.4 billion of Putnam managed funds ($10.9 billion at December 31, 2016), which are included in the categories above.

At December 31, 2017, total proprietary mutual funds and institutional accounts include $232.6 billion at Putnam and Great-West Financial, $38.5 billion at Irish Life and $6.8 billion at Quadrus Investment Services Ltd (Quadrus). Proprietary mutual funds and institutional accounts under management increased by $19.7 billion, primarily due to the positive impact of market movements, partially offset by the impact of currency movement.

LIABILITIES

Total liabilities

	December 31	
	2017	2016[1]
Insurance and investment contract liabilities	**$ 161,365**	$ 157,949
Other general fund liabilities[1]	**15,580**	16,373
Investment and insurance contracts on account of segregated fund policyholders	**217,357**	200,403
Total	**$ 394,302**	$ 374,725

(1) Comparative figures have been reclassified as described in note 2 and note 34 to the Company's December 31, 2017 annual consolidated financial statements.

Total liabilities increased by $19.6 billion to $394.3 billion at December 31, 2017 from December 31, 2016.

Insurance and investment contract liabilities increased by $3.4 billion, primarily due to the impact of new business, partially offset by the net impact of currency movement, primarily driven by the strengthening of the Canadian dollar against the U.S. dollar and changes in assumptions. Investment and insurance contracts on account of segregated fund policyholders increased by $17.0 billion, primarily due to the combined impact of market value gains and investment income of $13.4 billion, the impact of currency movement of $2.5 billion and net deposits of $1.1 billion.

Insurance and investment contract liabilities represent the amounts that, together with estimated future premiums and investment income, will be sufficient to pay estimated future benefits, dividends and expenses on policies in-force. Insurance and investment contract liabilities are determined using generally accepted actuarial practices, according to standards established by the Canadian Institute of Actuaries. Also, refer to the "Summary of Critical Accounting Estimates" section of this document for further details.

Assets supporting insurance and investment contract liabilities

	Participating Account	Non-Participating Canada	Non-Participating United States	Non-Participating Europe	Total
December 31, 2017					
Bonds	**$ 23,410**	**$ 19,486**	**$ 23,400**	**$ 33,037**	**$ 99,333**
Mortgage loans	**8,959**	**3,777**	**4,268**	**3,569**	**20,573**
Stocks	**5,142**	**2,027**	**—**	**262**	**7,431**
Investment properties	**1,689**	**134**	**—**	**2,810**	**4,633**
Other assets[(1)]	**9,671**	**4,607**	**1,146**	**13,971**	**29,395**
Total assets	**$ 48,871**	**$ 30,031**	**$ 28,814**	**$ 53,649**	**$ 161,365**
Total insurance and investment contract liabilities	**$ 48,871**	**$ 30,031**	**$ 28,814**	**$ 53,649**	**$ 161,365**
December 31, 2016					
Bonds	$ 22,896	$ 17,464	$ 23,820	$ 31,550	$ 95,730
Mortgage loans	8,810	3,699	4,005	3,557	20,071
Stocks	4,951	1,979	—	236	7,166
Investment properties	1,410	13	—	2,679	4,102
Other assets[(1)]	9,127	5,970	1,256	14,527	30,880
Total assets	$ 47,194	$ 29,125	$ 29,081	$ 52,549	$ 157,949
Total insurance and investment contract liabilities	$ 47,194	$ 29,125	$ 29,081	$ 52,549	$ 157,949

(1) Other assets include premiums in the course of collection, interest due and accrued, other investment receivables, current income taxes, prepaid expenses, accounts receivable and deferred acquisition costs.

Asset and liability cash flows are matched within reasonable limits to minimize the financial effects of a shift in interest rates and mitigate the changes in the Company's financial position due to interest rate volatility.

Other general fund liabilities

Other general fund liabilities

	December 31 2017	December 31 2016[(1)]
Debentures and other debt instruments	**$ 5,617**	$ 5,980
Other liabilities	**3,752**	3,836
Accounts payable	**2,684**	2,049
Derivative financial instruments	**1,336**	2,012
Deferred tax liabilities[(1)]	**1,194**	1,521
Current income taxes[(1)]	**464**	494
Funds held under reinsurance contracts	**373**	320
Capital trust securities	**160**	161
Total	**$ 15,580**	$ 16,373

(1) Comparative figures have been reclassified as described in note 2 and note 34 to the Company's December 31, 2017 annual consolidated financial statements.

Total other general fund liabilities at December 31, 2017 were $15.6 billion, a decrease of $0.8 billion from December 31, 2016, primarily due to a decrease of $0.7 billion in derivative financial liabilities, a decrease of $0.4 billion in debentures and other debt instruments and a decrease of $0.3 billion in deferred tax liabilities, partially offset by an increase of $0.6 billion in accounts payable. The decrease in deferred tax liabilities is primarily due to the impact of U.S. tax reform.

Other liabilities of $3.8 billion include pension and other post-employment benefits, deferred income reserve, bank overdraft and other liability balances. Refer to note 18 in the Company's December 31, 2017 annual consolidated financial statements for a breakdown of the other liabilities balance and note 16 in the Company's December 31, 2017 annual consolidated financial statements for details of the debentures and other debt instruments.

Segregated Fund and Variable Annuity Guarantees

The Company offers retail segregated fund products, unitized with profits (UWP) products and variable annuity products that provide for certain guarantees that are tied to the market values of the investment funds.

The Company utilizes internal reinsurance treaties to aggregate the business as a risk-mitigating tool. Aggregation enables the Company to benefit from diversification of segregated fund risks within one legal entity, a more efficient and cost effective hedging process, and better management of the liquidity risk associated with hedging. It also results in the Company holding lower required capital and insurance contract liabilities, as aggregation of different risk profiles allows the Company to reflect offsets at a consolidated level.

In Canada, the Company offers individual segregated fund products through Great-West Life, London Life and Canada Life. These products provide guaranteed minimum death benefits (GMDB) and guaranteed minimum accumulation on maturity benefits (GMAB). In 2009, Great-West Life, London Life and Canada Life launched new individual segregated fund products, which offer three levels of death and maturity guarantees, guarantee reset riders and lifetime guaranteed minimum withdrawal benefits (GMWB).

For a certain generation of products, the guarantees in connection with the Canadian individual segregated fund businesses of Great-West Life, London Life and Canada Life have been reinsured to London Reinsurance Group Inc. (LRG), a subsidiary of London Life. This does not include the guarantees on newer Canadian products, which have been reinsured to London Life. In addition to the guarantees reinsured from Great-West Life, London Life and Canada Life, LRG also has a closed portfolio of GMDB, GMAB and guaranteed minimum income benefits (GMIB) that it has reinsured from other U.S. and Canadian life insurance and reinsurance companies.

In Europe, the Company offers UWP products through Canada Life and unit-linked products with investment guarantees through Irish Life. These products are similar to segregated fund products, but include pooling of policyholders' funds and minimum credited interest rates. The Company also offers a GMWB product in Germany through Canada Life.

In the U.S., the Company offers variable annuities with GMDB through Great-West Financial. For the standalone GMDB business, most are a return of premium on death with the guarantee expiring at age 70. Great-West Financial in the U.S. also offers a GMWB product with an optional GMDB feature that does not expire with age.

The GMWB products offered by the Company in Canada, the U.S. and Germany, and previously offered in Ireland, provide the policyholder with a guaranteed minimum level of annual income for life. The minimum level of income may increase depending upon the level of growth in the market value of the policyholder's funds. Where the market value of the policyholder's funds is ultimately insufficient to meet the level of guarantee purchased by the policyholder, the Company is obligated to make up the shortfall.

These products involve cash flows of which the magnitude and timing are uncertain and are dependent on the level of equity and fixed-income market returns, interest rates, currency markets, market volatility, policyholder behaviour and policyholder longevity.

The Company has a hedging program in place to manage certain risks associated with options embedded in its GMWB products. The program methodology quantifies both the embedded option value and its sensitivity to movements in equity markets, currency markets and interest rates. Equity derivative instruments, currency derivative instruments and interest rate derivative instruments are used to mitigate changes in the embedded option value attributable to movements in equity markets, currency markets and interest rates respectively. The hedging program, by its nature, requires continuous monitoring and rebalancing to avoid over or under hedged positions. Periods of heightened market volatility will increase the frequency of hedge rebalancing.

By their nature, certain risks associated with the GMWB product either cannot be hedged, or cannot be hedged on a cost effective basis. These risks include policyholder behaviour, policyholder longevity and basis risk and market volatility. Consequently, the hedging program will not mitigate all risks to the Company associated with the GMWB products, and may expose the Company to additional risks including the operational risk associated with the reliance upon sophisticated models, and counterparty credit risk associated with the use of derivative instruments.

Other risk management processes are in place aimed at appropriately limiting the Company's exposure to the risks it is not hedging or are otherwise inherent in its GMWB hedging program. In particular, the GMWB product has been designed with specific regard to limiting policyholder anti-selection, and the array of investment funds available to policyholders has been determined with a view to minimizing underlying basis risk.

Certain GMWB products offered by the Company offer levels of death and maturity guarantees. At December 31, 2017, the amount of GMWB product in-force in Canada, the U.S., Ireland and Germany was $4,225 million ($3,917 million at December 31, 2016).

Segregated fund and variable annuity guarantee exposure

		December 31, 2017			
		Investment deficiency by benefit type			
	Market Value	**Income**	**Maturity**	**Death**	**Total[1]**
Canada	$ 32,889	$ —	$ 15	$ 44	$ 44
United States	13,266	4	—	37	41
Europe					
Insurance & Annuities	9,481	4	—	475	475
Reinsurance[2]	1,131	276	—	9	285
Total Europe	10,612	280	—	484	760
Total	**$ 56,767**	**$ 284**	**$ 15**	**$ 565**	**$ 845**

(1) A policy can only receive a payout from one of the three trigger events (income election, maturity or death). Total deficiency measures the point-in-time exposure assuming the most costly trigger event for each policy occurred on December 31, 2017.
(2) Reinsurance exposure is to markets in Canada and the U.S.

The investment deficiency measures the point-in-time exposure to a trigger event (i.e., income election, maturity or death) assuming it occurred on December 31, 2017. The actual cost to the Company will depend on the trigger event having occurred and the market values at that time. The actual claims before tax associated with these guarantees were $5 million in-quarter ($4 million for the fourth quarter of 2016) and $18 million year-to-date ($21 million year-to-date for 2016), with the majority arising in the Reinsurance business unit in the Europe segment.

LIFECO CAPITAL STRUCTURE

In establishing the appropriate mix of capital required to support the operations of the Company and its subsidiaries, management utilizes a variety of debt, equity and other hybrid instruments giving consideration to both the short and long-term capital needs of the Company.

DEBENTURES AND OTHER DEBT INSTRUMENTS

At December 31, 2017, debentures and other debt instruments decreased by $363 million to $5,617 million compared to December 31, 2016.

During the first quarter of 2017, Irish Life Assurance plc (ILA), a subsidiary of the Company, redeemed its 5.25% €200 million subordinated debenture notes at their principal amount together with accrued interest.

On May 26, 2017, Great-West Lifeco Finance (Delaware) LP, a subsidiary of the Company, issued US$700 million principal amount 4.150% senior unsecured notes that are fully and unconditionally guaranteed by Lifeco, maturing on June 3, 2047.

On June 21, 2017, Great-West Lifeco Finance (Delaware) LP, a subsidiary of the Company, redeemed all $1.0 billion principal amount of its 5.691% subordinated debentures due June 21, 2067 at a redemption price equal to 100% of the principal amount of the debentures, plus any accrued interest up to but excluding the redemption date.

Refer to note 16 in the Company's December 31, 2017 annual consolidated financial statements for further details of the Company's debentures and other debt instruments.

CAPITAL TRUST SECURITIES

At December 31, 2017, the Company had $150 million principal outstanding of Canada Life Capital Trust Securities – Series B (CLiCS – Series B). Included in the Company's invested assets at December 31, 2017 were CLiCS – Series B with a fair value of $52 million and principal value of $37 million (fair value of $50 million at December 31, 2016).

Each holder of the CLiCS – Series B is entitled to receive a semi-annual non-cumulative fixed cash distribution of $37.645 per CLiCS – Series B, representing an annual yield of 7.529% payable out of Canada Life Capital Trust's (CLCT) distributable funds. Subject to regulatory approval, CLCT may redeem the CLiCS – Series B, in whole or in part, at any time and the CLiCS – Series B are callable at par on June 30, 2032.

EQUITY

Share capital outstanding at December 31, 2017 was $9,974 million, which comprises $7,260 million of common shares, $2,464 million of fixed rate First Preferred Shares, $213 million of 5-year rate reset First Preferred Shares and $37 million of floating rate First Preferred Shares.

Common shares

At December 31, 2017, the Company had 988,722,659 common shares outstanding with a stated value of $7,260 million compared to 986,398,335 common shares with a stated value of $7,130 million at December 31, 2016.

The Company commenced a normal course issuer bid (NCIB) on January 9, 2017 for one year to purchase and cancel up to 20,000,000 of its common shares at market prices in order to mitigate the dilutive effect of stock options granted under the Company's Stock Option Plan.

During the twelve months ended December 31, 2017, the Company repurchased and subsequently cancelled 1,800,000 common shares (2016 - 7,967,881) at an average cost per share of $35.18 (2016 - $33.54) under its NCIB, which included shares repurchased under private agreements in 2016.

Subsequent to December 31, 2017, in order to mitigate the dilutive effect of stock options granted under the Company's Stock Option Plan and for other capital management purposes, the Company announced a normal course issuer bid commencing January 15, 2018 and terminating January 14, 2019 to purchase for cancellation up to but not more than 20,000,000 of its common shares at market prices.

Preferred shares

At December 31, 2017, the Company had 11 series of fixed rate First Preferred Shares, one series of 5-year rate reset First Preferred Shares and one series of floating rate First Preferred Shares outstanding with aggregate stated values of $2,464 million, $213 million and $37 million, respectively.

On May 18, 2017 the Company issued 8,000,000 Series T, 5.15% Non-Cumulative First Preferred Shares at $25.00 per share. The shares are redeemable at the option of the Company on or after June 30, 2022 for $25.00 per share plus a premium if redeemed prior to June 30, 2026, in each case together with all declared and unpaid dividends up to but excluding the date of redemption.

The terms and conditions of the outstanding First Preferred Shares are set out in the table below:

	Great-West Lifeco Inc.						
	Series F	Series G	Series H	Series I	Series L	Series M	Series N[1]
General Type	Fixed Rate	Fixed Rate	Fixed Rate	Fixed Rate	Fixed Rate	Fixed Rate	5-Year Rate Reset
Cumulative/Non-Cumulative	Non-cumulative	Non-cumulative	Non-cumulative	Non-cumulative	Non-cumulative	Non-cumulative	Non-cumulative
Date Issued	Jul 10, 2003	Sep 14, 2004	Aug 12, 2005	Apr 12, 2006	Oct 2, 2009	Mar 4, 2010	Nov 23, 2010
Shares Outstanding	7,740,032	12,000,000	12,000,000	12,000,000	6,800,000	6,000,000	8,524,422
Amount Outstanding (Par)	$193,500,800	$300,000,000	$300,000,000	$300,000,000	$170,000,000	$150,000,000	$213,110,550
Yield	5.90%	5.20%	4.85%	4.50%	5.65%	5.80%	2.176%
Earliest Issuer Redemption Date	Sep 30, 2008	Dec 31, 2009	Sep 30, 2010	Jun 30, 2011	Dec 31, 2014	Mar 31, 2015	Dec 31, 2015

	Great-West Lifeco Inc.					
	Series O[2]	Series P	Series Q	Series R	Series S	Series T
General Type	Floating Rate	Fixed Rate	Fixed Rate	Fixed Rate	Fixed Rate	Fixed Rate
Cumulative/Non-Cumulative	Non-cumulative	Non-cumulative	Non-cumulative	Non-cumulative	Non-cumulative	Non-cumulative
Date Issued	Dec 31, 2015	Feb 22, 2012	Jul 6, 2012	Oct 11, 2012	May 22, 2014	May 18, 2017
Shares Outstanding	1,475,578	10,000,000	8,000,000	8,000,000	8,000,000	8,000,000
Amount Outstanding (Par)	$36,889,450	$250,000,000	$200,000,000	$200,000,000	$200,000,000	$200,000,000
Yield	Floating	5.40%	5.15%	4.80%	5.25%	5.15%
Earliest Issuer Redemption Date	Dec 31, 2015	March 31, 2017	Sep 30, 2017	Dec 31, 2017	Jun 30, 2019	Jun 30, 2022

(1) The Series N, Non-Cumulative 5-Year Rate Reset First Preferred Shares carry an annual fixed non-cumulative dividend rate of 2.176% up to but excluding December 31, 2020 and are redeemable at the option of the Company on December 31, 2020 and on December 31 every five years thereafter for $25.00 per share plus all declared and unpaid dividends up to but excluding the date of redemption. Subject to the Company's right of redemption and certain other restrictions on conversion described in the Series N share conditions, each Series N share is convertible into one Series O share at the option of the holders on December 31, 2020 and on December 31 every five years thereafter.

(2) The Series O, Non-Cumulative Floating Rate First Preferred Shares carry a floating non-cumulative dividend rate equal to the relevant Government of Canada Treasury Bill rate plus 1.30% and are redeemable at the option of the Company for $25.50 per share, unless the shares are redeemed on December 31, 2020 or on December 31 every five years thereafter in which case the redemption price will be $25.00 per share, plus in each case all declared and unpaid dividends up to but excluding the date of redemption. Subject to the Company's right of redemption and certain other restrictions on conversion described in the Series O share conditions, each Series O share is convertible into one Series N share at the option of the holders on December 31, 2020 and on December 31 every five years thereafter.

The terms and conditions of the First Preferred Shares do not allow the holder to convert to common shares of the Company or to otherwise cause the Company to redeem the shares. Preferred shares issued by the Company are commonly referred to as perpetual and represent a form of financing that does not have a fixed term.

NON-CONTROLLING INTERESTS

The Company's non-controlling interests include participating account surplus in subsidiaries and non-controlling interests in subsidiaries. Refer to note 19 in the Company's December 31, 2017 annual consolidated financial statements for further details of the Company's non-controlling interests.

Non-controlling interests

	December 31	
	2017	2016
Participating account surplus in subsidiaries:		
Great-West Life	**$ 622**	$ 610
London Life	**1,796**	1,798
Canada Life	**339**	357
Great-West Financial	**14**	17
	$ 2,771	$ 2,782
Non-controlling interests in subsidiaries	**$ 164**	$ 224

LIQUIDITY AND CAPITAL MANAGEMENT AND ADEQUACY

LIQUIDITY

The Company's liquidity requirements are largely self-funded, with short-term obligations being met by internal funds and maintaining adequate levels of liquid investments. The Company holds cash, cash equivalents and short-term bonds at the Lifeco holding company level and with the Lifeco consolidated subsidiary companies. At December 31, 2017, the Company and its operating subsidiaries held cash, cash equivalents and short-term bonds of $7.3 billion ($7.9 billion at December 31, 2016) and other liquid assets and marketable securities of $93.8 billion ($91.6 billion at December 31, 2016). Included in the cash, cash equivalents and short-term bonds at December 31, 2017 was $0.5 billion ($1.1 billion at December 31, 2016) at the Lifeco holding company level. In addition, the Company maintains sufficient committed lines of credit with Canadian chartered banks for unanticipated liquidity needs, if required.

The Company does not have a formal common shareholder dividend policy. Dividends on outstanding common shares of the Company are declared and paid at the sole discretion of the Board of Directors of the Company. The decision to declare a dividend on the common shares of the Company takes into account a variety of factors including the level of earnings, adequacy of capital and availability of cash resources.

As a holding company, the Company's ability to pay dividends is dependent upon the Company receiving dividends from its operating subsidiaries. The Company's operating subsidiaries are subject to regulation in a number of jurisdictions, each of which maintains its own regime for determining the amount of capital that must be held in connection with the different businesses carried on by the operating subsidiaries. The requirements imposed by the regulators in any jurisdiction may change from time to time, and thereby impact the ability of the operating subsidiaries to pay dividends to the Company.

CASH FLOWS

Cash flows	For the three months ended December 31		For the twelve months ended December 31	
	2017	2016	**2017**	2016
Cash flows relating to the following activities:				
Operations	**$ 2,287**	$ 1,389	**$ 6,757**	$ 6,254
Financing	**(256)**	510	**(1,659)**	(1,045)
Investment	**(1,627)**	(1,689)	**(4,778)**	(4,565)
	404	210	**320**	644
Effects of changes in exchange rates on cash and cash equivalents	**41**	(11)	**(28)**	(198)
Increase (decrease) in cash and cash equivalents in the period	**445**	199	**292**	446
Cash and cash equivalents, beginning of period	**3,106**	3,060	**3,259**	2,813
Cash and cash equivalents, end of period	**$ 3,551**	$ 3,259	**$ 3,551**	$ 3,259

The principal source of funds for the Company on a consolidated basis is cash provided by operating activities, including premium income, net investment income and fee income. These funds are used primarily to pay policy benefits, policyholder dividends and claims, as well as operating expenses and commissions. Cash flows generated by operations are mainly invested to support future liability cash requirements. Cash flows related to financing activities include the issuance and repayment of capital instruments and associated dividends and interest payments.

In the fourth quarter of 2017, cash and cash equivalents increased by $445 million from September 30, 2017. Cash flows provided by operations during the fourth quarter of 2017 were $2,287 million, an increase of $898 million compared to the fourth quarter of 2016. Cash flows used in financing were $256 million, primarily due to payment of dividends to the preferred and common shareholders of $396 million and the purchase and cancellation of $36 million in common shares, partially offset by an increase to a line of credit of a subsidiary of $171 million. For the three months ended December 31, 2017, cash flows were used by the Company to acquire an additional $1,627 million of investment assets.

For the twelve months ended December 31, 2017, cash and cash equivalents increased by $292 million from December 31, 2016. Cash flows provided by operations were $6,757 million, an increase of $503 million compared to the same period in 2016. Cash flows used in financing were $1,659 million, primarily used for payments of dividends to the preferred and common shareholders of $1,582 million, the net redemption of debt of $359 million and the purchase and cancellation of $63 million in common shares, partially offset by the net issuance of common and preferred shares of $323 million and a $24 million increase in a line of credit of a subsidiary. In the first quarter of 2017, the Company increased the quarterly dividend to common shareholders from $0.346 per common share to $0.367 per common share. For the twelve months ended December 31, 2017, cash flows were used by the Company to acquire an additional $4,778 million of investment assets.

COMMITMENTS/CONTRACTUAL OBLIGATIONS

Commitments/contractual obligations
At December 31, 2017

	Payments due by period						
	Total	**1 year**	**2 years**	**3 years**	**4 years**	**5 years**	**Over 5 years**
1) Debentures and other debt instruments	$ 5,235	$ 200	$ —	$ 500	$ —	$ —	$ 4,535
2) Operating leases							
- office	763	113	92	79	69	52	358
- equipment	8	6	2	—	—	—	—
3) Purchase obligations	253	109	74	48	19	3	—
4) Credit-related arrangements							
(a) Contractual commitments	939	938	1	—	—	—	—
(b) Letters of credit	see note 4(b) below						
5) Pension contributions	300	300	—	—	—	—	—
Total contractual obligations	**$ 7,498**	**$ 1,666**	**$ 169**	**$ 627**	**$ 88**	**$ 55**	**$ 4,893**

1) Refer to note 16 in the Company's December 31, 2017 annual consolidated financial statements. Excluded from debentures and other debt instruments are unamortized transaction costs.
2) Operating leases include office space and certain equipment used in the normal course of business. Lease payments are charged to operations over the period of use.
3) Purchase obligations are commitments to acquire goods and services, essentially related to information services.
4) (a) Contractual commitments are essentially commitments of investment transactions made in the normal course of operations in accordance with policies and guidelines that are to be disbursed upon fulfillment of certain contract conditions.

(b) Letters of credit (LOC) are written commitments provided by a bank. The total amount of LOC facilities is US$1.7 billion of which US$1.6 billion were issued as of December 31, 2017.

The Reinsurance operation periodically uses letters of credit as collateral under certain reinsurance contracts for on-balance sheet policy liabilities. The Company may be required to seek collateral alternatives if it is unable to renew existing LOCs on maturity. Various Lifeco subsidiaries have provided LOCs as follows:

To external parties
Clients residing in the United States are required pursuant to their insurance laws to obtain LOCs issued on the Company's behalf from approved banks in order to further secure the Company's obligations under certain reinsurance contracts.

Great-West Life has a LOC facility for US$600 million with a bank syndicate, which can be used by Great-West Life and its subsidiaries. As of December 31, 2017, Great-West Life subsidiaries have issued US$97 million to external parties.

Great-West Life also has a LOC facility for US$375 million for use by Great-West Life and its subsidiaries. Under this facility, Canada Life has issued US$49 million to external parties.

As well, certain London Reinsurance Group subsidiaries and London Life have provided LOCs totaling US$5 million to external parties.

To internal parties
GWL&A Financial Inc. terminated a US$1.2 billion LOC facility in fourth quarter of 2017 that had been issued to the U.S. branch of Canada Life as beneficiary to allow it to receive statutory capital credit for reserves ceded to Great-West Life & Annuity Insurance Company of South Carolina (GWSC). In the fourth quarter of 2017, GWSC entered into a reinsurance transaction that allows for the capital credit without the need for the letter of credit.

Great-West Life & Annuity Insurance Company also has a US$70 million LOC facility in place. As of December 31, 2017, US$70 million has been issued to Great-West Life & Annuity Insurance Company of South Carolina as beneficiary, to allow it to receive statutory capital credit.

Canada Life has a £117 million LOC issued to Canada Life Limited (CLL) as beneficiary, to allow CLL to receive statutory capital credit in the United Kingdom for a loan made from Canada Life.

Canada Life has a US$500 million LOC facility. As of December 31, 2017, US$500 million has been issued to Canada Life's U.S. Branch.

In addition, using capacity from the facilities listed above, Great-West Life subsidiaries have issued US$750 million to other subsidiaries.

5) Pension contributions are subject to change, as contribution decisions are affected by many factors including market performance, regulatory requirements and management's ability to change funding policy. Funding estimates beyond one year are excluded due to the significant variability in the assumptions required to project the timing of future contributions.

CAPITAL MANAGEMENT AND ADEQUACY

At the holding company level, the Company monitors the amount of consolidated capital available and the amounts deployed in its various operating subsidiaries. The amount of capital deployed in any particular company or country is dependent upon local regulatory requirements as well as the Company's internal assessment of capital requirements in the context of its operational risks and requirements and strategic plans. The Company's practice is to maintain the capitalization of its regulated operating subsidiaries at a level that will exceed the relevant minimum regulatory capital requirements in the jurisdictions in which they operate. The capitalization decisions of the Company and its operating subsidiaries also give consideration to the impact such actions may have on the opinions expressed by various credit rating agencies that provide financial strength and other ratings to the Company.

In Canada, OSFI has established a capital adequacy measurement for life insurance companies incorporated under the Insurance Companies Act (Canada) and their subsidiaries, known as the MCCSR ratio. The internal target range of the MCCSR ratio for Lifeco's major Canadian operating subsidiaries is 175% to 215% (on a consolidated basis).

Great-West Life's MCCSR ratio at December 31, 2017 was 241% (240% at December 31, 2016). London Life's MCCSR ratio at December 31, 2017 was 225% (217% at December 31, 2016). Canada Life's MCCSR ratio at December 31, 2017 was 284% (275% at December 31, 2016). The MCCSR ratio does not take into account any impact from $0.5 billion of liquidity at the Lifeco holding company level at December 31, 2017 ($1.1 billion at December 31, 2016).

The MCCSR ratio of 241% for Great-West Life includes 6 points for the impact of capital activity in advance of closing for the Retirement Advantage acquisition. The related impact for Canada Life was 10 points, and nil for London Life.

In calculating the MCCSR position, available regulatory capital is reduced by goodwill and intangible assets, subject to a prescribed inclusion for a portion of intangible assets. The OSFI MCCSR Guideline also prescribes that quarterly re-measurements to defined benefit plans, impacting available capital for the Company's federally regulated subsidiaries, are amortized over twelve quarters.

At December 31, 2017, the Risk Based Capital (RBC) ratio of Great-West Life & Annuity Insurance Company, Lifeco's regulated U.S. operating company, is estimated to be 487% of the Company Action Level set by the National Association of Insurance Commissioners. Great-West Life & Annuity Insurance Company reports its RBC ratio annually to U.S. Insurance Regulators.

The Board of Directors reviews and approves an annual capital plan as well as capital transactions undertaken by management pursuant to the plan. The capital plan is designed to ensure that the Company maintains adequate capital, taking into account the Company's strategy, risk profile and business plans. The Company has established policies and procedures designed to identify, measure and report all material risks. Management is responsible for establishing capital management procedures for implementing and monitoring the capital plan. In addition to undertaking capital transactions, the Company uses and provides traditional and structured reinsurance to support capital and risk management.

OSFI Regulatory Capital Initiatives

Effective January 1, 2018, OSFI has replaced the current MCCSR guideline with the LICAT guideline, a new regulatory capital framework for the Canadian insurance industry. OSFI published the final 2018 LICAT Guideline during the fourth quarter of 2017. The first reporting period will be the first quarter of 2018. The Company continues implementation preparations and is well-positioned for the new LICAT regulatory capital framework.

In May 2017, the IASB issued IFRS 17, *Insurance Contracts*, which will replace IFRS 4, *Insurance Contracts,* effective for annual periods beginning on or after January 1, 2021. IFRS 17 includes, among other things, new requirements for the recognition and measurement of insurance contracts the Company issues and reinsurance contracts it holds. The new standard is expected to have a significant impact to insurers and is expected to lead to further review and possible amendments to the OSFI LICAT Guideline. Additional details on the new IFRS 17 standard are included in the "International Financial Reporting Standards" section.

CAPITAL ALLOCATION METHODOLOGY

The Company has a capital allocation methodology, which allocates financing costs in proportion to allocated capital. For the Canadian and European segments (essentially Great-West Life), this allocation method tracks the regulatory capital requirements, while for U.S. Financial Services and U.S. Asset Management (Putnam), it tracks the financial statement carrying value of the business units. Total leverage capital is consistently allocated across all business units in proportion to total capital resulting in a debt-to-equity ratio in each business unit mirroring the consolidated Company.

The capital allocation methodology allows the Company to calculate comparable return on equity (ROE) for each business unit. These ROEs are therefore based on the capital the business unit has been allocated and the financing charges associated with that capital.

Return on equity[1]

	Dec. 31 2017	Sept. 30 2017	Dec. 31 2016
Canada	**17.5 %**	17.9 %	19.9 %
U.S. Financial Services[2]	**17.4 %**	10.9 %	10.6 %
U.S. Asset Management (Putnam)[3]	**(24.2)%**	(1.5)%	(2.9)%
Europe	**15.4 %**	14.8 %	17.1 %
Lifeco Corporate	**(4.3)%**	(5.1)%	(5.2)%
Total Lifeco Net Earnings Basis	**10.9 %**	12.4 %	13.8 %
Total Lifeco Adjusted Net Earnings Basis[4]	**13.4 %**	13.3 %	14.1 %

(1) ROE is the calculation of net earnings divided by the average common shareholders' equity over the trailing four quarters.
(2) U.S. Financial Services includes the impact of restructuring costs of $2 million in the fourth quarter of 2016 and $11 million in 2017 and the positive impact of U.S. tax reform of $197 million in the fourth quarter of 2017.
(3) U.S. Asset Management (Putnam) includes the impact of fourth quarter of 2016 restructuring costs of $20 million, a net charge on the sale of an equity investment of $122 million in the fourth quarter of 2017 and the impact of U.S. tax reform of $448 million in the fourth quarter of 2017.
(4) Total Lifeco Adjusted Net Earnings Basis includes adjustments made to arrive at adjusted net earnings, which are detailed in footnote 6 to the Selected Consolidated Financial Information table of this MD&A. The fourth quarter of 2016 included restructuring costs of $20 million related to Putnam and $2 million related to the Financial Services business unit. The third quarter of 2016 included restructuring costs of $13 million related to the Insurance & Annuities business unit and $2 million related to the Financial Services business unit. The second quarter of 2016 included restructuring costs of $3 million related to the Financial Services business unit and $1 million related to the Insurance & Annuities business unit. The first quarter of 2016 included restructuring costs of $2 million related to the Financial Services business unit and $1 million related to the Insurance & Annuities business unit.

The Company reported ROE of 10.9% at December 31, 2017 compared to 13.8% at December 31, 2016. Excluding the impact of U.S. tax reform and a net charge on a sale of equity investment in the U.S. segment in 2017 and restructuring costs in both 2016 and 2017, the Company reported ROE based on adjusted net earnings of 13.4% at December 31, 2017 compared to 14.1% at December 31, 2016. Lifeco's net earnings for the third quarter of 2017 included a loss estimate of $175 million after-tax relating to estimated claims resulting from the impact of in-year Atlantic hurricane activity which reduced ROE by 0.9%.

RATINGS

The Company's financial leverage ratio has been maintained at a level consistent with credit rating agencies' targets for highly rated entities and provides the Company with financial flexibility to invest in organic growth and acquisition strategies.

Lifeco maintains ratings from five independent ratings companies. In 2017, the credit ratings for Lifeco and its major operating subsidiaries were unchanged (set out in table below). The Company continued to receive strong ratings relative to its North American peer group resulting from its conservative risk profile, stable net earnings and consistent dividend track record.

Lifeco's operating companies are assigned a group rating from each rating agency. This group rating is predominantly supported by the Company's leading position in the Canadian insurance market and competitive positions in the U.S. and European markets. Great-West Life, London Life and Canada Life have common management, governance and strategy, as well as an integrated business platform. Each operating company benefits from the strong implicit financial support and collective ownership by Lifeco. There were no changes to the Company's group credit ratings in 2017.

Rating agency	Measurement	Lifeco	Great-West Life	London Life	Canada Life	Irish Life	Great-West Life & Annuity Insurance Company
A.M. Best Company	Financial Strength		A+	A+	A+		A+
DBRS Limited	Issuer Rating	A (high)	AA				
	Financial Strength		AA	AA	AA		NR
	Senior Debt	A (high)					
	Subordinated Debt				AA (low)		
Fitch Ratings	Insurer Financial Strength		AA	AA	AA	AA	AA
	Senior Debt	A					
	Subordinated Debt				A+		
Moody's Investors Service	Insurance Financial Strength		Aa3	Aa3	Aa3		Aa3
Standard & Poor's Ratings Services	Insurer Financial Strength		AA	AA	AA		AA
	Senior Debt	A+					
	Subordinated Debt				AA-		

In the second quarter of 2017, Standard & Poor's Ratings Services affirmed and subsequently withdrew its ILA ratings following the redemption of its subordinated debenture during the first quarter of 2017.

SEGMENTED OPERATING RESULTS

The consolidated operating results of Lifeco, including the comparative figures, are presented on an IFRS basis after capital allocation. Consolidated operating results for Lifeco comprise the net earnings of Great-West Life and its operating subsidiaries, London Life and Canada Life; Great-West Financial and Putnam; together with Lifeco's Corporate results.

For reporting purposes, the consolidated operating results are grouped into four reportable segments – Canada, United States, Europe and Lifeco Corporate – reflecting geographic lines as well as the management and corporate structure of the companies.

CANADA

The Canada segment of Lifeco includes the operating results of the Canadian businesses operated by Great-West Life, London Life and Canada Life, together with an allocation of a portion of Lifeco's corporate results. There are two primary business units included in this segment. Through the Individual Customer business unit, the Company provides life, disability and critical illness insurance products as well as wealth accumulation and annuity products to individual customers. Through the Group Customer business unit, the Company provides life, accidental death and dismemberment, critical illness, health and dental protection, creditor and direct marketing insurance as well as accumulation and annuity products and other specialty products to group customers in Canada.

BUSINESS PROFILE

INDIVIDUAL CUSTOMER

Individual Customer comprises both individual insurance and individual wealth management product lines.

Individual insurance includes individual life insurance and living benefits products and services. Individual wealth management includes individual wealth accumulation and annuity product lines. The Company is a leader in Canada for all insurance and wealth management products and services and utilizes diverse, complementary distribution channels: Freedom 55 Financial™, Wealth and Insurance Solutions Enterprise (WISE), MGAs and national accounts, including Investors Group, a member of the Power Financial Corporation group of companies. Through Financial Horizons Group, the Company participates in the MGA channel, distributing products from across the insurance industry.

The individual lines of business access the various distribution channels through distinct product labels offered by Great-West Life, London Life, Canada Life and Quadrus. By offering this broad suite of products and services through multiple distribution channels, the Company is able to provide advice and product solutions to meet the need of Canadians at all phases of their life.

GROUP CUSTOMER

Group Customer includes group life and health benefits, group creditor, and group retirement and investment product lines.

Through its group life and health benefit product lines, the Company offers effective benefit solutions for small, medium and large plan sponsors. The Company offers a wide range of traditional group products and services including life, accidental death and dismemberment, critical illness, disability, health and dental as well as specialty products. In addition, specialty product development has been a focus over the past several years as the Company seeks to provide customized solutions to increasingly unique customer needs. Products to address the needs of mental health in the workplace, high cost medications, optional products purchased by plan members directly and wellness programs are examples of this.

The Company’s creditor and direct marketing business, conducted through its Canada Life subsidiary, offers creditor and affinity group products to large financial institutions, credit card companies, alumni and association groups. Canada Life is a leader in the creditor insurance business in Canada.

Group retirement and investment product lines include group Registered Retirement Savings Plans (RRSP), Tax-Free Savings Accounts (TFSA), group retirement income products, and institutional investment services. The Company is focused on innovation within savings and investment product lines, including student debt savings incentive products, Wayfinder™, a tool to help Canadians achieve a view of all of their savings and investment goals and tailored fund shelf solutions for plan sponsors. Great-West Life has a leading employee education program to help Canadians understand how investment goals can be established, tracked and updated.

Through the Company's extensive network of Group sales offices located across the country, it distributes its products through brokers, consultants and financial security advisors.

MARKET OVERVIEW

PRODUCTS AND SERVICES

INDIVIDUAL CUSTOMER

The Company provides an array of individual insurance, wealth accumulation and annuity products that are distributed through multiple sales channels. Products are marketed under the Great-West Life, London Life, Canada Life and Quadrus brands.

MARKET POSITION	PRODUCTS AND SERVICES	DISTRIBUTION[2]

• Manages largest portfolio of life insurance in Canada as measured by premium[1]
• Pre-eminent provider of individual disability and critical illness insurance with 27% market share of in-force premium[1]
• 27% market share of individual segregated funds[1]
	Individual Life Insurance
	• Term life
	• Universal life
	• Participating life
	
	Living Benefits
	• Disability
	• Critical illness
	
	Individual Wealth Management
	• Savings plans
	  • RRSPs
	  • Non-registered savings programs
	  • TFSAs
	Invested in:
	  • Segregated funds
	  • Mutual funds
	  • Guaranteed investment options
	
	• Retirement Income Plans
	  • Segregated funds with GMWB rider
	  • Retirement income funds
	  • Life income funds
	  • Payout annuities
	  • Deferred annuities
	
	• Residential mortgages
	• Banking products
		Wealth and Insurance Solutions Enterprise
		• 3,388 financial security advisors
		
		Freedom 55 Financial
		• 2,627 financial security advisors
		
		Affiliated Partnerships
		• 7,926 independent brokers associated with 34 MGAs
		• 1,868 advisors associated with 14 national accounts
		• 2,822 Investors Group consultants who actively sell Canada Life products
		• 124 direct brokers and producer groups
		
		Financial Horizons Group
		• 4,800 independent brokers selling products from across the insurance industry, including Canada Life
		
		Quadrus Investment Services Ltd. (also included in WISE & Freedom 55 Financial advisor counts):
		• 4,951 investment representatives

(1) As at September 30, 2017
(2) WISE and Freedom 55 Financial includes all contracted advisors. Affiliated Partnerships and Financial Horizons Group include advisors who placed new business in 2017

GROUP CUSTOMER

The Company provides an array of life, health and creditor insurance products that are distributed primarily through Group sales offices across the country.

<table>
<tr><th>MARKET POSITION</th><th>PRODUCTS AND SERVICES</th><th>DISTRIBUTION</th></tr>
<tr><td>• Employee benefits to over 30,000 plan sponsors[3]
• 21% market share for employee benefit plans[1]
• Leading market share with 39% for creditor products[1] with coverage provided to over 7.3 million plan members[3]
• 5% market share for direct marketing products[1] with coverage provided to over 0.6 million plan members[3]
• 20% market share of group capital accumulation plans[1]
• 24% new sales market share of single premium group annuities[2]</td><td>Life and Health Benefits
• Life
• Disability
• Critical illness
• Accidental death & dismemberment
• Dental
• Expatriate coverage
• Extended health care

Creditor
• Life
• Disability
• Job loss
• Critical illness

Group Retirement & Investment Services
• Group Capital Accumulation Plans including:
• Defined contribution pension plans
• Group RRSPs & TFSAs
• Deferred profit sharing plans
• Non-registered savings programs
Invested in:
• Segregated funds
• Guaranteed investment options
• Single company stock

• Retirement Income Plans
• Payout annuities
• Deferred annuities
• Retirement income funds
• Life income funds

• Investment management services only plans
Invested in:
• Segregated funds
• Guaranteed investment options
• Securities</td><td>• Group Life and Health and Group Retirement and Investment Services are distributed through brokers, consultants, and financial security advisors. Sales and service support are provided by an integrated team of over 600 employees, located in 28 offices across the country, including 148 account executives.
• Group Creditor products and services are distributed primarily though large financial institutions, and serviced through a dedicated sales and service organization.</td></tr>
</table>

(1) As at December 31, 2016
(2) As at September 30, 2017
(3) As at December 31, 2017

COMPETITIVE CONDITIONS

INDIVIDUAL CUSTOMER

The individual insurance marketplace is highly competitive. Competition focuses on service, technology, product features, price and financial strength, as indicated by ratings issued by nationally recognized agencies. The Company's broad spectrum of distribution associates, including exclusive and independent channels, provide important strategic advantages within the Canadian market.

The individual wealth management marketplace is also very competitive. The Company's main competitors include mutual fund companies, insurance companies, banks and investment advisors as well as other service and professional organizations. New FinTech competitors have entered the marketplace leading to increased competition. Competition focuses on ease of doing business through technology, service, variety of investment options, investment performance, product features, price (fees) and financial strength, as indicated by ratings issued by nationally recognized agencies. Individual wealth management's broad spectrum of distribution associates, including exclusive and independent channels, provide important strategic advantages within the Canadian market.

GROUP CUSTOMER

The group life and health benefits market in Canada is highly competitive. There are three large group insurance carriers with significant market positions, a number of smaller companies operating nationally and several regional and niche competitors. The Company has a significant market share of 21%, which is supported by an extensive distribution network who have access to a wide range of products and services. This strong market share position is a distinct advantage for competing successfully in the Canadian group insurance market.

The group capital accumulation plan market is also very competitive. Three major insurance companies hold a significant market share while several smaller insurance companies have an important market presence. There has been some market disruption through new FinTech companies, however, the major companies are responding well with technology advancements of their own.

The pension risk transfer business continues to grow in the Canadian marketplace as more companies with defined benefit pension plans (open or closed) look to transfer the investment and longevity risk to insurance companies. Helping the market with the capacity to meet this demand, existing companies have increased their presence in the market place, including major independent and bank-owned insurance companies with strong balance sheets and new entrants.

Selected consolidated financial information - Canada

	For the three months ended			For the twelve months ended	
	Dec. 31 2017[1]	Sept. 30 2017[2]	Dec. 31 2016[2]	**Dec. 31 2017[1]**	Dec. 31 2016[2]
Premiums and deposits	**$ 6,847**	$ 6,158	$ 6,681	**$ 26,545**	$ 24,661
Sales	**3,772**	2,940	3,871	**13,608**	12,933
Fee and other income	**419**	411	386	**1,616**	1,494
Net earnings - common shareholders	**338**	296	326	**1,074**	1,218
Adjusted net earnings - common shareholders[1]	**357**	296	326	**1,219**	1,218
Total assets[2]	**$ 161,760**	$ 157,684	$ 153,531		
Proprietary mutual funds and institutional net assets	**6,810**	6,513	5,852		
Total assets under management	**168,570**	164,197	159,383		
Other assets under administration	**11,580**	11,135	15,911		
Total assets under administration	**$ 180,150**	$ 175,332	$ 175,294		

[1] Adjusted net earnings attributable to common shareholders is a non-IFRS measure of earnings performance. Adjustments are detailed in footnote 6 to the Selected Consolidated Financial Information table of this MD&A.
[2] Comparative figures have been reclassified as described in note 2 and note 34 to the Company's December 31, 2017 annual consolidated financial statements.

Net earnings - common shareholders

	For the three months ended			For the twelve months ended	
	Dec. 31 2017	Sept. 30 2017	Dec. 31 2016[2]	**Dec. 31 2017**	Dec. 31 2016[2]
Individual Customer	**$ 162**	$ 141	$ 179	**$ 589**	$ 617
Group Customer	**193**	155	154	**641**	564
Corporate	**(17)**	—	(7)	**(156)**	37
Net earnings	**$ 338**	$ 296	$ 326	**$ 1,074**	$ 1,218
Adjustments:					
Restructuring costs	**—**	—	—	**126**	—
U.S. tax reform impact	**19**	—	—	**19**	—
Adjusted net earnings[1]	**$ 357**	$ 296	$ 326	**$ 1,219**	$ 1,218

[1] Adjusted net earnings attributable to common shareholders is a non-IFRS measure of earnings performance. Adjustments are detailed in footnote 6 to the Selected Consolidated Financial Information table of this MD&A.
[2] Comparative figures have been reclassified to reflect presentation adjustments, related to the realignment of the Canada segment operations into two business units.

2017 DEVELOPMENTS

- In 2017, Great-West Life, London Life and Canada Life realigned their Canadian operations into two new business units: one focused on individual customers and the other on group customers. In conjunction with these changes, in April, the Company announced it expected to achieve $200 million pre-tax of annual expense reductions expected to be realized by the first quarter of 2019, approximately $160 million relating to the common shareholders' account and $40 million relating to the participating accounts. The expense reductions address costs across the Canadian operations and corporate functions primarily through a reduction in staff, exiting certain lease agreements and information system impairments.

  As of December 31, 2017, $123 million pre-tax of annualized expense reductions have been achieved compared to $95 million as of September 30, 2017. The $123 million of pre-tax annualized expense reductions are approximately $93 million related to the common shareholders' account and $30 million related to the participating accounts.

As part of this effort, in the second quarter of 2017, the Company incurred a $215 million pre-tax restructuring charge, which included $172 million relating to the common shareholders' account and $43 million relating to the participating accounts. The restructuring charge has reduced 2017 net earnings attributable to the common shareholders by $126 million and net earnings attributable to the participating accounts by $32 million.

- On January 1, 2017, Individual Customer launched updated participating whole life, term and universal life insurance products that comply with the new tax exempt legislation effective January 2017.
- On May 19, 2017, the Company, through its wholly-owned subsidiary Great-West Life, entered into an agreement to purchase Financial Horizons Group, a MGA that offers access to life and health insurance, employee benefits, pensions, investments, structured settlements, and risk management products and services to advisors throughout Canada. Effective July 31, 2017, regulatory approval was received and the transaction completed. While the revenue and net earnings from the Financial Horizons Group will not be material, it expands the Company's investment in distribution in Canada with an ownership stake in the growing independent MGA sector.
- The Group Customer business area rolled out the next phase in the DrugSolutions program. The SMART (Sustainable, Managed And Reasonable Treatment) plan helps guide Great-West Life's decisions around drug coverage. Through the SMART plan, new or updated drugs are closely assessed before being included in drug plan coverage and an enhanced pre-authorization program strengthens the claims management process to help benefit plans remain sustainable while providing plan members with continued access to comprehensive coverage.
- GWL Realty Advisors ranked first in Canada in the Global Real Estate Sustainability Benchmark (GRESB) for 2017. After participating in the benchmark for only 3 years, GWL Realty Advisors has improved its ranking year over year to take the first spot in Canada and earn a green star ranking for the third consecutive year.
- During the fourth quarter of 2017, Great-West Life was named the Life and Health Insurer of the Year at the 2017 Insurance Business Awards.
- During the fourth quarter of 2017, the Company was the first in Canada to announce a new flexible savings pilot program to help post-secondary graduate plan members focus on savings for the future while paying down their student loan debt.

BUSINESS UNITS - CANADA

INDIVIDUAL CUSTOMER

OPERATING RESULTS

	For the three months ended			For the twelve months ended	
	Dec. 31 2017	Sept. 30 2017	Dec. 31 2016[1]	**Dec. 31 2017**	Dec. 31 2016[1]
Premiums and deposits	**$ 2,809**	$ 2,499	$ 2,769	**$ 10,880**	$ 10,040
Sales	**2,537**	2,033	2,648	**9,723**	9,086
Fee and other income	**255**	236	225	**949**	870
Net earnings	**162**	141	179	**589**	617

[1] Comparative figures have been reclassified to reflect presentation adjustments, related to the realignment of the Canada segment operations into two business units.

Premiums and deposits
Premiums and deposits for the fourth quarter of 2017 of $2.8 billion were comparable to the same quarter last year. Individual wealth premiums and deposits decreased by $0.1 billion, primarily due to a decrease in segregated fund deposits, while individual insurance premiums increased by $0.1 billion, primarily due to an increase in participating life premiums.

For the twelve months ended December 31, 2017, premiums and deposits increased by $0.8 billion to $10.9 billion compared to the same period last year, due to an increase in individual insurance premiums of $0.4 billion and an increase in individual wealth premiums and deposits of $0.4 billion. The increase in individual insurance premiums was primarily due to an increase in participating life premiums, while the increase in individual wealth premiums and deposits was primarily due to an increase in segregated funds and proprietary mutual funds.

Premiums and deposits for the fourth quarter of 2017 increased by $0.3 billion compared to the previous quarter, primarily due to a $0.3 billion increase in individual insurance participating life premiums. Individual wealth premiums and deposits were comparable to the previous quarter.

Sales

Sales for the fourth quarter of 2017 decreased by $0.1 billion to $2.5 billion compared to the same quarter last year, due to a decrease in individual insurance sales of $0.2 billion, partially offset by an increase in individual wealth sales of $0.1 billion. The decrease in individual insurance sales was primarily due to higher participating life sales in the fourth quarter of 2016 relating to changes to tax exempt legislation effective January 2017, while the increase in individual wealth sales was primarily due to an increase in third party sales.

For the twelve months ended December 31, 2017, sales increased by $0.6 billion to $9.7 billion compared to the same period last year, primarily due to an increase in individual wealth sales of $0.8 billion, partially offset by a decrease in individual insurance sales of $0.2 billion. The increase in individual wealth sales was primarily due to an increase in investment fund sales, while the decrease in individual insurance sales was primarily due to the same reason discussed for the in-quarter results.

Sales for the fourth quarter of 2017 increased by $0.5 billion compared to the previous quarter, due to an increase in individual wealth sales of $0.5 billion, driven by an increase in segregated fund and third party sales. Individual insurance sales were comparable to the previous quarter.

For the individual wealth investment fund business, net cash outflows for the fourth quarter of 2017 were $83 million compared to net cash inflows of $99 million for the same quarter last year and net cash inflows of $141 million for the previous quarter. Net cash inflows for the twelve months ended December 31, 2017 were $299 million compared to $276 million for the same period last year.

Assets under administration - Individual Wealth

	December 31	
	2017	2016
Assets under management		
Risk-based products	**5,252**	5,527
Segregated funds	**33,356**	31,931
Quadrus group of funds	**6,211**	5,530
Total assets under management	**$ 44,819**	$ 42,988
Other assets under administration[1]	**$ 8,283**	$ 7,240
Total assets under administration - Individual Wealth	**$ 53,102**	$ 50,228

[1] Includes third party mutual funds distributed by Quadrus

Fee and other income

Fee and other income for the fourth quarter of 2017 increased by $30 million to $255 million compared to the same quarter last year, primarily due to growth in other income related to distribution arrangements and growth in fee income driven by higher average assets under administration, partially offset by lower margins.

For the twelve months ended December 31, 2017, fee and other income increased by $79 million to $949 million compared to the same period last year. The increase was primarily due to the same reasons discussed for the in-quarter results.

Fee and other income for the fourth quarter of 2017 increased by $19 million compared to the previous quarter, primarily due to the same reasons discussed for the in-quarter results.

Net earnings

Net earnings for the fourth quarter of 2017 decreased by $17 million to $162 million compared to the same quarter last year. The decrease was primarily due to lower contributions from investment experience and less favourable mortality experience. These items were partially offset by higher contributions from insurance contract liability basis changes, the favourable impact of new business and favourable morbidity and policyholder behaviour experience.

For the twelve months ended December 31, 2017, net earnings decreased by $28 million to $589 million compared to the same period last year. The decrease was primarily due to lower contributions from investment experience, lower contributions from insurance contract liability basis changes and less favourable morbidity experience. These items were partially offset by lower new business strain, higher net fee income and favourable mortality experience.

Net earnings for the fourth quarter of 2017 increased by $21 million compared to the previous quarter. The increase was primarily due to higher contributions from insurance contract liability basis changes and lower new business strain, partially offset by lower contributions from investment experience.

For the fourth quarter of 2017, net earnings attributable to the participating account decreased by $153 million to $25 million compared to the same quarter last year. The decrease was primarily due to lower contributions from insurance contract liability basis changes, partially offset by lower new business strain.

For the twelve months ended December 31, 2017, net earnings attributable to the participating account were $42 million compared to $191 million for the same period last year. Excluding the impact of restructuring costs of $32 million recorded in the second quarter of 2017, net earnings decreased by $117 million, primarily due to the same reasons discussed for the in-quarter results.

Compared to the previous quarter, net earnings attributable to the participating account increased by $6 million, primarily due to lower new business strain, partially offset by lower contributions from insurance contract liability basis changes.

OUTLOOK – INDIVIDUAL CUSTOMER

Refer to Cautionary Note regarding Forward-looking Information and Cautionary Note regarding non-IFRS Financial Measures at the beginning of this document.

The Individual Customer business unit delivered solid results in 2017. The Company's reputation for strength and stability, combined with prudent business practices as well as the depth and breadth of its distribution channels positions the Company well for 2018 and beyond.

In 2018, Individual Customer will continue to advance on transformation to position for growth. The Company will further establish the value propositions for advisors in all channels, providing them with strategies and tools for helping customers focus on achieving long-term financial security regardless of life stage and market fluctuations. This Lifetime Advice approach is beneficial to strong customer retention as well as helping advisors attract new customers to the Company. A key distribution strategy will be to maximize the use of common tools, processes and support, while tailoring support to specific segments of advisors where appropriate.

The Company will continue to competitively develop, price and market its comprehensive range of individual insurance and individual wealth management products while maintaining its focus on sales and service support to customers and advisors in all channels.

Operational expense management continues to be critically important to delivering strong financial results. This will be achieved through disciplined expense controls and effective development and implementation of strategic investments. Management has identified a number of areas of focus for these investments to facilitate the objective of organic growth, including continuing to invest in digital solutions to support advisors and customers and addressing its legacy of administration systems and processes to unlock the potential for future growth.

GROUP CUSTOMER

OPERATING RESULTS

	For the three months ended			For the twelve months ended	
	Dec. 31 2017	Sept. 30 2017	Dec. 31 2016[1]	**Dec. 31 2017**	Dec. 31 2016[1]
Premiums and deposits	**$ 4,038**	$ 3,659	$ 3,912	**$ 15,665**	$ 14,621
Sales	**1,235**	907	1,223	**3,885**	3,847
Fee and other income	**157**	150	147	**610**	574
Net earnings	**193**	155	154	**641**	564

(1) Comparative figures have been reclassified to reflect presentation adjustments, related to the realignment of the Canada segment operations into two business units.

Premiums and deposits
Premiums and deposits for the fourth quarter of 2017 increased by $0.1 billion to $4.0 billion compared to the same quarter last year, due to an increase in group insurance premiums and deposits of $0.1 billion. The increase in group insurance was primarily due to an increase in large case market premiums and deposits. Group wealth premiums and deposits were comparable to the same quarter last year.

For the twelve months ended December 31, 2017, premiums and deposits increased by $1.0 billion to $15.7 billion compared to the same period last year, due to an increase in group wealth premiums and deposits of $0.6 billion and an increase in group insurance premiums and deposits of $0.4 billion. The increase in group wealth was primarily due to increases in segregated fund deposits, while the increase in group insurance was primarily due to increases in large case market premiums and deposits.

Premiums and deposits for the fourth quarter of 2017 increased by $0.4 billion compared to the previous quarter, due to an increase in group wealth premiums and deposits of $0.3 billion and an increase in group insurance premiums and deposits of $0.1 billion. The increase in group wealth was primarily due to increases in group segregated fund deposits, while the increase in group insurance was primarily due to increases in ASO market premiums and deposits.

Sales
Sales for the fourth quarter of 2017 were comparable to the same quarter last year.

For the twelve months ended December 31, 2017, sales were comparable to the same period last year. Group wealth sales increased by $0.1 billion, while group insurance sales decreased by $0.1 billion. The increase in group wealth sales was primarily due to higher sales of segregated fund products, while the decrease in group insurance sales was primarily due to lower sales in the large case market.

Sales for the fourth quarter of 2017 increased by $0.3 billion compared to the previous quarter, due to an increase in group wealth sales of segregated fund products.

For the group wealth segregated fund business, net cash inflows for the fourth quarter of 2017 were $214 million, compared to $133 million for the same quarter last year and $72 million for the previous quarter. For the twelve months ended December 31, 2017, net cash inflows were $780 million compared to $408 million, which excludes a $910 million withdrawal of a lower margin group capital accumulation plan, for the same period last year.

Assets under administration - Group Retirement & Investment Services

	December 31	
	2017	2016
Assets under management		
Risk-based products	**$ 7,978**	$ 7,595
Segregated funds	**47,043**	42,978
Institutional assets	**599**	322
Total assets under management	**$ 55,620**	$ 50,895
Other assets under administration[1]	**$ 506**	$ 538
Total assets under administration - Group Retirement & Investment Services	**$ 56,126**	$ 51,433

[1] Includes mutual funds distributed by Quadrus, stock purchase plans administered by London Life and portfolio assets managed by GLC Asset Management Group.

Fee and other income

Fee and other income for the fourth quarter of 2017 increased by $10 million to $157 million compared to the same quarter last year, primarily due to higher average assets under administration driven by higher average equity markets and net cash inflows, partially offset by lower margins.

For the twelve months ended December 31, 2017, fee and other income increased by $36 million to $610 million compared to the same period last year, primarily due to the same reasons discussed for the in-quarter results.

Fee and other income for the fourth quarter of 2017 increased by $7 million compared to the previous quarter, primarily due to the same reasons discussed for the in-quarter results above.

Net earnings

Net earnings for the fourth quarter of 2017 increased by $39 million to $193 million compared to the same quarter last year. The increase was primarily due to more favourable morbidity experience and higher contributions from investment experience, partially offset by lower contributions from insurance contract liability basis changes.

For the twelve months ended December 31, 2017, net earnings increased by $77 million to $641 million compared to the same period last year. The increase was primarily due to more favourable morbidity experience and higher contributions from insurance contract liability basis changes, partially offset by less favourable impacts of changes to certain income tax estimates and less favourable mortality experience.

Net earnings for the fourth quarter of 2017 increased by $38 million compared to the previous quarter, primarily due to more favourable morbidity experience and higher contributions from investment experience, partially offset by lower contributions from insurance contract liability basis changes.

OUTLOOK – GROUP CUSTOMER

Refer to Cautionary Note regarding Forward-looking Information and Cautionary Note regarding non-IFRS Financial Measures at the beginning of this document.

During 2017, the Company maintained its strong competitive position in the Canadian group market with leading or strong market share in all case size, regional and benefit market segments. The Company believes that this market share position, together with its distribution capacity, will facilitate continued growth in revenue premium. In particular, through effective investment in digital technologies and innovative benefit solutions, the Company expects to continue to enhance its competitive position in the marketplace.

Recently, the Company has announced a number of new initiatives to grow market share and relevance to Canadian group plans and their covered members including:

- An innovative new student debt project to be piloted in early 2018 which is intended to address the growing issue of rising debt levels of recent post-secondary graduates and will facilitate both the pay-down of student debt concurrent with saving for the future.
- A pilot for a fully bilingual digital health platform, Dialogue™, was launched in November of 2017. Dialogue™ is a service that facilitates an interaction, through web or mobile application, between a plan member and a team of medical professionals who can diagnose a number of conditions and provide medical advice in an efficient and effective manner.
- The Company expects to continue to expand on its leading Health Case Management program through a planned pilot with Best Doctors™ in 2018 to enhance patient diagnosis and treatment. This service is expected to improve health outcomes for plan members, while improving the cost effectiveness of the benefits program for plan sponsors.
- GroupNet for Plan Members will be relaunched on a new digital platform allowing for personalization specific to each plan member. The Company is actively working to leverage the digital channel to be able to deliver customized information efficiently and in a timely manner to plan members.

The Company's investments in technology and innovation are expected to improve processes and provide faster service, while empowering customers to better achieve financial, physical and mental well-being.

CANADA CORPORATE

Canada Corporate consists of items not associated directly with or allocated to the Canadian business units.

For the fourth quarter of 2017, Canada Corporate had a net loss of $17 million compared to a net loss of $7 million for the same quarter last year. The net loss in the fourth quarter of 2017 includes the impact of U.S. tax reform which was a net charge of $19 million. Excluding this item, net earnings for the fourth quarter of 2017 increased $9 million, primarily due to a more favourable impact from changes to certain income tax estimates, partially offset by lower fee income.

Excluding the impact of U.S. tax reform discussed for the in-quarter results and the impact of restructuring costs of $126 million included in the second quarter of 2017 results, the adjusted net loss for the twelve months ended December 31, 2017 was $11 million compared to net earnings of $37 million for the same period last year. The change in net earnings was primarily due to lower net investment income and a less favourable impact from changes to certain income tax estimates. The year-to-date net earnings in 2016 included a gain on the sale of an investment property which did not recur.

Excluding the items discussed for the in-quarter results, adjusted net earnings for the fourth quarter of 2017 were $2 million compared to nil in the previous quarter. The change in net earnings was primarily due to a more favourable impact from changes to certain income tax estimates, offset by lower fee income.

UNITED STATES

The United States operating results for Lifeco include the results of Great-West Financial, Putnam and the results of the insurance businesses in the United States branches of Great-West Life and Canada Life, together with an allocation of a portion of Lifeco's corporate results.

Through its Financial Services business unit, and specifically the Empower Retirement brand, the Company provides an array of financial security products, including employer-sponsored defined contribution plans, administrative and recordkeeping services, individual retirement accounts, fund management as well as investment and advisory services. The Company also provides life insurance, annuity and executive benefits products through its Individual Markets operations.

Through its Asset Management business unit, the Company provides investment management, certain administrative functions, distribution and related services, through a broad range of investment products.

TRANSLATION OF FOREIGN CURRENCY

Foreign currency assets and liabilities are translated into Canadian dollars at the market rate at the end of the financial period. All income and expense items are translated at an average rate for the period.

Currency translation impact is a non-IFRS financial measure that highlights the impact of changes in currency translation rates on IFRS results. This measure provides useful information as it facilitates the comparability of results between periods. Refer to the Cautionary Note regarding non-IFRS Financial Measures at the beginning of this document.

BUSINESS PROFILE

FINANCIAL SERVICES

Great-West Financial provides an array of financial security products, including employer-sponsored defined contribution plans, individual retirement accounts, life insurance, annuity products and executive benefits products. Under the Empower Retirement brand name, Great-West Financial offers employer-sponsored defined contribution plans, individual retirement accounts, enrollment services, communication materials, investment options and education services as well as fund management, investment and advisory services. Through its FASCore subsidiary, the Company offers private label recordkeeping and administrative services for other providers of defined contribution plans. Through relationships with government plan sponsors, the Company is the largest provider of services to state defined contribution plans, with 22 recordkeeping and two investment only state clients.

ASSET MANAGEMENT

Putnam provides investment management, certain administrative functions and distribution services. Putnam offers a broad range of investment products, including equity, fixed-income, absolute return and alternative strategies, through Putnam Funds, Putnam World Trust Funds and institutional portfolios. Revenue is derived from the value and composition of assets under management and performance fees as well as service and distribution fees. Accordingly, fluctuations in the financial markets and changes in the composition of assets or accounts affect revenues and results of operations.

MARKET OVERVIEW

PRODUCTS AND SERVICES

The Company provides a focused product offering that is distributed through a variety of channels.

FINANCIAL SERVICES

MARKET POSITION	PRODUCTS AND SERVICES	DISTRIBUTION
• Second largest defined contribution recordkeeper in the country[(4)] by participants providing services for 8.3 million participant accounts and 37,515 plans[(1)] • 24% market share in state and local government deferred compensation plans, based on number of participant accounts[(2)] • 30% market share of individual life insurance sold through the retail bank channel[(3)] • 13% market share of executive benefits markets life insurance purchased by financial institutions[(3)] • Great-West Lifetime Funds are the 12th largest target date fund offering in the U.S.[(1)]	• Employer-sponsored defined contribution plans, enrollment services, communication materials, investment options and education services • Administrative and recordkeeping services for financial institutions and employer-sponsored defined contribution plans and associated defined benefit plans • Fund management, investment and advisory services • Individual retirement accounts (IRAs), individual term and single premium life insurance and individual annuity products • Executive benefits markets life insurance products	• Retirement services products distributed to plan sponsors through brokers, consultants, advisors, third-party administrators and banks • FASCore recordkeeping and administrative services distributed through institutional clients • Individual life and annuity products distributed through wholesale and retail sales force, banks, broker dealers and investment advisors • IRAs available to individuals through the Retirement Solutions Group • Executive benefits markets life insurance products distributed through wholesalers and specialized consultants

(1) As at December 31, 2017
(2) As at September 30, 2017
(3) Market share based on annualized Q1 - Q3 2017 sales data
(4) As at December 31, 2016

ASSET MANAGEMENT

MARKET POSITION	PRODUCTS AND SERVICES	DISTRIBUTION
• A global asset manager with assets under management of US$171.5 billion[1] • Global distribution includes sales teams that are focused on major institutional markets in the U.S., Europe, the Middle East, Asia and Australia and through a distribution relationship in Japan	**Investment Management Products & Services** • Individual retail investors - a family of open-end and closed-end mutual funds, college savings plans and variable annuity products • Institutional investors - defined benefit and defined contribution investment only plans sponsored by corporations, state, municipal and other governmental authorities, university endowment funds, charitable foundations, and collective investment vehicles (both U.S. and non-U.S.) • Investment services for defined contribution investment only plans • Alternative investment products across the fixed-income, quantitative and equity groups **Administrative Services** • Transfer agency, underwriting, distribution, shareholder services, trustee and other fiduciary services	**Individual Retail Investors** • A broad network of distribution relationships with unaffiliated broker dealers, financial planners, registered investment advisors and other financial institutions that distribute the Putnam Funds and defined contribution investment only services to their customers, which, in total, includes approximately 168,000 advisors • Sub-advisory relationships and Putnam-labeled funds as investment options for insurance companies and non-U.S. residents • Retail distribution channels are supported by Putnam's sales and relationship management team • Retirement plan sponsors and participants are supported by Putnam's dedicated defined contribution investment only professionals and through a relationship with Empower Retirement **Institutional Investors** • Supported by Putnam's dedicated account management, product management and client service professionals • Strategic relationships with several investment management firms outside of the U.S.

[1] As at December 31, 2017

COMPETITIVE CONDITIONS

FINANCIAL SERVICES

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

ASSET MANAGEMENT

The investment management business is highly competitive. Putnam competes with other providers of investment products and services, primarily based on the range of investment products offered, investment performance, distribution, scope and quality of shareholder and other services as well as general reputation in the marketplace. Putnam's investment management business is also influenced by general securities market conditions, government regulations, global economic conditions as well as advertising and sales promotional efforts. Putnam competes with other mutual fund firms and institutional asset managers that offer investment products similar to Putnam as well as products that Putnam does not offer. Putnam also competes with a number of mutual fund sponsors that offer their funds directly to the public. Conversely, Putnam offers its funds only through intermediaries.

Selected consolidated financial information - United States

	For the three months ended			For the twelve months ended	
	Dec. 31 2017	Sept. 30 2017[2]	Dec. 31 2016[2]	**Dec. 31 2017**	Dec. 31 2016[2]
Premiums and deposits	**$ 14,150**	$ 13,544	$ 14,644	**$ 58,449**	$ 59,627
Sales	**19,162**	21,173	18,384	**81,621**	98,218
Fee and other income	**616**	606	619	**2,452**	2,311
Net earnings - common shareholders	**(298)**	110	55	**(50)**	249
Net earnings - common shareholders (US$)	**(234)**	88	41	**(42)**	188
Adjusted net earnings - common shareholders[1]	**75**	110	77	**334**	278
Adjusted net earnings - common shareholders (US$)[1]	**60**	88	57	**260**	209
Total assets[2]	**$ 84,063**	$ 83,489	$ 87,057		
Proprietary mutual funds and institutional net assets	**232,623**	225,481	219,699		
Total assets under management	**316,686**	308,970	306,756		
Other assets under administration	**597,596**	567,984	534,428		
Total assets under administration	**$ 914,282**	$ 876,954	$ 841,184		

(1) Adjusted net earnings attributable to common shareholders is a non-IFRS measure of earnings performance. Adjustments are detailed in footnote 6 to the Selected Consolidated Financial Information table of this MD&A.

(2) Comparative figures have been reclassified as described in note 2 and note 34 to the Company's December 31, 2017 annual consolidated financial statements.

Net earnings - common shareholders	For the three months ended			For the twelve months	
	Dec. 31 2017	Sept. 30 2017	Dec. 31 2016	**Dec. 31 2017**	Dec. 31 2016
Financial Services	**$ 80**	$ 104	$ 80	**$ 357**	$ 333
Asset Management	**(5)**	6	(3)	**(21)**	(52)
Corporate[1]	**(373)**	—	(22)	**(386)**	(32)
Net earnings	**$ (298)**	$ 110	$ 55	**$ (50)**	$ 249
Adjustments					
Restructuring costs	**—**	—	22	**11**	29
Net charge on sale of equity investment	**122**	—	—	**122**	—
U.S. tax reform impact	**251**	—	—	**251**	—
Adjusted net earnings[1]	**$ 75**	$ 110	$ 77	**$ 334**	$ 278
Financial Services (US$)	**$ 64**	$ 83	$ 59	**$ 277**	$ 250
Asset Management (US$)	**(4)**	5	(2)	**(15)**	(39)
Corporate (US$)[1]	**(294)**	—	(16)	**(304)**	(23)
Net earnings (US$)	**$ (234)**	$ 88	$ 41	**$ (42)**	$ 188
Adjustments					
Restructuring costs (US$)	**—**	—	16	**8**	21
Net charge on sale of equity investment (US$)	**96**	—	—	**96**	—
U.S. tax reform impact (US$)	**198**	—	—	**198**	—
Adjusted net earnings (US$)[1]	**$ 60**	$ 88	$ 57	**$ 260**	$ 209

(1) Adjusted net earnings attributable to common shareholders is a non-IFRS measure of earnings performance. Adjustments are detailed in footnote 6 to the Selected Consolidated Financial Information table of this MD&A.

2017 DEVELOPMENTS

- The net loss for the three months ended December 31, 2017 was US$234 million compared to net earnings of US$41 million in the same quarter last year. The net loss for the fourth quarter of 2017 included a net charge related to the impact U.S. tax reform of US$198 million as well as a net charge related to the sale of an equity investment of US$96 million. In the fourth quarter of 2016, net earnings included restructuring costs of US$15 million related to Putnam and US$1 million related to Great-West Financial. Excluding these items, adjusted net earnings for the fourth quarter of 2017 increased by US$3 million to US$60 million compared to the same quarter last year. Adjusted net earnings for the twelve months ended December 31, 2017 were US$260 million, an increase of US$51 million compared to the same period in 2016, primarily due to higher net fee income and lower expenses.
- 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 discussed in the "Income Tax" section of this MD&A. As a result of this U.S. tax reform, the Company revalued certain deferred tax balances and insurance contract liabilities and updated certain expense provisions. For the U.S. segment, the impact of these items was a net charge of US$198 million included in the U.S. Corporate business unit.
- During the fourth quarter of 2017, the Company agreed in principle to sell an equity investment in Nissay, which has been reclassified to assets held for sale and is expected to be finalized in the first quarter of 2018. The impact of the disposal has been included in net earnings for the fourth quarter of 2017 in U.S. Corporate and is a net charge of US$96 million including the non-cash write-off of an associated indefinite life intangible asset.

- On April 6, 2016, the U.S. Department of Labor ("DOL") issued a new rule redefining and expanding who is a fiduciary by reason of providing investment advice to a retirement plan or holder of an individual retirement account. The Company has analyzed the rule against current business practices, particularly in its Empower Retirement and Individual Markets businesses. The rule requires changes to certain aspects of product and service delivery but management does not expect that it will prevent Great-West Financial or Putnam 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.

BUSINESS UNITS – UNITED STATES

FINANCIAL SERVICES

2017 DEVELOPMENTS

- In the first quarter of 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 US$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. In the third quarter of 2017, Empower Retirement was named by the retirement plan advisors as the top defined contribution plan provider in a new survey published by PlanAdvisor.
- Empower Retirement assets under administration grew to approximately US$530 billion, up from US$450 billion at December 31, 2016.

OPERATING RESULTS

	For the three months ended			For the twelve months ended	
	Dec. 31 2017	Sept. 30 2017	Dec. 31 2016	**Dec. 31 2017**	Dec. 31 2016
Premiums and deposits	**$ 3,134**	$ 3,140	$ 3,525	**$ 12,950**	$ 14,156
Sales	**8,146**	10,769	7,265	**36,122**	52,747
Fee and other income	**380**	362	383	**1,496**	1,362
Net earnings	**80**	104	80	**357**	333
Premiums and deposits (US$)	**$ 2,467**	$ 2,513	$ 2,650	**$ 10,003**	$ 10,680
Sales (US$)	**6,414**	8,615	5,462	**27,988**	39,324
Fee and other income (US$)	**299**	290	288	**1,156**	1,029
Net earnings (US$)	**64**	83	59	**277**	250

Premiums and deposits

Premiums and deposits for the fourth quarter of 2017 decreased by US$0.2 billion to US$2.5 billion compared with the same quarter last year. The decrease was primarily due to a decrease in Empower Retirement which was driven by lower deposits from retail and segregated fund investment options and lower deposits from existing participants.

Premium and deposits for the twelve months ended December 31, 2017 decreased by US$0.7 billion to US$10.0 billion compared with the same period last year, due primarily to a decrease in Empower Retirement which was driven by lower deposits from retail and segregated fund investment options and lower sales. The decrease was partially offset by higher sales in the individual annuity line of business of Individual Markets.

Premiums and deposits for the fourth quarter of 2017 of US$2.5 billion were comparable with the previous quarter in 2017.

Sales

Sales in the fourth quarter of 2017 increased by US$1.0 billion to US$6.4 billion compared with the same quarter last year, primarily due to an increase in Empower Retirement sales driven by higher small and large plan sales. Large plan sales can be highly variable from period to period and tend to be lower margin.

For the twelve months ended December 31, 2017, sales decreased by US$11.3 billion to US$28.0 billion compared with the same period last year, primarily due to a decrease in Empower Retirement sales. The first quarter of 2016 included a very large plan sale which did not recur in 2017.

Sales in the fourth quarter of 2017 decreased by US$2.2 billion compared with the previous quarter, primarily due to a decrease in Empower Retirement sales driven by lower large plan sales.

Empower Retirement - customer account values (US$)

	Change for the twelve months ended December 31		Total at December 31		
	2017	2016	**2017**	2016	**% Change**
General account - fixed options	**$ 388**	$ 1,226	**$ 12,607**	$ 12,219	3%
Segregated funds - variable options	**(415)**	(162)	**19,006**	19,421	(2)
Proprietary mutual funds[1]	**3,815**	3,665	**23,765**	19,950	19
Unaffiliated retail investment options & administrative services only	**75,457**	34,243	**474,282**	398,825	19
	$ 79,245	$ 38,972	**$ 529,660**	$ 450,415	18%

(1) At December 31, 2017, proprietary mutual funds included US$9.7 billion in Putnam managed funds (US$8.2 billion at December 31, 2016).

Empower Retirement customer account values at December 31, 2017 increased by US$79.2 billion compared with December 31, 2016, primarily due to higher average equity market levels and net cash inflows. Net cash inflows for the general account, proprietary mutual funds and unaffiliated retail investment options and administrative services only account values were partially offset by net asset outflows for segregated funds.

Fee and other income

Fee income is derived primarily from assets under management, assets under administration, shareholder servicing fees, administration and recordkeeping services and investment advisory services. Generally, fees are earned based on assets under management, assets under administration or the number of plans and participants for which services are provided.

Fee and other income for the fourth quarter of 2017 increased by US$11 million to US$299 million compared with the same quarter last year. Included in fee and other income for the fourth quarter of 2016 was a reclassification adjustment of US$33 million relating to variable-asset based fee income. Excluding this adjustment, fee and other income increased US$44 million, primarily due to growth in participants and higher average equity market levels.

For the twelve months ended December 31, 2017, fee and other income increased by US$127 million to US$1,156 million compared with the same period last year. Excluding the adjustment discussed for the in-quarter results, the increase in fee and other income was US$160 million, primarily due to growth in the business and higher average equity market levels.

Fee and other income for the fourth quarter of 2017 increased by US$9 million compared to the previous quarter, primarily due to the same reasons discussed for the year-to-date results.

Net earnings

Net earnings for the fourth quarter of 2017 increased by US$5 million to US$64 million compared with the same quarter last year, primarily due to higher net fee income, partially offset by lower contributions from investment experience and insurance contract liability basis changes. Included in the fourth quarter of 2016 were $2 million of strategic and business development expenses related to Empower Retirement.

For the twelve months ended December 31, 2017, net earnings increased by US$27 million to US$277 million compared with the same period last year. Net earnings for the first quarter of 2016 included the positive impact of a management election to claim foreign tax credits of US$19 million. Excluding this item, net earnings increased by US$46 million, primarily due to higher net fee income and lower expenses mostly driven by lower integration costs and an expense recovery related to a change in the future obligations for an employee pension plan, partially offset by lower contributions from investment experience and insurance contract liability basis changes. Included in the year-to-date net earnings were US$3 million of strategic and development expenses related to Empower Retirement, compared with US$16 million for the same period in 2016.

Net earnings for the fourth quarter of 2017 decreased by US$19 million compared with the previous quarter in 2017, primarily due to the pension expense recovery in the third quarter of 2017 discussed for the year-to-date results and unfavourable mortality experience.

OUTLOOK – FINANCIAL SERVICES

Refer to Cautionary Note regarding Forward-looking Information and Cautionary Note regarding non-IFRS Financial Measures at the beginning of this document.

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. Great-West Financial 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, Great-West Financial 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, which launched in the third quarter of 2015 with over 600 professionals based in India, will continue to expand with a focus on lower unit costs.

Through its Individual Markets line of business, Great-West Financial focuses on providing value and innovative products to the partners, brokers and the clients they serve to help them live well longer. Great-West Financial was the second largest distributor of life insurance through banks in 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, Great-West Financial provides unique solutions to address the complex needs of organizations for funding employee benefits and retaining key executives. Great-West Financial 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.

ASSET MANAGEMENT

2017 DEVELOPMENTS

- Putnam's ending assets under management (AUM) at December 31, 2017 of US$171.5 billion increased by US$19.3 billion compared to the same period last year, while average AUM for the twelve months ended December 31, 2017 of US$163.6 billion increased by US$15.6 billion compared to the same period last year.
- During the fourth quarter of 2016, Putnam announced that it was undertaking US$65 million pre-tax in expense reductions and was realigning its resources to better position itself for current and future opportunities. As of December 31, 2017, the Company has completed the program and achieved US$53 million pre-tax in annualized expense reductions. This resulted in a pre-tax expense reduction of approximately US$14 million in the fourth quarter of 2017.
- Putnam continues to sustain strong investment performance relative to its peers. As of December 31, 2017, approximately 93% and 85% of Putnam's fund assets performed at levels above the Lipper median, respectively, on a one-year and five-year basis. Additionally, approximately 46% and 55% of Putnam's fund assets performed at levels above the Lipper top quartile, respectively, on a one-year and five-year basis.
- For the 28th consecutive year, Putnam has been recognized by DALBAR Inc. for mutual fund service quality, citing industry-leading consistency and reliability. This recognition includes Putnam being named as a DALBAR Mutual Fund Service Award winner for 26 of those years. Additionally, for the seventh consecutive year, Putnam has been named the winner of DALBAR's Total Client Experience award recognizing overall mutual fund customer service quality.
- In January 2018, Putnam announced plans to offer two funds with dedicated environmental, social and governance strategies that identify opportunities driven by corporate sustainability practices and solutions. Putnam will reposition two existing products with nearly US$5.0 billion in AUM in creating these funds which will focus on identifying companies with demonstrated commitment to sustainable business practices or that provide solutions directly contributing to sustainable social, environmental and economic development.

OPERATING RESULTS

	For the three months ended			For the twelve months ended	
	Dec. 31 2017	Sept. 30 2017	Dec. 31 2016	**Dec. 31 2017**	Dec. 31 2016
Sales	**$ 11,016**	$ 10,404	$ 11,119	**$ 45,499**	$ 45,471
Fee income					
Investment management fees	**199**	193	194	**788**	775
Performance fees	**(10)**	5	(6)	**(23)**	(30)
Service fees	**37**	36	37	**150**	157
Underwriting & distribution fees	**10**	10	11	**41**	47
Fee income	**236**	244	236	**956**	949
Core net earnings (loss)[1][3]	**(7)**	19	(4)	**19**	(17)
Less: Financing and other expenses (after-tax)[1]	**2**	(13)	1	**(40)**	(35)
Reported net earnings (loss)[3]	**(5)**	6	(3)	**(21)**	(52)
Sales (US$)	**$ 8,674**	$ 8,323	$ 8,360	**$ 35,125**	$ 34,295
Fee income (US$)					
Investment management fees (US$)	**157**	155	146	**609**	585
Performance fees (US$)	**(8)**	4	(4)	**(18)**	(23)
Service fees (US$)	**29**	28	28	**115**	119
Underwriting & distribution fees (US$)	**8**	8	8	**32**	35
Fee income (US$)	**186**	195	178	**738**	716
Core net earnings (loss) (US$)[1][3]	**(6)**	15	(3)	**15**	(12)
Less: Financing and other expenses (after-tax) (US$)[1]	**2**	(10)	1	**(30)**	(27)
Reported net earnings (loss) (US$)[3]	**(4)**	5	(2)	**(15)**	(39)
Pre-tax operating margin[2][3]	**1.5%**	12.0%	(0.1)%	**5.2%**	(1.9)%
Average assets under management (US$)	**$ 169,837**	$ 165,180	$ 151,903	**$ 163,591**	$ 148,003

(1) Core net earnings (loss) (a non-IFRS financial measure) is a measure of the Asset Management business unit's performance. Core net earnings (loss) includes the impact of dealer commissions and software amortization, and excludes the impact of corporate financing charges and allocations, fair value adjustments related to stock-based compensation, certain tax adjustments and other non-recurring transactions.

(2) Pre-tax operating margin (a non-IFRS financial measure) is a measure of the Asset Management business unit's pre-tax core net earnings (loss) divided by the sum of fee income and net investment income.

(3) For the three and twelve months ended December 31, 2017, core and reported net earnings exclude the impact of the net charge related to Assets Held for Sale and the impact of U.S. tax reform, which are included in U.S. Corporate. For the three and twelve months ended December 31, 2016, core and reported net earnings exclude restructuring expenses of $20 million (US$15 million), which are included in U.S. Corporate.

Sales

Sales for the fourth quarter of 2017 were US$8.7 billion compared to US$8.4 billion for the same quarter last year. The increase was due to an increase in mutual fund sales of US$0.8 billion, partially offset by a decrease in institutional sales of US$0.5 billion.

For the twelve months ended December 31, 2017, sales increased by US$0.8 billion to US$35.1 billion compared to the same period last year. Mutual fund sales increased by US$2.8 billion, partially offset by a decrease in institutional sales of US$2.0 billion.

Sales in the fourth quarter of 2017 increased by US$0.4 billion compared to the previous quarter, due to a US$1.0 billion increase in mutual fund sales, partially offset by a US$0.6 billion decrease in institutional sales.

Fee income
Fee income is derived primarily from investment management fees, performance fees, transfer agency and other service fees, as well as underwriting and distribution fees. Generally, fees are earned based on AUM and may depend on financial markets, the relative performance of Putnam's investment products, the number of retail accounts and sales.

Fee income for the fourth quarter of 2017 increased by US$8 million to US$186 million compared to the same quarter last year. The increase was primarily due to higher investment management fees, driven by higher average AUM.

For the twelve months ended December 31, 2017, fee income increased by US$22 million to US$738 million compared to the same period last year. The increase was primarily due to the same reasons discussed for the in-quarter results.

Fee income for the fourth quarter of 2017 decreased by US$9 million compared to the previous quarter, primarily due to the proceeds earned from the sale of a previously impaired investment product in the third quarter of 2017. Excluding the impact of proceeds earned on the sale recorded in the third quarter of US$12 million, fee income increased US$4 million, primarily due to the same reasons discussed for the in-quarter results.

Net earnings
The core net loss (a non-IFRS financial measure) for the fourth quarter of 2017 was US$6 million, compared to core net loss of US$3 million for the same quarter last year. The increase in core net loss was primarily due to higher volume-related expenses, higher incentive compensation from improved investment performance and less favourable impacts of changes to certain income tax estimates. These items were partially offset by increased fee revenue, driven by higher AUM and higher contributions from investment experience. Expenses in the fourth quarter of 2017 were up slightly from the same quarter last year, due to the impact of one-time items, including expense recoveries in 2016, and the timing of certain compensation accruals. Both periods benefited similarly from the expense reductions announced in the fourth quarter of 2016. In the fourth quarter of 2017, the reported net loss, including financing and other expenses, was US$4 million compared to reported net losses of US$2 million for the same quarter last year. Financing and other expenses for the fourth quarter of 2017 were an expense recovery of US$2 million, compared to an expense recovery of US$1 million for the same quarter last year. The impact of the reversal of a previously impaired indefinite life intangible asset of US$10 million, reduced financing costs and lower U.S. state tax expenses shared with an affiliate were mostly offset by less favourable adjustments to certain income tax estimates.

For the twelve months ended December 31, 2017, core net earnings were US$15 million, compared to a core net loss of US$12 million for the same period last year. The increase was primarily due to increased fee revenue, driven by higher AUM and higher contributions from investment experience, partially offset by less favourable impacts of changes to certain income tax estimates. The current year also benefited from the expense reductions announced in the fourth quarter of 2016, mostly offset by the impact of one-time items, including expense recoveries in 2016, and higher volume related expenses related to improved sales activity and investment performance. For the twelve months ended December 31, 2017, the reported net loss, including financing and other expenses, was US$15 million compared to reported net loss of US$39 million for the same period last year. Financing and other expenses for the twelve month period ended December 31, 2017 increased by US$3 million to US$30 million compared to the same period last year, primarily due to the positive impact of adjustments to certain income tax estimates in the prior year, mostly offset by the indefinite life intangible asset impairment reversal of US$10 million, lower financing costs and U.S. state tax expenses shared with an affiliate.

The core net loss for the fourth quarter of 2017 was US$6 million compared to core net earnings of US$15 million for the previous quarter. Core net earnings for the third quarter of 2017 included proceeds of US$7 million after-tax from the sale of a previously impaired investment product. Excluding this item, the core net loss increased by US$14 million, primarily due to lower contributions from investment experience, higher incentive compensation from improved investment performance and less favourable impacts of changes to certain income tax estimates. The reported net loss, including financing and other expenses, for the fourth quarter of 2017, was US$4 million compared to net earnings of US$5 million for the previous quarter. Financing and other expenses for the fourth quarter of 2017 were an expense recovery of US$2 million compared to expenses of US$10 million for the previous quarter, primarily due to the indefinite life intangible asset impairment reversal of US$10 million and lower U.S. state tax expenses shared with an affiliate.

ASSETS UNDER MANAGEMENT

Assets under management (US$)	**For the three months ended**			**For the twelve months ended**	
	Dec. 31 2017	Sept. 30 2017	Dec. 31 2016	**Dec. 31 2017**	Dec. 31 2016
Beginning assets	**$ 167,798**	$ 162,913	$ 153,798	**$ 152,122**	$ 148,370
Sales - Mutual funds	**5,408**	4,404	4,636	**19,892**	17,115
Redemptions - Mutual funds	**(5,605)**	(4,625)	(5,560)	**(21,462)**	(24,654)
Net asset flows - Mutual funds	**(197)**	(221)	(924)	**(1,570)**	(7,539)
Sales - Institutional	**3,266**	3,919	3,724	**15,233**	17,180
Redemptions - Institutional	**(3,898)**	(3,601)	(4,251)	**(13,975)**	(13,025)
Net asset flows - Institutional	**(632)**	318	(527)	**1,258**	4,155
Net asset flows - Total	**(829)**	97	(1,451)	**(312)**	(3,384)
Impact of market/performance	**4,489**	4,788	(225)	**19,648**	7,136
Ending assets	**$ 171,458**	$ 167,798	$ 152,122	**$ 171,458**	$ 152,122
Average assets under management					
Mutual funds	**78,030**	75,900	71,679	**75,612**	72,326
Institutional assets	**91,807**	89,280	80,224	**87,979**	75,677
Total average assets under management	**$ 169,837**	$ 165,180	$ 151,903	**$ 163,591**	$ 148,003

Average AUM for the three months ended December 31, 2017 was US$169.8 billion, an increase of US$17.9 billion compared to the same quarter last year, primarily due to the cumulative impact of positive markets over the twelve month period. Net asset outflows for the fourth quarter of 2017 were US$0.8 billion compared to US$1.5 billion for the same quarter last year. In-quarter mutual fund net asset outflows were US$0.2 billion and institutional net asset outflows were US$0.6 billion.

Average AUM for the twelve months ended December 31, 2017 increased by US$15.6 billion to US$163.6 billion compared to the same period last year, primarily due to the same reason discussed for the in-quarter results. Net asset outflows for the twelve months ended December 31, 2017 were US$0.3 billion compared to US$3.4 billion for the same period last year. Year-to-date mutual fund net asset outflows of US$1.6 billion were mostly offset by institutional net asset inflows of US$1.3 billion.

Average AUM for the three months ended December 31, 2017 increased by US$4.7 billion compared to the previous quarter, primarily due to the impact of positive markets over the three month period, partially offset by net asset outflows.

OUTLOOK – ASSET MANAGEMENT

Refer to Cautionary Note regarding Forward-looking Information and Cautionary Note regarding non-IFRS Financial Measures at the beginning of this document.

Putnam remains committed to providing strong, long-term investment performance across asset classes for its clients and investors in the mutual fund, institutional and retirement marketplaces.

In 2018, Putnam will continue to focus efforts on driving growth and market share through new sales and asset retention in all markets it serves including Global Institutional, PanAgora (Putnam's quantitative institutional manager), U.S. Retail and Defined Contribution Investment Only, while maintaining its industry recognized reputation for service excellence.

Innovation will remain a key differentiator in 2018, as Putnam further develops its product offerings, service features and operational functions, while bolstering its corporate and business/product brand image with a wide range of key constituents. Putnam continues to increasingly incorporate digital technology throughout its business to drive greater efficiencies and create business opportunities.

Putnam will continue to focus on growth of revenues and assets in 2018, while at the same time managing firm-wide expenses, as the firm seeks to build a scalable, profitable asset management franchise.

UNITED STATES CORPORATE

U.S. Corporate consists of items not associated directly with or allocated to the United States business units, including the impact of certain non-continuing items related to the U.S. segment.

In the fourth quarter of 2017, the net loss was US$294 million compared to US$16 million for the same period in 2016. The net loss in the fourth quarter of 2017 includes the impact of U.S. tax reform which was a net charge of US$198 million, reflecting a US$353 million reduction of deferred tax assets in the Asset Management business unit, partially offset by a US$155 million reduction, primarily related to deferred tax liabilities in the Financial Services business unit. The impact of the sale of an equity investment in Nissay, included in assets held for sale, contributed a further net charge of US$96 million. The fourth quarter of 2016, included restructuring costs of US$16 million, primarily related to Putnam. Excluding these items, net earnings for the fourth quarter of 2017 were comparable to the same period in 2016.

The net loss for the twelve months ended December 31, 2017 was US$304 million compared to US$23 million in the same period in 2016. The 2017 year-to-date results include the items discussed for the in-quarter results as well as US$8 million of restructuring costs primarily relating to Empower Retirement included in the first quarter of 2017 results. The 2016 year-to-date results include restructuring costs of US$15 million related to Putnam and US$6 million related to RPS.

Excluding the items discussed for the in-quarter results, the adjusted net loss for the three months ended December 31, 2017 was comparable to the previous quarter in 2017.

EUROPE

The Europe segment comprises two distinct business units: Insurance & Annuities and Reinsurance, together with an allocation of a portion of Lifeco's corporate results. Insurance & Annuities provides protection and wealth management products, including payout annuity products, through subsidiaries of Canada Life in the U.K., the Isle of Man and Germany, as well as through Irish Life in Ireland. Reinsurance operates primarily in the U.S., Barbados and Ireland, and is conducted through Canada Life, London Life and their subsidiaries.

TRANSLATION OF FOREIGN CURRENCY

Foreign currency assets and liabilities are translated into Canadian dollars at the market rate at the end of the financial period. All income and expense items are translated at an average rate for the period.

Currency translation impact is a non-IFRS financial measure that highlights the impact of changes in currency translation rates on IFRS results. This measure provides useful information as it facilitates the comparability of results between periods. Refer to the Cautionary Note regarding non-IFRS Financial Measures at the beginning of this document.

BUSINESS PROFILE

INSURANCE & ANNUITIES

The core products offered in the U.K. are guaranteed annuities, investments (including retirement drawdown and pension) and group insurance. These products are distributed through independent financial advisors (IFAs) and employee benefit consultants. The international operations based in the Isle of Man and Ireland offer investment, savings and individual protection products that are sold through IFAs and private banks in the U.K. and in other selected territories. Canada Life Investments is the fund management division in the U.K. and manages over £37 billion of assets. These include equities, fixed-income, property, mortgages and cash for companies in the Lifeco group as well as a wide range of life, pension and collective funds. The funds are distributed mainly through financial advisors as well as wealth managers and discretionary managers in the U.K.

Subsequent to December 31, 2017, on January 2, 2018, The Canada Life Group (U.K.) Limited completed the acquisition of U.K. financial services provider Retirement Advantage. The Retirement Advantage acquisition will add further expertise in the growing U.K. retirement income and broadens our product suite to include equity release mortgages.

The core products offered by Irish Life in Ireland are savings and investments, individual and group life insurance, health insurance and pension products. These products are distributed through independent brokers, a direct sales force and tied agent bank branches. Irish Life Health offers individual and corporate health plans, distributed through independent brokers and direct channels. Irish Life Investment Managers (ILIM) is one of the Company's fund management operations in Ireland and manages approximately €69 billion of assets. In addition to managing assets on behalf of companies in the Lifeco group, ILIM also manages assets for a wide range of institutional and retail clients, occupational defined benefit and defined contribution pensions, large multinational corporations, charities and domestic companies.

The German operation focuses on pension, lifetime GMWB and individual protection products that are distributed through independent brokers and multi-tied agents.

Insurance & Annuities continues to expand its presence in its defined market segments by focusing on the introduction of innovative products and services, the quality of its service offerings as well as the enhancement of distribution capabilities and intermediary relationships.

REINSURANCE

Reinsurance operates primarily in the U.S., Barbados and Ireland. In the U.S., the reinsurance business operates through branches of Canada Life, London Life, subsidiaries of London Life and an indirect subsidiary of Great-West Financial. In Barbados, the reinsurance business operates primarily through branches of Canada Life, London Life and subsidiaries of London Life. In Ireland, the reinsurance business operates through subsidiaries of Canada Life.

The Company's business includes both reinsurance and retrocession business transacted directly with clients or through reinsurance brokers. As a retrocessionaire, the Company provides reinsurance to other reinsurers to allow those companies to manage their insurance risk.

The product portfolio offered by the Company includes life, annuity as well as property catastrophe reinsurance, provided on both a proportional and non-proportional basis.

In addition to providing reinsurance products to third parties, the Company also utilizes internal reinsurance transactions between companies in the Lifeco group. These transactions are undertaken to better manage insurance risks relating to retention, volatility and concentration; and to facilitate capital management for the Company, its subsidiaries and branch operations. These internal reinsurance transactions may produce benefits that are reflected in one or more of the Company's other business units.

MARKET OVERVIEW

PRODUCTS AND SERVICES

INSURANCE & ANNUITIES

MARKET POSITION	PRODUCTS AND SERVICES	DISTRIBUTION
U.K. • The market leader of the group life market, with 25% share[1] • A market leader in group income protection, with 18% share[1] • Among the top four insurers in payout annuities, with a market share in excess of 16% (Advisor only)[2] • A market leading international life company selling into the U.K. market, with 30% market share[3] • Among the top five in the onshore unit-linked single premium bond market, with 11% market share[3] **Ireland** • The market leading life assurance company, with 38% share[4] • Leading position in the retail life and pensions market, with a 35% share[4] • Leading positions in the group pensions, group risk and corporate annuities markets with a 44% share[4] • ILIM is one of the largest institutional fund managers in Ireland with €69 billion assets under management[5] • Third largest health insurance business through Irish Life Health [1] **Germany** • 5% share of the broker market[5] • Continued competitive presence in the unit-linked market	**U.K.** • Individual and bulk payout annuities • Fixed term annuities • Pension investment • Savings • Life insurance • Income protection (disability) • Critical illness • Equity release mortgages (with the Retirement Advantage acquisition in 2018) **Ireland** • Individual and group risk & pensions • Individual and bulk payout annuities • Health insurance • Wealth management services • Individual savings and investment • Institutional investment management **Germany** • Pensions • Income protection (disability) • Critical illness • Variable annuities (GMWB) • Individual life insurance	**U.K.** • IFAs • Private banks • Employee benefit consultants **Ireland** • Independent brokers • Pensions and investment consultants • Direct sales force • Tied bank branch distribution with various Irish banks **Germany** • Independent brokers • Multi-tied agents

(1) As at December 31, 2016
(2) Market share based on annualized Q1 to Q3 2017 data through IFAs, restricted whole market advisors and Non-Advised Distributor
(3) Market share based on annualized Q1 to Q3 2017 data
(4) As at June 30, 2017
(5) As at December 31, 2017

REINSURANCE

MARKET POSITION	PRODUCTS AND SERVICES	DISTRIBUTION
• Among the top two life reinsurers in the U.S. for assumed structured life reinsurance[(1)] • Positioned to participate in the developments of the evolving European structured life reinsurance market • Ranked 6th for traditional mortality reinsurance in the US • Long-standing provider of a range of Property and Casualty catastrophe retrocession protection coverages • Leading provider of U.K. and other European annuity / longevity reinsurance	**Life** • Yearly renewable term • Co-insurance • Modified co-insurance • Capital relief solutions **Property & Casualty** • Catastrophe retrocession **Annuity / Longevity** • Payout annuity • Longevity protection • Fixed annuity	• Independent reinsurance brokers • Direct placements

(1) As at November, 2017

COMPETITIVE CONDITIONS

United Kingdom

In the U.K., the Company has strong market positions for group risk, payout annuities and wealth management products, where, combining sales from onshore and international businesses, Canada Life is one of the top unit-linked single premium bond providers in the U.K. The Company's market position in the U.K. is further strengthened by the acquisition of Retirement Advantage, which closed on January 2, 2018.

The market for payout annuities increased in 2017. The Company benefited from increased demand from customers for competitive pricing, which increased the proportion of annuities sold through independent financial advisors, the Company’s primary distribution channel. The Company continued to offer both standard and enhanced annuities as well as pension products for individuals who want to take advantage of the greater pension flexibility introduced in recent years. The Company also offers bulk annuities aimed at trustees of defined benefits plans who want to insure pension annuities in payment. There have been a number of new entrants to this market; however, this is a sizeable market and demand from trustees remains strong. The market is expected to grow as pension plan funding improves and trustees consider ways to reduce risk from pension plans. With expertise and experience in longevity and investment products, the Company is well placed to continue to grow new business.

In international wealth management operations, the market in 2017 remained relatively flat. The penetration of the U.K. retail market increased sales during 2017, an area of continued focus. Future estate planning continues to be an area of focus for U.K. advisors and Canada Life International remains one of the leading companies in this sector of the market.

The impact of Brexit remains uncertain as the U.K. and EU continue exit negotiations in 2018.

Ireland

The Company maintained its market-leading presence in Ireland through Irish Life and continues to be the largest life assurance company with a market share of 38% (as at June 2017). Irish Life follows a multi-channel distribution strategy with the largest broker distribution network, the largest direct sales force and the largest Bancassurance distribution network where it has tied relationships with five banks.

Irish Life Investment Managers is one of Ireland's largest institutional fund managers with €69 billion of assets under management, including funds managed for other companies within the Lifeco group, as at December 31, 2017. During 2017, in addition to maintaining its market leading position in Ireland, ILIM continued to expand its business relationships in the U.S., Canada, the U.K. and Europe. In the fourth quarter, ILIM was formally appointed to manage assets for a significant global exchange traded funds (ETF) provider for its EU business.

Setanta Asset Management, a subsidiary of Canada Life, manages assets for a number of institutional clients, both third-party institutions as well as for companies in the Lifeco group and has €9 billion of assets under management as at December 31, 2017.

The Company operates its Irish health insurance business under the Irish Life Health brand, where it has a top three position with 21% market share.

Germany

Canada Life has established a leading position among providers of unit-linked products to the German independent intermediary market. This market remains competitive as more companies enter the market due to the projected strong growth over the coming years. Throughout this period of increased competition, the Company has increased market share and maintained a top three position in this segment of the market through continuous product, technology and service improvements. Sales of unit linked products grew by 4% in 2017, and are over 85% higher than 2014 levels. The market for traditional German insurance products has been challenging following the introduction of Solvency II in 2016 and the reductions in the statutory guaranteed interest rate on these products. This new environment continues to create growth opportunities for Canada Life and its unit-linked products.

Reinsurance

In the U.S. life reinsurance market, the demand for capital relief remains strong because of continuing conservative reserving requirements on term and universal life insurance products. Several competitors are now focusing on growing their share of this market, which increased competition for this business. However, an independent industry survey released in November 2017 confirmed that the Company remains one of the top two providers of capital relief solutions in the U.S. market.

The Company has also had success in traditional life reinsurance as the number of remaining life reinsurers is declining due to consolidation and client value diversification of reinsurers. The Company's financial strength and ability to offer both capital solutions and traditional mortality reinsurance continues to be a competitive advantage.

In Europe, Solvency II dominates the regulatory landscape and interest in capital relief transactions that produce capital benefits under the new regime continues to grow. Demand for longevity reinsurance remains very strong in the U.K. and some continental European countries. As a result, there are now more reinsurers participating in this market, but even so, demand for longevity coverage continues to exceed supply.

Selected consolidated financial information - Europe

	For the three months ended			For the twelve months ended	
	Dec. 31 2017	Sept. 30 2017[2]	Dec. 31 2016	**Dec. 31 2017**	Dec. 31 2016
Premiums and deposits	**$ 11,660**	$ 8,820	$ 8,714	**$ 38,155**	$ 33,178
Fee and other income	**368**	348	340	**1,386**	1,296
Net earnings - common shareholders	**358**	184	307	**1,152**	1,200
Adjusted net earnings - common shareholders[3]	**308**	185	307	**1,121**	1,215
Total assets[2]	**$ 174,015**	$ 165,595	$ 159,145		
Proprietary mutual funds and institutional net assets	**39,521**	37,000	33,664		
Total assets under management	**213,536**	202,595	192,809		
Other assets under administration	**41,945**	39,413	38,952		
Total assets under administration[1]	**$ 255,481**	$ 242,008	$ 231,761		

(1) At December 31, 2017, total assets under administration excludes $8.2 billion of assets managed for other business units within the Lifeco group of companies ($7.9 billion at September 30, 2017 and $7.9 billion at December 31, 2016).
(2) Comparative figures have been reclassified as described in note 2 and note 34 to the Company's December 31, 2017 annual consolidated financial statements.
(3) Adjusted net earnings attributable to common shareholders is a non-IFRS measure of earnings performance. Adjustments are detailed in footnote 6 to the Selected Consolidated Financial Information table of this MD&A.

Net earnings - common shareholders

	For the three months ended			For the twelve months ended	
	Dec. 31 2017	Sept. 30 2017	Dec. 31 2016	**Dec. 31 2017**	Dec. 31 2016
Insurance & Annuities	**$ 250**	$ 233	$ 225	**$ 947**	$ 927
Reinsurance	**67**	(41)	86	**190**	277
Europe Corporate	**41**	(8)	(4)	**15**	(4)
Net earnings - common shareholders	**$ 358**	$ 184	$ 307	**$ 1,152**	$ 1,200
Adjustments					
Restructuring costs	**4**	1	—	**23**	15
U.S. tax reform impact	**(54)**	—	—	**(54)**	—
Adjusted net earnings - common shareholders[1]	**$ 308**	$ 185	$ 307	**$ 1,121**	$ 1,215

(1) Adjusted net earnings attributable to common shareholders is a non-IFRS measure of earnings performance. Adjustments are detailed in footnote 6 to the Selected Consolidated Financial Information table of this MD&A.

2017 DEVELOPMENTS

- Some market volatility continues following the U.K.'s formal notification in March 2017 of its intention to leave the European Union (EU). The most notable impact following the Brexit vote in June 2016 on the Company's financial results has been the weakening of the British pound. The average currency translation rate for the Company's British pound net earnings have declined by 9% from the second quarter of 2016 to the fourth quarter of 2017. The Company will continue to work closely with customers, business partners and regulators over the next few years as the U.K. and the EU negotiate and agree on their new relationship. The Company's other European businesses may also see some impacts arising from the market uncertainty in Europe continuing from Brexit, but the impacts are not currently expected to be significant.

- On February 8, 2017, Irish Life Assurance plc, a subsidiary of the Company, redeemed its 5.25% €200 million subordinated debenture notes at their principal amount together with accrued interest.
- In March 2017, the Company completed the sale of its 30.43% ownership of Allianz Ireland to a subsidiary of Allianz SE. The sale was approved by the shareholders of Allianz Irish Life Holdings plc and sanctioned by the High Court in Ireland. Consideration received for the sale was €145 million and resulted in a €15 million gain on disposal.
- On August 24, 2017, the Company, through its wholly-owned subsidiary The Canada Life Group (U.K.) Limited, reached an agreement to acquire U.K. financial services provider Retirement Advantage. Retirement Advantage has over 30,000 pension and equity release customers, and more than £2 billion of assets under management including a £1.5 billion block of in-force annuities (as of June 30, 2017). The transaction was completed on January 2, 2018. The transaction is expected to be earnings accretive, although it is not expected to have a material impact on the Company's financial results.
- The Company, through its subsidiary London Reinsurance Group Inc., offers property catastrophe coverage to reinsurance companies and as a result the Company is exposed to claims arising from major weather events and other catastrophic events. The 2017 Atlantic hurricane season was active and a number of storms made landfall, leading to a high level of insured losses. Included in the Company’s net earnings for the third quarter of 2017 are losses of $175 million after-tax relating to estimated claims net of reinstatement premiums on these coverages. The Company’s loss estimate is based on currently available information and the exercise of judgment. The Company’s loss estimate may change as additional information becomes available.
- *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 discussed in the "Income Tax" section of this MD&A. As a result of this U.S. tax reform, the Company revalued certain deferred tax balances and insurance contract liabilities. For the Europe segment, the impact of these items on net earnings was a positive $54 million.
- In the fourth quarter of 2017, the Company achieved an additional €7 million pre-tax of annualized synergies relating to the integration of the Irish Life Health operations for a total of €17 million pre-tax achieved to date slightly exceeding the target of €16 million. The integration of Aviva Health Insurance Ireland Limited (Aviva) and the GloHealth Financial Services Limited (GloHealth) has now completed.
- The Company completed its efforts relating to the Irish Life business strategy to support growth in the retail division and achieved its target of €8 million pre-tax in annualized cost reductions within the Irish Life retail division in 2017.
- During the fourth quarter of 2017, Irish Life entered into its largest ever bulk payout annuity transaction which resulted in over €300 million in additional sales.
- The Irish Life retail division in 2017 achieved its highest ever customer satisfaction score, 87%, and entered the top quartile of companies for customer satisfaction based on a league table of over 700 companies across all business sectors in Ireland and the U.K.
- During the fourth quarter of 2017, the Company received a number of awards:
    - Canada Life achieved ‘5 stars’ in the 2017 Financial Adviser Service Awards in both the 'Life and Pensions' and 'Investments Providers and Packagers' categories for the second successive year.
    - Irish Life Investment Managers were winners of the Property Investment Fund Manager award at the KPMG Irish Independent Property Industry Excellence Awards and Investment Manager of the Year and Equities Manager of the Year at the Irish Pensions Awards 2017.
    - The Marketing Institute of Ireland awarded Irish Life Health the 2017 Integrated Marketing Award in recognition of their brand launch campaign.

BUSINESS UNITS – EUROPE

INSURANCE & ANNUITIES

OPERATING RESULTS

	For the three months ended			For the twelve months ended	
	Dec. 31 2017	Sept. 30 2017	Dec. 31 2016	**Dec. 31 2017**	Dec. 31 2016
Premiums and deposits[(1)]	**$ 8,665**	$ 5,983	$ 4,984	**$ 25,426**	$ 22,276
Sales[(1)]	**7,325**	5,362	4,410	**21,938**	19,179
Fee and other income	**361**	344	333	**1,366**	1,276
Net earnings	**250**	233	225	**947**	927

(1) For the three and twelve months ended December 31, 2017, premiums and deposits and sales exclude $0.1 billion and $0.6 billion, respectively, of assets managed for other business units within the Lifeco group of companies ($0.2 billion for the three months ended September 30, 2017, $0.4 billion for the three months ended December 31, 2016 and $7.5 billion for the twelve months ended December 31, 2016).

Premiums and deposits

Premiums and deposits for the fourth quarter of 2017 increased by $3.7 billion to $8.7 billion compared to the same quarter last year, primarily due to higher sales in fund management and pensions and a large bulk payout annuity sale in Ireland, higher wealth management sales in the U.K. and the impact of currency movement.

For the twelve months ended December 31, 2017, premiums and deposits were $25.4 billion compared to $22.3 billion for the same period last year, primarily due to higher bulk payout annuity and wealth management sales in the U.K. and higher pension and bulk payout annuity sales in Ireland, partially offset by the impact of currency movement.

Premiums and deposits for the fourth quarter of 2017 increased by $2.7 billion compared to the previous quarter, primarily due to higher sales in fund management and pensions and a large bulk payout annuity sale in Ireland, higher wealth management sales in the U.K., higher pension sales in Germany as well as the impact of currency movement.

Sales

Sales for the fourth quarter of 2017 increased by $2.9 billion to $7.3 billion compared to the same quarter last year and by $2.0 billion from the previous quarter, primarily due to the same reasons discussed for premiums and deposits for the respective periods.

For the twelve months ended December 31, 2017, sales increased by $2.8 billion to $21.9 billion compared to the same period last year primarily due to the same reasons discussed for premiums and deposits for the same period.

Fee and other income

Fee and other income for the fourth quarter of 2017 increased by $28 million to $361 million compared to the same quarter last year, primarily due to higher other income in Ireland, which can be highly variable from quarter to quarter, as well as from higher asset management fees in Ireland and Germany.

For the twelve months ended December 31, 2017, fee and other income increased by $90 million to $1,366 million compared to the same period last year. The increase was primarily due to higher asset management fees in Ireland and Germany as well as higher other income in Ireland due to the full year contribution of fee income in 2017 from the Aviva and GloHealth acquisitions in the third quarter of 2016, partially offset by the impact of currency movement and lower surrender fees in the U.K.

Fee and other income for fourth quarter of 2017 increased by $17 million compared to the previous quarter, primarily due to the same reasons discussed for the in-quarter results.

Net earnings
Net earnings for the fourth quarter of 2017 increased by $25 million to $250 million compared to the same quarter last year. The increase was primarily due to favourable morbidity experience in Ireland, the impact of changes to certain tax estimates and the impact of currency movements, partially offset by lower contributions from investment experience and insurance contract liability basis changes and unfavourable morbidity experience in the U.K.

Net earnings for the twelve months ended December 31, 2017 increased by $20 million to $947 million compared to the same period last year. The increase was primarily due to the impact of higher new business volumes, contributions from investment experience, a gain on the sale of the Company's Allianz Ireland holdings and the impact of changes to certain tax estimates, partially offset by lower contributions from insurance contract liability basis changes and the impact of currency movements.

Net earnings for the fourth quarter of 2017 increased by $17 million compared to the previous quarter, primarily due to higher contributions from investment experience, higher new business volumes, the impact of changes to certain tax estimates and the impact of currency movements, partially offset by lower contributions from insurance contract liability basis changes.

OUTLOOK – INSURANCE & ANNUITIES
Refer to Cautionary Note regarding Forward-looking Information and Cautionary Note regarding non-IFRS Financial Measures at the beginning of this document.

United Kingdom – The outlook for the payout annuities market in 2018 is for modest growth. Since April 2015, when changes to the U.K. budget became effective, individuals with defined contribution pensions have had greater flexibility for accessing their savings in retirement. As expected, some individuals have chosen to remain invested in the market while drawing a pension income rather than buying a payout annuity and the Company expects that the attractiveness of this guaranteed income will remain a key part of customers' retirement planning in the future. In the future, the Company sees the opportunity to grow its payout annuity business in line with the expected growth in the overall retirement market. The Company will look to further develop its presence in the bulk annuity market, where trustees want to insure pension annuities in payment. The Retirement Advantage acquisition in early 2018 creates a strong platform for growth in the U.K.'s growing equity release and retirement income markets. The Company will also continue to develop products for individuals who require additional pension flexibility. The overall size of the retirement market continues to grow as more employers transition from defined benefit to defined contribution pension plans.

Canada Life continues to be a key player in the single premium investment bond marketplace. It will continue to develop a presence in both the international and onshore market segments. The Company's distribution strategy for onshore will remain focused on IFAs. In the international wealth management segment, the outlook for 2018 is cautiously optimistic with an expectation that the market will continue to grow. The majority of the Company's business growth is expected to be through discretionary fund management wealth advisors, the retail market and through tax and estate planning products.

The outlook for the group risk operation remains positive and has benefited from additional risk benefits as a result of the U.K. Government's Pensions Auto Enrolment initiative in the workplace, which commenced October 2012 and will be complete in 2018. Larger Canada Life plans have grown, as the pension legislation increased the membership of the associated group plans. The Company expects the expansion of the existing customer base experienced in recent years will moderate as larger employers have implemented the changes required by the legislation. The Company's group operations will continue to maintain pricing discipline, reflecting the current low interest rate environment.

The Company has seen market volatility as a result of the Brexit vote, although this benefited the U.K. stock market 2017, which ended the year at higher levels. It is anticipated that the current conditions will continue until further clarity is provided as to the details of the exit process and the respective negotiating positions become clearer. This uncertainty is expected to continue throughout 2018.

***Ireland* –** The Irish economy continues to perform strongly with projected economic growth rates in 2018 of 4.2%. The uncertainty surrounding the impact that Brexit could have on Ireland together with the relatively significant rebound in the domestic market, are key risk in the medium term.

Domestic sources and household spending continue to be the source of growth. The labour market continues to expand with sustained job growth across sectors and regions, with the unemployment rate expected to average 5.4% during 2018 (down from a high of 15% in 2012). Consumer sentiment index remains positive but cautious, and has fallen slightly from a September 2017 high. The favourable forecast in household consumption and declining unemployment is expected to influence retention and new business measures for the Company's Irish businesses. Irish Life is looking to maintain market share and to improve profitability across its retail, corporate, health and investment management businesses following its multi-channel distribution strategy but continually faces the challenges of operating in a competitive market. The establishment of an Irish innovation centre, to embed collaborative and agile methodologies of high growth into the business, is expected to challenge existing and design new business processes and customer offerings.

***Germany* –** The outlook for the German business continues to be positive and the Company expects continued growth in assets under management in 2018. In 2018, the Company expects to continue to grow its share of the market for unit-linked products, as the market for traditional fixed interest guaranteed products declines, due to lower interest rates and increasing costs of guarantees. The Company is positioning itself to further strengthen its presence in the unit-linked market through continued investments in product development, distribution technology and service improvements. Sales of protection products continued to grow in 2017, with sales up 6% from 2016 levels and over 75% from 2014 levels.

Across all European entities, European Insurance and Occupational Pensions Authority (EIOPA) consultation on Solvency II calibrations could lead to change in capital ratios, if approved.

REINSURANCE

OPERATING RESULTS

	For the three months ended			For the twelve months ended	
	Dec. 31 2017	Sept. 30 2017	Dec. 31 2016	**Dec. 31 2017**	Dec. 31 2016
Premiums and deposits	**$ 2,995**	$ 2,837	$ 3,730	**$ 12,729**	$ 10,902
Fee and other income	**7**	4	7	**20**	20
Net earnings	**67**	(41)	86	**190**	277

Premiums and deposits

Reinsurance premiums can vary significantly from period to period depending on the terms of underlying treaties. For certain life reinsurance transactions, premiums will vary based on the form of the transaction. Treaties where insurance contract liabilities are assumed on a proportionate basis will typically have significantly higher premiums than treaties where claims are not incurred by the reinsurer until a threshold is exceeded. Earnings are not directly correlated to premiums received.

Premiums and deposits for the fourth quarter of 2017 were $3.0 billion compared to $3.7 billion for the same quarter last year. The decrease was primarily due to lower volumes relating to existing business, restructured reinsurance agreements and currency movements.

For the twelve months ended December 31, 2017, premiums and deposits increased by $1.8 billion to $12.7 billion compared to the same period last year. The increase was primarily due to new reinsurance agreements and higher volumes relating to existing business.

Premiums and deposits for the fourth quarter of 2017 were $3.0 billion compared to $2.8 billion for the previous quarter. The increase was primarily due to volume on existing business and currency movements.

Fee and other income

Fee and other income for the fourth quarter of 2017 of $7 million was comparable to the same period last year.

For the twelve months ended December 31, 2017, fee and other income was comparable to the previous period.

Fee and other income for the fourth quarter of 2017 increased by $3 million driven by new business and volumes on existing business.

Net earnings

Net earnings for the fourth quarter of 2017 decreased by $19 million to $67 million compared to the same quarter last year. The decrease was primarily due to less favourable morbidity experience, lower impacts from new business gains, partially offset by favourable contributions from insurance contract liability basis changes.

For the twelve months ended December 31, 2017, net earnings decreased by $87 million to $190 million compared to the same period last year. Included in this result is a loss of $175 million for estimated claims resulting from the impact of in-year hurricanes. Excluding this estimated loss, net earnings were $365 million, an increase of $88 million over the same period last year, primarily due to favourable experience in the life and annuity business, higher impacts from new business gains and the favourable impact of changes to certain tax estimates, partially offset by lower contributions of insurance contract liability basis changes and less favourable morbidity experience.

Net earnings for the fourth quarter of 2017 increased by $108 million compared to the previous quarter. Excluding the loss estimate discussed for the year-to-date results, net earnings decreased $67 million over the previous quarter. The decrease was primarily due to lower new business gains, less favourable mortality experience in the traditional life segment and less favourable changes to certain tax estimates, partially offset by higher contributions from insurance contract liability basis changes.

OUTLOOK – REINSURANCE

Refer to Cautionary Note regarding Forward-looking Information and Cautionary Note regarding non-IFRS Financial Measures at the beginning of this document.

The U.S. life reinsurance industry is focused on accessing certain demographics, including the low to middle income families market. If the industry is successful, this could create renewed growth, otherwise expected sales and volume will remain stable. The current Presidential Administration in the U.S. has signaled the desire to repeal and replace the Affordable Care Act. At this point, the Company cannot determine what the impact may be on the health reinsurance market. Effective in 2017, new U.S. regulatory rules (Principle-Based Reserving) affecting the calculation of statutory reserves were issued. These rules are to be implemented by 2020. The U.S. tax reform enacted by the current Administration could cause changes to the industry that are hard to assess at the moment.

In Europe, Solvency II is expected to continue to be the main driver of the business in 2018 and beyond. The Company's reinsurance operation is prepared to help European clients and other affiliated companies meet the capital challenges and business opportunities arising from these regulatory changes. EIOPA's current consultation on Solvency II calibrations, if approved, could provide further opportunities.

The 2017 Atlantic hurricane season was extremely active with a number of storms making landfall, leading to a high level of insured losses. As a result, the Company expects the softening of market pricing to reverse and there will be increases in prices in 2018. Hedge fund capacity, collateralized covers and catastrophe bond issuance are expected to continue to grow in 2018. The primary focus for 2018 will be to continue to move further away from exposed risk, continue to utilize the most recent U.S. modeling updates and manage geographic exposures with an expected increase in risk adjusted premiums.

EUROPE CORPORATE

The Europe Corporate account includes financing charges and the impact of certain non-continuing items as well as the results for the legacy international businesses.

Net earnings for the fourth quarter of 2017 increased by $45 million to $41 million compared to the same quarter last year. Net earnings for the fourth quarter of 2017, included the impact of U.S. tax reform which was a net positive of $54 million, primarily related to a reduction of deferred tax liabilities in the Reinsurance business unit. Excluding this item, net earnings decreased by $9 million, primarily due to restructuring costs of $4 million related to Irish Life Health and the Irish Life business strategy to support business growth in the retail division.

For the twelve months ended December 31, 2017, Europe Corporate had net earnings of $15 million compared to a net loss of $4 million for the same period last year. Excluding the impact of U.S. tax reform discussed for the in-quarter results, net earnings decreased by $35 million, primarily due to restructuring costs of $23 million related to Irish Life Health and the Irish Life business strategy to support business growth in the retail division, compared to restructuring costs of $15 million, primarily related to Irish Life Health, for the same period last year. Year-to-date results for Europe Corporate in 2016 also included a fair value gain of $24 million which resulted from the assumption of control of GloHealth.

Excluding the impact of U.S. tax reform discussed for the in-quarter results, the adjusted net earnings for the three months ended December 31, 2017 were $13 million compared to a net loss of $8 million in the previous quarter, primarily due to higher restructuring costs in the fourth quarter of 2017.

LIFECO CORPORATE OPERATING RESULTS

The Lifeco Corporate segment includes operating results for activities of Lifeco that are not associated with the major business units of the Company.

The net loss for the three months ended December 31, 2017 of $6 million decreased from a net loss of $12 million for the same quarter last year, primarily due to higher net investment income and lower operating expenses, partially offset by higher preferred share dividend payments.

For the twelve months ended December 31, 2017, the net loss of $27 million was comparable to the previous period.

The net loss for the three months ended December 31, 2017 of $6 million decreased from a net loss of $9 million for the previous quarter, primarily due to higher net investment income, lower operating expenses and lower preferred share dividend payments, partially offset by higher income taxes.

RISK MANAGEMENT

OVERVIEW

As a diverse financial services company, the effective management of risk is integral to the success of the Company's business. The Company has a prudent and measured approach to risk management. This approach is built on a strong risk culture and is guided by an integrated Enterprise Risk Management (ERM) Framework.

The Company's ERM Framework facilitates the alignment of business strategy with risk appetite, informs and improves the deployment of capital; and supports the identification, mitigation and management of exposure to possible operational surprises, losses and risks. The Company's Risk Function is responsible for the Risk Appetite Framework (RAF), the supporting risk policies and risk limit structure, and provides independent risk oversight across the Company's operations.

There are three main sections to this Risk Management disclosure: ERM Framework, Risk Management and Control Practices and Exposures and Sensitivities.

ENTERPRISE RISK MANAGEMENT FRAMEWORK

The Company's Board and Management Committees provide oversight of the ERM Framework which is comprised of five components: Risk Culture, Risk Governance, Risk Appetite Framework, Risk Processes and Risk Infrastructure.

RISK CULTURE

Risk culture is defined as the system of values and behaviours which reflect the Company's collective sense of responsibility to fulfill promises to policyholders and safeguard the Company's financial strength and reputation while growing shareholder value. The risk strategy emphasizes the Company's strong culture of managing risk, which is strengthened by the role of the Board of Directors and senior management. This reflects the Company's commitment to placing the interests of its customers and the long-term strength of the Company at the centre of decision-making.

The Company's culture emphasizes open communication, transparency and ethical behaviour.

RISK GOVERNANCE

Board of Directors

The Board of Directors is ultimately responsible for the Company's risk governance and associated risk policies and annually approves the ERM Policy, RAF and Own Risk and Solvency Assessment (ORSA). The Board considers advice from the Risk Committee of the Board of Directors on risk oversight matters.

The Board of Directors addresses risk management and governance primarily through its Risk Committee, although other Board Committees also have responsibilities in connection with risk management. The Risk Committee's responsibilities include:

- Review and oversight of the ERM Policy and RAF;
- Review, approval and oversight of the credit, market, insurance, operational and other key risk policies;
- Approval of the risk limit framework, associated risk limits and monitoring adherence to those limits;
- Approval of the organizational structure and resources of the risk management oversight function;
- Evaluation of the Company's risk culture;
- Discussion of the risks in aggregate and by type of risk;
- Review of the Risk Function reports including stress testing and Dynamic Capital Adequacy Testing (DCAT);
- Review of the Own Risk and Solvency Assessment (ORSA);
- Review of the risk impact of business strategies, capital plans, financial plans and the new business initiatives;
- Review and assessment of the performance and compensation of the Company's Chief Risk Officer (CRO) and provision of input on succession planning;
- Periodic consideration and input regarding the relationships between risk and compensation; and
- Review and assessment of the effectiveness of risk management across the Company including processes to ensure effective identification, measurement, management, monitoring and reporting on significant current and emerging risks.

The Risk Committee is required to meet, at least annually, with the Audit Committee and with the Company's Chief Internal Auditor. Members of the Board Risk Committee are independent of management.

The mandate of the Board, which it discharges directly or through one of its Committees, is to supervise the management of the business and affairs of the Company.

Audit Committee - The primary mandate of the Audit Committee is to review the financial statements of the Company and public disclosure documents containing financial information and to report on such review to the Board, to be satisfied that adequate procedures are in place for the review of the Company's public disclosure documents that contain financial information and to oversee the work and review the independence of the external auditor. The Audit Committee meets with the Risk Committee annually.

Conduct Review Committee - The primary mandate of the Conduct Review Committee is to require management to establish satisfactory procedures for the consideration and approval of transactions with related parties and to review and, if deemed appropriate, to approve related party transactions, and to recommend to the Board a code of conduct applicable to directors, officers and employees of the Company.

Executive Committee - The primary mandate of the Executive Committee is to approve strategic goals and objectives for the Company, to review and approve, and to monitor the implementation of, the Company's annual business, financial and capital plans, to review the risks associated with the Company's diverse businesses, to approve disclosure policies, and to supervise the management of the business and affairs of the Company when the Board is not in session.

Governance and Nominating Committee - The primary mandate of the Governance and Nominating Committee is to oversee the Company's approach to governance matters, to recommend to the Board effective corporate governance policies and processes, to assess the effectiveness of the Board of Directors, of Committees of the Board and of the Directors, and to recommend to the Board candidates for election as directors and candidates for appointment to Board Committees.

Human Resources Committee - The primary mandate of the Human Resources Committee is to support the Board in its oversight of compensation, talent management and succession planning. This includes the responsibility to approve compensation policies, to review the designs of major compensation programs, to approve compensation arrangements for senior executives of the Company and to recommend to the Board compensation arrangements for the Directors and for the President and Chief Executive Officer. The mandate also includes the responsibility to review succession plans for the President and Chief Executive Officer and other senior executives, to review talent management programs and initiatives and to review the leadership capabilities required to support the advancement of the Company's strategic objectives. The Human Resources Committee meets with the Risk Committee annually.

Investment Committee - The primary mandate of the Investment Committee is to oversee the Company's global investment strategy and activities, including reviewing and approving the Company's investment policy and related investment procedures, guidelines and limits. It also monitors the Company's compliance with the investment policy and ensures that it aligns with the Company's ERM Policy and RAF. The mandate also includes reviewing, approving and monitoring progress against the Company's annual investment plan, reviewing and approving the authority, mandate and effectiveness of the Company's Chief Investment Officer, and reviewing emerging risks, market trends and performance, investment regulatory issues and any other matters relevant to the oversight of the Company's global investment function.

Senior Management Risk Committees

The Executive Risk Management Committee (ERMC) is the primary senior management committee that oversees all forms of risk and the implementation of the ERM Framework. The members are the CEO, the heads of each major Business Segment and the heads of the key oversight functions. The Board Risk Committee delegates authority for the approval and management of lower level risk limits to the ERMC. The Company's Chief Risk Officer (CRO) leads the Risk Function and chairs the ERMC. Its responsibilities include reviewing compliance with the RAF, risk policies and risk standards. It also assesses the risk impact of business strategies, capital and financial plans, and material initiatives. The following four enterprise-wide sub-committees, chaired by the Risk Function, report into the ERMC to provide advice and recommendations on each of the key risk categories:

- Market Risk Committee
- Credit Risk Management Committee
- Insurance Risk Committee
- Operational Risk Committee

The oversight responsibilities of the above committees include identification, measurement, management, monitoring and reporting of their respective risks.

Accountabilities
The Company has adopted a three lines of defense model in order to clearly segregate risk management and risk oversight responsibilities and applies the ERM Framework rigorously across the enterprise:

- **First Line:** Business units and support functions, including Investment Management, Human Resources, Information Services and Legal, have primary responsibility for identifying and managing the risks inherent in the products, activities, processes and systems for which they are accountable;
- **Second Line:** The Risk Function has overall responsibility for independent risk oversight and governance through developing and implementing the ERM framework. In this role, the Risk Function receives support from other control functions including Actuarial, Compliance and Finance; and
- **Third Line:** Internal Audit is responsible for independently assessing the adequacy of the design and operational effectiveness of the Company's ERM Framework.

The Company's CRO reports directly, both to the President and CEO and to the Board Risk Committee. The CRO is responsible for ensuring that the Risk Function is appropriately resourced and effective in executing its responsibilities. The accountabilities of the CRO include reporting on compliance with the ERM Policy and RAF as well as for escalating matters that require attention.

Regional ERMCs monitor all risk categories for businesses and operations within their respective business segments. Risk resources and capabilities are aligned with the Company's business segments and operating units. Further support is provided by centrally based risk areas of expertise.

RISK APPETITE FRAMEWORK
The Company has an articulated Risk Appetite Framework (RAF) that includes a risk strategy and a qualitative Risk Appetite Statement that reflects the aggregate levels and types of risk that the Company is willing to accept in order to achieve its business objectives. The Company's Risk Appetite Statement has four key components:

- **Strong Capital Position**: the Company maintains a strong balance sheet and does not take risks that would jeopardize its financial strength;
- **Mitigated Earnings Volatility**: the Company seeks to avoid substantial earnings shortfalls by ensuring appropriate diversification and limiting exposure to more volatile lines of business;
- **Strong Liquidity**: the Company maintains a high quality, diversified investment portfolio with sufficient liquidity to meet the demands of policyholder and financing obligations under normal and stressed conditions; and
- **Maintenance of the Company's Reputation:** the Company considers, across all business activities and operations, the potential impact on its reputation.

A comprehensive structure of risk limits and controls is in place across the Company. Enterprise risk limits are further broken down by business unit and risk type. The limit structure is accompanied by comprehensive limit approval and breach management processes to ensure effective governance and oversight of the RAF.

The Company and its subsidiaries are subject to various regulatory regimes. The capital requirements under these regulatory capital regimes are reflected in the development of risk limits.

RISK STRATEGY
The Company's business strategy is aligned with its risk strategy and risk appetite. The risk strategy supports the Company's main objectives to keep its commitments while growing shareholder value. The risk strategy requires: diversification of products and services, customers, distribution channels and geographies; a prudent and measured approach to risk-taking; conducting business with high standards of integrity; and generating consistent returns.

RISK PROCESSES
Risk processes follow a cycle of: identification, measurement, management, monitoring and reporting and are designed to ensure both current and emerging risks are assessed against the RAF.

Risk Identification, Measurement and Management
Risk identification requires the structured analysis of the current and emerging risks facing the Company, so that they are understood and appropriately controlled. Processes are designed to ensure risks are considered, assessed, prioritized and addressed in all business initiatives and changes, including investment strategies, product design, significant transactions, annual planning and budgeting as well as potential business acquisitions and disposals.

Risk measurement provides the means to quantify and assess the Company's risk profile and monitor the profile against the risk limits. Any material new business development or change in strategy warrants an independent assessment of risk and potential impact on reputation, in addition to measurement of the impact on capital, earnings and liquidity. Stress and scenario testing is used to evaluate risk exposures against the risk appetite. Sensitivity testing of key risks is used to evaluate the impact of risk exposures independent of other risks. Scenario testing is used to evaluate the combined impact of multiple risk exposures.

The Company has processes in place to identify risk exposures on an ongoing basis and, where appropriate, develops mitigation strategies to proactively manage these risks. Effective risk management requires the selection and implementation of approaches to accept, reject, transfer, avoid or control risk, including mitigation plans. It is based on a control framework that includes risk limits, key risk indicators and stress and scenario testing to ensure appropriate escalation and resolution of potential issues in a timely manner.

A key responsibility of the Risk Function is to ensure that the risk appetite is applied consistently across the Company and that limits are established to ensure that risk exposures comply with the risk appetite and Company-wide risk policies.

Risk Monitoring, Reporting and Escalation
Risk monitoring relates to ongoing oversight and tracking of the Company's risk exposures, ensuring that the risk management approaches in place remain effective. Monitoring may also identify risk-taking opportunities.

Risk reporting presents an accurate and timely picture of existing and emerging risk issues and exposures as well as their potential impact on business activities. Reporting highlights the risk profile relative to the risk appetite and associated risk limits.

A clearly defined escalation protocol has been established in respect of breaches of the RAF, risk policies, operating standards and guidelines. Remediation plans are reviewed by the Risk Function and escalated to designated management and Board committees.

RISK INFRASTRUCTURE
The Company's organization and infrastructure is established to ensure resources and risk systems required to support risk policies, operating standards and guidelines and processes are adequate and appropriate.

The Company has codified its procedures and operations related to risk management and oversight requirements in a set of guiding documents composed of risk policies, operating standards and associated guidelines. This comprehensive documentation framework provides detailed and effective guidance across all risk management processes. These documents enable a consistent approach to risk management and oversight across the Company's businesses and are reviewed and approved regularly, in accordance with an established authority hierarchy, by the Board of Directors, the Board Risk Committee or a senior management committee. Similar policy structures have been developed and are maintained by each region.

RISK MANAGEMENT AND CONTROL PRACTICES

The Company's risk profile is impacted by a variety of risks and its risk management and independent oversight processes are tailored to the type, volatility and magnitude of each risk. The Company has defined specific risk management and oversight processes for risks, broadly grouped in the following categories:

1. Market and Liquidity Risk
2. Credit Risk
3. Insurance Risk
4. Operational Risk
5. Conduct Risk
6. Strategic Risk

MARKET AND LIQUIDITY RISK

Risk Description

Market risk is the risk of loss arising from potential changes in market rates and prices and from changes associated with future cash flows of the Company's business activities. Market risks include interest rate, equity market, real estate and foreign exchange rate risks. Liquidity risk is the risk that the Company cannot meet cash and collateral commitments as they fall due.

Market and Liquidity Risk Management

The Company's Market Risk Policy sets out the market risk management framework and provides the principles for market risk management. This policy is supported by a number of other policies and guidelines that provide detailed guidance.

An effective governance structure has been implemented for the management of market risk. The business units, including Investment Management, are the ultimate owners of market risk and as such have primary responsibility for the identification, measurement, management, monitoring and reporting of market risk. The Company has established a senior management committee to provide oversight of market risk, which includes completing reviews and making recommendations regarding risk limits, the risk policy and associated compliance, breach management and mitigation pertaining to market risk. Each region has established oversight committees and operating committees to help manage market risk within the region. The Company has developed risk limits, key risk indicators and measures to support the management of market and liquidity risk in compliance with the Company's RAF.

The Company is willing to accept market risk and liquidity risk in certain circumstances as a consequence of its business model and seeks to mitigate the risk wherever practical, for example through the immunization of the assets and liabilities, either directly or indirectly (e.g. using derivatives). To reduce market risk, the Company uses a dynamic hedging program associated with segregated fund and variable annuity guarantees. This is supplemented by a general macro equity hedging program.

Risks and risk management activities associated with the broad market and liquidity risk categories are detailed below.

Interest Rate Risk

Interest rate and spread risk is the risk of loss resulting from the effect of the volatility and uncertainty of future interest rates and credit spreads on asset cash flows relative to liability cash flows and on assets backing surplus. The Company's principal exposure to interest rate risk arises from certain general fund and segregated fund products. The Company's Asset Liability Management (ALM) strategy has been designed to mitigate interest rate risks associated with general fund products, with close matching of asset cash flows and insurance and investment contract obligations. Products with similar risk characteristics are grouped together to ensure an effective aggregation and management of the Company's ALM positions. Asset portfolios backing liabilities are segmented to align with the duration and other characteristics (e.g. liquidity) of contract liabilities.

Crediting rates within general fund products are set prudently and a significant proportion of the Company's portfolio of crediting rate products includes pass-through features, which allow for the risk and returns to be shared with policyholders. Asset management and related products permit redemptions; however, the Company attempts to mitigate this risk by establishing long-term customer relationships, built on a strategic customer focus and an emphasis on delivering strong fund performance.

The Company has established dynamic hedging programs to hedge interest rate risk sensitivity associated with segregated fund and variable annuity guarantees. The hedging programs are designed to offset changes in the economic value of liabilities through the use of derivative instruments. The Company's approach to dynamic hedging of interest rate risk principally involves transacting in interest rate swaps. The hedge asset portfolios are dynamically rebalanced within approved thresholds and rebalancing criteria.

Where the Company's insurance and investment products have benefit or expense payments that are dependent on inflation (e.g. inflation-indexed annuities, pensions and disability claims), the Company generally invests in real return instruments to mitigate changes in the real dollar liability cash flows. Some protection against changes in the inflation index can be achieved, as any related change in the fair value of the assets will be largely offset by a similar change in the fair value of the liabilities.

Equity Risk

Equity risk is the risk of loss resulting from the sensitivity of the values of assets, liabilities, financial instruments and fee revenue to changes in the level or in the volatility of prices of equity markets. The Company's principal exposure to equity risk arises from segregated funds and fee income associated with the Company's assets under management. Approved investment and risk policies also provide for general fund investments in equity markets within defined limits.

The Company has established dynamic hedging programs to hedge equity risk sensitivity associated with segregated fund and variable annuity guarantees. The hedging programs are designed to mitigate exposure to changes in the economic value of these liabilities through the use of derivative instruments. The Company's approach to dynamic hedging of equity risk principally involves the short selling of equity index futures. The hedge asset portfolios are dynamically rebalanced within approved thresholds and rebalancing criteria. The Company's product-level hedging programs are supplemented by a general macro hedging strategy.

For certain very long-dated liabilities it is not practical or efficient to closely match liability cash flows with fixed-income investments. Certain long-dated asset portfolios therefore target an investment return sufficient to meet liability cash flows over the longer term. These segments are partially backed by a diversified portfolio of non-fixed income investments, including equity and real estate investments, in addition to long dated fixed-income instruments that provide duration.

The Company has established a macro equity hedging program. The objective of the program is to reduce the Company's exposure to equity tail-risk and to maintain overall capital sensitivity to equity market movements within Board approved risk appetite limits. The program is designed to hedge a portion of the Company's capital sensitivity due to movements in equity markets arising from sources outside of dynamically hedged segregated fund and variable annuity exposures.

Foreign Exchange Risk

Foreign exchange risk is the risk of loss due to changes in currency exchange rates. The Company's foreign exchange investment and risk management policies and practices are to match the currency of the Company's general fund investments with the currency of the underlying insurance and investment contract liabilities. To enhance portfolio diversification and improve asset liability matching, the Company may use foreign exchange derivatives to mitigate currency exchange risk to the extent this is practical through the use of forward contracts and swaps.

The Company has net investments in foreign operations. As a result, the Company's revenue, expenses and income denominated in currencies other than the Canadian dollar are subject to fluctuations due to the movement of the Canadian dollar against these currencies. Such fluctuations affect the Company's financial results. The Company has exposures to the U.S. dollar resulting from the operations of Great-West Financial and Putnam in the United States segment and the Reinsurance business unit within the Europe segment; and to the British pound and the euro resulting from operations of business units within the Europe segment operating in the U.K., the Isle of Man, Ireland and Germany.

In accordance with IFRS, foreign currency translation gains and losses from net investments in foreign operations, net of related hedging activities and tax effects, are recorded in accumulated other comprehensive income (loss). Strengthening or weakening of the Canadian dollar spot rate compared to the U.S. dollar, British pound and euro spot rates impacts the Company's total share capital and surplus. Correspondingly, the Company's book value per share and capital ratios monitored by rating agencies are also impacted.

- A 5% appreciation (depreciation) of the average exchange rate of the Canadian dollar to each of the British pound and euro would decrease (increase) net earnings in 2017 by $25 million and $39 million, respectively. A 5% appreciation (depreciation) of the average exchange rate of the Canadian dollar to the U.S. dollar would decrease (increase) net losses by $5 million.
- A 5% appreciation (depreciation) of the Canadian dollar spot rate compared to each of the U.S. dollar, British pound and euro spot rates would decrease (increase) the unrealized foreign currency translation losses, including the impact of instruments designated as hedges of net investments on foreign operations, in accumulated other comprehensive income (loss) of shareholders' equity by approximately $320 million, $310 million and $110 million, respectively, as at December 31, 2017.

Management may use forward foreign currency contracts and foreign denominated debt to mitigate the volatility arising from the movement of rates as they impact the translation of net investments in foreign operations. The Company uses non-IFRS financial measures such as constant currency calculations to assist in communicating the effect of currency translation fluctuation on financial results.

Liquidity Risk

Liquidity risk arises from the Company's inability to generate the necessary funds to meet its on-and-off balance sheet obligations as they come due.

The Company's liquidity risk framework and associated limits are designed to ensure that the Company can meet cash and collateral commitments as they fall due, both on an expected basis and under a severe liquidity stress.

In the normal course of certain Reinsurance business, the Company provides Letters of Credit (LOCs) to other parties, or beneficiaries. A beneficiary will typically hold a LOC as collateral in order to secure statutory credit for insurance and investment contract liabilities ceded to or amounts due from the Company.

The Company may be required to seek collateral alternatives if it is unable to renew existing LOCs at maturity. The Company monitors its use of LOCs on a regular basis and assesses the ongoing availability of these and alternative forms of operating credit. The Company has contractual rights to reduce the amount of LOCs issued to the LOC beneficiaries for certain reinsurance treaties. The Company staggers the maturities of LOCs to reduce the renewal risk.

Liquidity	December 31	
	2017	2016
Cash, cash equivalents and short-term bonds	**$ 7,309**	$ 7,874
Other liquid assets and marketable securities		
Government bonds	**36,566**	36,873
Corporate bonds	**44,573**	43,044
Common/Preferred shares (public)	**8,465**	7,989
Residential mortgages - insured	**4,205**	3,652
	$ 93,809	$ 91,558
Total	**$ 101,118**	$ 99,432

Cashable liability characteristics	December 31	
	2017	2016
Surrenderable insurance and investment contract liabilities		
At market value	**$ 19,886**	$ 20,369
At book value	**51,712**	49,751
Total	**$ 71,598**	$ 70,120

The carrying value of the Company's liquid assets and marketable securities is approximately $101.1 billion or 1.4 times the Company’s surrenderable insurance and investment contract liabilities. The Company believes that it holds adequate and appropriate liquid assets to meet anticipated cash flow requirements as well as to meet cash flow needs under a severe liquidity stress.

The majority of liquid assets and other marketable securities comprise fixed-income securities whose value is inversely related to interest rates. Consequently, a significant rise in prevailing interest rates would result in a decrease in the value of this pool of liquid assets. Also, a high interest rate environment may encourage holders of certain types of policies to terminate their policies, thereby placing demands on the Company's liquidity position.

For a further description of the Company's financial instrument risk management policies, refer to note 7 to the Company's annual consolidated financial statements for the period ended December 31, 2017.

CREDIT RISK

Risk Description

Credit risk is the risk of loss arising from an obligor’s potential inability or unwillingness to fully meet its contractual obligations. Exposure to credit risk occurs any time funds are extended, committed or invested through actual or implied contractual agreements. The Company is exposed to the credit risk of issuers of securities held in the Company’s general fund and pension plans (e.g. bonds, mortgages, structured securities), and to the credit risk of reinsurance and derivative counterparties.

Credit exposure resulting from the purchase of fixed-income securities, which are primarily used to support policyholder liabilities, is considered to be a core business risk that is appropriately factored into the Company’s risk appetite. The Company manages financial contracts with counterparties which may result in counterparty credit risk related to the mitigation of insurance risk, through reinsurance agreements, and market risk, through derivative contracts. Credit risk arising from both sources is included in the Company’s measurement of its credit risk profile.

Credit Risk Management
The Company's credit risk management framework focuses on minimizing undue concentration to issuers, connected companies, industries or individual geographies by emphasizing diversification. Diversification is achieved through the establishment of appropriate limits and transaction approval authority protocols. The Company's approach to credit risk management includes the continuous review of its existing risk profile relative to the RAF as well as to the projection of potential changes in the risk profile under stress scenarios.

Effective governance of credit risk management requires the involvement of dedicated senior management committees, experienced credit risk personnel, and with the guidance of appropriate credit risk policies, standards and processes. For credit risk, the Investment Committee of the Board of Directors (Investment Committee) is responsible for the approval of investment decisions of significant size or level of complexity, and oversight of the Company's global investment strategy, including compliance with investment limits and policies as well as breach management. Additionally, the Investment Committee reviews the Company's investment policies, procedures, guidelines, and corresponding limits to ensure that investment decisions are in compliance with the Company's RAF. The Risk Committee advises the Board of Directors on credit risk oversight matters and approves and monitors compliance with credit risk policies and limits. The Risk Committee also provides oversight of the Credit Risk Management Policy and related processes, and is responsible for ensuring compliance with the Company's RAF.

The Investment Committee and Risk Committee are supported by senior management committees. The Global Management Investment Review Committee (GMIRC) and the Management Investment Review Committees (MIRCs) for each regional business segment review and approve new investments above the transaction approval authority delegated to management and manage credit risk across invested assets and counterparties. The Credit Risk Management Committee (CRMC), is the ERMC sub-committee responsible for providing global oversight of credit risk management activities, including credit risk limit approval and breach management processes, and credit risk policy compliance.

The Company has established business-segment specific Investment and Lending Policies, including investment limits for each asset class, which are approved by the Investment Committee. These policies and limits are complemented by the Credit Risk Policy which describes credit risk management processes and identifies the role of the Risk Function in the oversight of credit risk, including the setting and monitoring of aggregate risk limits, and the approval and escalation of exceptions.

The Company identifies credit risk through an internal credit risk rating system which includes a detailed assessment of an obligor's creditworthiness based on a thorough and objective analysis of business risk, financial profile, structural considerations and security characteristics including seniority and covenants. Credit risk ratings are expressed using a 22-point scale that is consistent with those used by external rating agencies. In accordance with the Company's policies, internal credit risk ratings cannot be higher than the highest rating provided by certain independent ratings companies. The Risk Function reviews and approves the credit risk ratings assigned by Investment Management for all new investments, and reviews the appropriateness of ratings assigned to outstanding exposures.

The Risk Function assigns credit risk parameters (probabilities of default, rating transition rates, loss given defaults, exposures at default) to all credit exposures in order to measure the Company's aggregate credit risk profile. In addition, the Risk Function establishes limits and processes, performs stress and scenario testing (using stochastically generated and deterministic scenarios) and assesses compliance with the limits established in the RAF. It regularly reports on the Company's credit risk profile to executive management, the Board of Directors and various committees at enterprise, regional and legal entity levels.

Investment Management and the Risk Function are independently responsible for the monitoring of exposures relative to limits as well as for the management and escalation of risk limit breaches as they occur. The Investment Management Function is also responsible for the continuous monitoring of its portfolios for changes in credit outlook, and performs regular credit reviews of all relevant obligors and counterparties, based on a combination of bottom-up credit analysis and top-down views on the economy and assessment of industry and sub-sector outlooks. Watch Lists are also used at the regional business segment levels to plan and execute the relevant risk mitigation strategies.

The Risk Function oversees monitoring, breach management and escalation activities, and has developed risk limits, key risk indicators (KRIs) and risk budgets to act as early warnings against unacceptable levels of concentration and to support the management of credit risk limits in compliance with the Company's RAF.

Counterparty Risk

Through reinsurance arrangements, the Company cedes insurance risk in order to mitigate insurance risk. Counterparties providing reinsurance to the Company are reviewed for financial soundness as part of an ongoing monitoring process. The minimum financial strength of reinsurers is outlined in the Reinsurance Risk Management Policy. The Company seeks to minimize reinsurance credit risk by setting rating based limits on net ceded exposure by counterparty as well as seeking protection in the form of collateral or funds withheld arrangements where possible.

The Company uses derivatives for risk mitigation purposes. Derivative products are traded through exchanges or with counterparties approved by the Board of Directors or the Investment Committee. The Company seeks to mitigate derivative credit risk by setting rating based counterparty limits in its investment policies and through collateral arrangements where possible. In addition, the Company includes potential future exposure of derivatives in its measure of total exposure against single name limits.

INSURANCE RISK

Risk Description

Insurance risk is the risk of loss resulting from adverse changes in experience associated with contractual promises and obligations made under insurance contracts. Insurance risk includes uncertainties around the ultimate amount of net cash flows (premiums, commissions, claims, payouts and related settlement expenses), the timing of the receipt and payment of these cash flows, as well as the impact of policyholder behaviour (e.g. lapses).

The Company identifies six broad categories of insurance risk, which may contribute to financial losses: mortality risk, morbidity risk, longevity risk, lapse risk, expense risk and property catastrophe risk. Mortality risk, morbidity risk and longevity risk are core business risks and the exchange of these risks into value is a core business activity. Lapse risk and expense risk associated with offering the core products are accepted as a consequence of the business model and mitigated where appropriate. Property catastrophe risk is a selectively accepted business risk which is constrained, actively managed and controlled within risk limits.

Insurance Risk Management

Insurance products involve commitments by the insurer to provide services and financial obligations with coverage for extended periods of time. In order to provide insurance protection effectively, the insurer must design and price products so that the premiums received, and the investment income earned on those premiums, will be sufficient to pay future claims and expenses associated with the product. This requires the insurer, in pricing products and establishing insurance contract liabilities, to make assumptions regarding expected levels of income, claims and expenses and how policyholder behaviours and market risks might impact these assumptions. Insurance contract liability valuation requires regular updating of assumptions to reflect emerging experience. Insurance contract liabilities are established to fund future claims and include a provision for adverse deviation, set in accordance with professional actuarial standards.

An effective governance structure has been implemented for the management of insurance risk. Business units are the ultimate owners of insurance risk and as such have primary responsibility for the identification, measurement, management, monitoring and reporting of insurance risk. The Risk Function, supported by Corporate Actuarial, is primarily responsible for oversight of the insurance risk management framework. The Company has established the Insurance Risk Committee to provide oversight of insurance risk, which includes completing reviews and making recommendations regarding risk limits, the risk policy and associated compliance, breach management and mitigation pertaining to insurance risk. Each region has established oversight committees and operating committees to help manage insurance risk within the region.

The Company's Insurance Risk Policy sets out the insurance risk management framework and provides the principles for insurance risk management. This policy is supported by a number of other policies and guidelines that provide detailed guidance, including:

- Product Design and Pricing Risk Management Policy and Reinsurance Risk Management Policy, which provide guidelines and standards for the product design and pricing risk management processes and reinsurance ceded risk management practices;
- Corporate Actuarial Valuation Policy, which provides documentation and control standards consistent with the valuation standards of the Canadian Institute of Actuaries; and
- Participating Account Management Policies and Participating Policyholder Dividend Policies, which govern the management of participating accounts and provide for the distribution of a portion of the earnings in the participating account as participating policyholder dividends.

The Risk Function in conjunction with Corporate Actuarial implements a number of processes to carry out its responsibility for oversight of insurance risk. It reviews the Insurance Risk Policy relative to current risk exposures and updates it as required. It reviews insurance risk management processes carried out by the business units, including product design and pricing, underwriting, claims adjudication, and reinsurance ceding, and provides challenge as required. The Risk Function works with the business units and other oversight functions to ensure that current and emerging insurance risks are identified and that appropriate action is taken if required. Insurance risk limits, risk budgets and key risk indicators are set to keep the insurance risk profile within the Company's appetite for insurance risk and the Risk Function regularly monitors the insurance risk profile relative to these measures. Any breaches would be escalated as required and appropriate remediation would be implemented. The Risk Function performs stress testing and does analysis of insurance risks, including review of experience studies. It provides regular reporting on these activities to the business units, senior management, and risk oversight committees.

Risks and risk management activities associated with the broad insurance risk categories are detailed below.

Mortality and Morbidity Risk

Mortality risk is the risk of loss resulting from adverse changes in the level, trend, or volatility of mortality rates, where an increase in the mortality rate leads to an increase in the value of insurance contract liabilities.

Morbidity risk is the risk of loss resulting from adverse changes in the level, trend, or volatility of disability, health, dental, critical illness and other sickness rates, where an increase in the incidence rate or a decrease in the disability recovery rate leads to an increase in the value of insurance contract liabilities.

There is a risk that the Company will mis-estimate the level of mortality or morbidity, or accept customers who generate worse mortality and morbidity experience than expected.

The Company employs the following practices to manage its mortality and morbidity risk:

- Research and analysis is done regularly to provide the basis for pricing and valuation assumptions to properly reflect the insurance and reinsurance risks in markets where the Company is active.
- Underwriting limits, practices and policies control the amount of risk exposure, the selection of risks insured for consistency with claims expectations and support the long-term sustainability of the Company.

- The insurance contract liabilities established to fund future claims include a provision for adverse deviation, set in accordance with professional standards. This margin is required to provide for the possibilities of mis-estimation of the best estimate and/or future deterioration in the best estimate assumptions.
- The Company sets and adheres to retention limits for mortality and morbidity risks. Aggregate risk is managed through a combination of reinsurance and capital market solutions to transfer the risk where appropriate.
- For Group life products, exposure to a concentrated mortality event due to concentration of risk in specific locations for example, could have an impact on financial results. To manage the risk, concentrations are monitored for new business and renewals. The Company may impose single-event limits on some group plans and declines to quote in localized areas where the aggregate risk is deemed excessive.
- Effective plan design and claims adjudication practices, for both morbidity and mortality risks are critical to the management of the risk. As an example, for Group healthcare products, inflation and utilization will influence the level of claims costs, which can be difficult to predict. The Company manages the impact of these and similar factors through plan designs that limit new costs and long-term price guarantees and include the ability to regularly re-price for emerging experience.
- The Company manages large blocks of business, which, in aggregate, are expected to result in relatively low statistical fluctuations in any given period. For some policies, these risks are shared with the policyholder through adjustments to future policyholder charges or in the case of participating policies through future changes in policyholder dividends.

Longevity Risk

Longevity risk is the risk of loss resulting from adverse changes in the level, trend, or volatility of mortality rates, where a decrease in the mortality rate leads to an increase in the value of insurance contract liabilities. Annuities and some segregated fund products with Guaranteed Minimum Withdrawal Benefits are priced and valued to reflect the life expectancy of the annuitant. There is a risk that annuitants could live longer than was estimated by the Company, which would increase the value of the associated insurance contract liabilities.

Business is priced using mortality assumptions which take into account recent Company and industry experience and the latest research on expected future trends in mortality.

Aggregate risk is managed through a combination of reinsurance and capital market solutions to transfer the risk as appropriate. The Company has processes in place to verify annuitants' eligibility for continued income benefits. These processes are designed to ensure annuity payments accrue to those contractually entitled to receive them and help ensure mortality data used to develop pricing and valuation assumptions is as complete as possible.

Lapse Risk

Lapse risk is the risk of loss resulting from adverse changes in the level or volatility of the rates of policy lapses, terminations, renewals and/or surrenders.

Many products are priced and valued to reflect the expected duration of contracts. There is a risk that the contract may be terminated before expenses can be recovered, to the extent that higher costs are incurred in early contract years. Risk also exists where the contract is terminated later than assumed, on certain long-term level premium products where costs increase by age.

Business is priced using policy termination assumptions which take into account product designs and policyholder options, recent Company and industry experience and the latest research on expected future trends. Assumptions are reviewed regularly and are updated for new policies as necessary.

The Company also incorporates early surrender charges into certain contracts and incorporates commission chargebacks in its distribution agreements to reduce unrecovered expenses.

Policyholder taxation rules in many jurisdictions help encourage the retention of insurance coverage.

Expense Risk
Expense risk is the risk of loss resulting from adverse variability of expenses incurred with fee-for-service business or in servicing and maintaining insurance, savings or reinsurance contracts, including direct expenses and allocations of overhead costs.

Expense management programs are regularly monitored to control unit costs while maintaining effective service delivery.

Property Catastrophe Risk
Property catastrophe risk is the risk of loss resulting from adverse changes in property damage experience and is mainly related to extreme or catastrophic events.

The reinsurance business in particular has exposure to natural catastrophic events that result in property damage. As a retrocessionaire for property catastrophe risk, the Company generally participates at more remote event-loss exposures than primary carriers and reinsurers. Generally, an event of significant size must occur prior to the Company incurring a claim. The Company limits the total maximum claim amount under all property catastrophe contracts. The Company monitors cedant companies' claims experience and research from third party expert risk models on an ongoing basis and incorporates this information in pricing models to ensure that the premium is adequate for the risk undertaken.

OPERATIONAL RISK

Risk Description
Operational Risk is the risk of loss arising from potential problems relating to internal processes, people and systems or from external events. Operational risk can result from either normal day-to-day operations or a specific unanticipated event. Operational risks include legal and regulatory, human resources, infrastructure, process, fraud and supplier risks. In addition to operational risks, the Company also manages reputational risk, which can emerge across many businesses and risk types; therefore, reputational considerations are incorporated within each aspect of the Company's business and risk management practices.

Operational Risk Management
While operational risks can be mitigated and managed, they remain an inherent feature of the business model, as multiple processes, systems, and stakeholders are required to interact across the enterprise on an ongoing basis. The Company actively manages operational risk across the enterprise in order to maintain a strong reputation and standing, maintain financial strength, protect customers and the Company's value. On-going engagement of businesses and support functions across the enterprise through robust training and communications is regularly undertaken for identifying, assessing and mitigating operational risk issues.

Operational Risk Management governance and oversight reflects a combined effort between business units and oversight functions. This combined effort is particularly critical for management of operational risk, and it is a key factor for ensuring the Company remains within its Risk Appetite. The Risk Function is responsible for the development of operational risk management policies and operating standards as well as overseeing operational risk management activities performed in the first line of defense. The Operational Risk Committee has the primary mandate to provide risk oversight for Operational Risk across the enterprise. In addition, each regional business segment has established operating committees to oversee operational risk management within their business.

The Company has an Operational Risk Policy, that is supported by standards and guidelines that relate to specialized functions, detailing practices related to stress testing, modeling, fraud, risk data aggregation and risk reporting, regulatory and information technology risk management. The Company implements controls to manage operational risk through integrated policies, procedures, processes and practices, with consideration given to the cost/benefit trade-off. Processes and controls are monitored and refined by the business areas and periodically reviewed by the Company's Internal Audit department. Financial reporting processes and controls are further examined by external auditors.

The Company also manages operational risks through the corporate insurance program which mitigates a portion of the operational risk exposure by purchasing insurance coverage that provides protection against unexpected material losses resulting from events such as property loss or damage and liability exposures. As well, the Company purchases insurance to satisfy legal requirements and/or contractual obligations. The nature and amount of insurance protection purchased is assessed with regard to the Company's risk profile, risk appetite and tolerance for the associated risks.

The Company employs a combination of operational risk management methods including risk and control assessments, internal control factors and risk events analyses. For the identification of operational risks, the Company utilizes Risk and Control Assessments which systematically identify and assess potential operational risks and associated controls. Internal and external operational risk events are analyzed to identify root causes and provide insights into potential new operational risks that could impact the Company. In addition, scenario analysis is employed to identify and quantify potential severe operational risk exposures, while key risk indicators, risk appetite preferences, and other processes are leveraged to measure, manage and monitor operational risks.

The Risk Function monitors the status of actions being undertaken to remediate risks to ensure that risk exposures are mitigated in a timely manner. Processes are in place to escalate significant matters to senior management to inform and enable management to take appropriate action when needed. The Risk Function regularly reports on the Company's operational risk profile to executive management, the Board of Directors and various committees at enterprise, regional and legal entity levels.

Key operational risks and the Company's approach to managing them are outlined below.

Legal and Regulatory Risk

Legal and regulatory risks arise from non-compliance with specific local or international rules, laws, and regulations, prescribed practices, or ethical standards as well as civil or criminal litigation against the Company. As a multi-national company, the Company and certain of its subsidiaries are subject to extensive legal and regulatory requirements in Canada, the U.S., the U.K., Ireland and other jurisdictions. These requirements cover most aspects of the Company's operations including capital adequacy, liquidity and solvency, investments, the sale and marketing of insurance and annuity products, the business conduct of insurers, asset managers and investment advisors as well as reinsurance processes. Material changes in the legal or regulatory framework or the failure to comply with legal and regulatory requirements could have a material adverse effect on the Company.

Legal and Regulatory risk is managed through coordination between first and second line of defense functions. The Company records, manages and monitors the regulatory compliance environment closely, leveraging the subject matter expertise of both local and enterprise-wide Compliance and Legal stakeholders and reporting on emerging changes that would have significant impact on the Company's operations or business.

Human Resources Risk
Human Resources risks can arise from an inability to attract, retain, train and develop the right talent, ineffective governance practices or legal action related to discrimination, and can impact the ability of the Company to meet its business objectives. The Company maintains a highly skilled workforce that is reflective of the diverse cultures and practices of the countries in which the Company operates. Competitive compensation programs, succession planning, talent management and employee engagement processes, are in place to manage these risks and support a high performance culture.

Infrastructure Risk
Infrastructure Risk arises from reduced or non-availability of any aspect of a fully functioning business environment. This includes corporate facilities, physical assets, human resources and/or technology (technology assets, systems, applications, cloud computing), security (logical, physical and cyber), failures in license management and insufficient software/application support.

The ability to consistently and reliably obtain securities pricing information, accurately process client transactions and provide reports and other customer services is essential to the Company's operations. A failure of any of these services could have an adverse effect on the Company's results of operations and financial condition and could lead to loss of client confidence, breach of regulatory requirements, harm to the Company's reputation, exposure to disciplinary action and liability to the Company's customers.

The Company maintains a resilient and secure environment by investing in and managing infrastructure that is sustainable and effective in meeting the Company's needs for a fully functioning and secure business operation that protects assets and stakeholder value. Infrastructure risk management programs include strong business continuity capabilities across the enterprise to manage incidents or outages and the recovery of critical functions in the event of a disaster. In addition, security measures are designed to deny unauthorized access to facilities, equipment and resources, and to protect personnel and property from damage or harm (such as espionage, theft or terrorist attacks) and events that could cause serious losses or damage.

Technology and Cyber Risk
Technology and Cyber Risk arises from a purposeful or accidental event related to the use of technology. It includes the risk of cyber-attack that leads to unplanned outages, unauthorized access, or unplanned disclosure of confidential or restricted information. Technology risk also includes the risk of a deterioration in the reliability and availability of internal, customer-facing, or vendor-supported applications, infrastructure systems and/or services.

Technology remains a critical component of the Company's business operations and is also central to the Company's customer-focused and digital strategies. The Company continues to face heightened technology and cyber risks due to the evolving external threat environment, the advancement in techniques used in cyber-attacks and the nature of information entrusted to the Company by clients. Such cyber-attacks include advanced-persistent threats that involve unauthorized parties attempting to gain undetected access to the Information Technology environment and maintain access over an extended period of time, ransomware attacks that attempt to limit or prevent users from accessing their devices by locking or encrypting files and systems while demanding ransom, and distributed denial of service attacks that are intended to disrupt online applications and services.

The Company's strategy and approach to managing technology and cyber risks includes a comprehensive set of policies that govern the technology environment and set high standards related to information security and the use of technology, including;

- a risk averse approach to the design and ongoing management of the technology environment;
- the use of multiple layers of technologies that are designed to prevent unauthorized access, ransomware attacks, distributed denial of service and other cyber-attacks;
- coordinated global and regional information security offices that gather threat intelligence, detect, monitor and respond to security events and conduct regular threat and vulnerability risk assessments;

- oversight, review and challenge of the approach taken to mitigate technology and cyber risks by the Information Services Risk Management team, an independent group that acts as the second line of defense; and
- regular cyber security awareness sessions and mandatory cyber security training for all employees.

Process Risk
Inadequate or failed business processes can adversely impact the Company's financial results, relationships with customers and reputation. Process risk includes risks arising from significant change initiatives such as business operations changes, major systems implementation, new product introductions and leadership changes, as well as core business operational activities. Process risk also includes risk associated with data aggregation and reporting, and model development and use.

Risk management seeks to ensure strategic alignment and congruency in all business activities, including change initiatives and business-as-usual activities, with the Company's operational risk appetite and considers the potential impact on the Company's reputation. The Company monitors change initiatives to ensure that risks are appropriately mitigated and benefits are realized. Core business operational activities have quality control measures in place. Robust processes are in place for the management and oversight of model risk. Further, the Company seeks to control processes across the value chain through automation, standardization and process improvements to prevent or reduce operational losses.

Fraud Risk
The external fraud environment continues to intensify for financial institutions, as increasingly sophisticated methods of organized fraud and cyber fraud are employed. Fraud can result in a financial loss or reputational impact to the Company and have other impacts that are detrimental to customers and other stakeholders.

The Company manages fraud through a combined focus on prevention, detection and response. The Company promotes a culture of honesty, integrity, transparency and fairness in its internal operations and further manages fiduciary responsibilities through the Company's Fraud Risk Management Policy and Code of Conduct. The Company maintains a strong set of controls designed to prevent fraud and employs various methods to detect fraud. A fraud response plan is in place to deal with events through a coordinated investigative strategy to ensure stakeholders and the interests of the Company are protected.

Supplier Risk
The Company strategically engages suppliers to maintain cost efficiency, to free internal resources and capital and to utilize skills, expertise and resources not otherwise available to the Company. The Company's profitability or reputation could be negatively impacted if suppliers do not meet Company standards for performance. Suppliers that do not meet the Company's standards for performance can have a negative impact on the Company's financial results and reputation. To minimize this risk, the Company applies a supplier risk management program that provides effective oversight and monitoring throughout the entire supplier relationship. This program helps to ensure the arrangement, transactions and other interactions with suppliers meet standards for quality of service and protect the interests of the Company and its stakeholders.

CONDUCT RISK

Risk Description
Conduct risk is the risk of unfair outcomes for customers as a result of inadequate or failed processes and/or inappropriate behaviours, offerings or interactions by the Company or its agents. Conduct risk may result in loss due to the cost of customer remediation, damage to reputation and/or regulatory fines.

Conduct Risk Management
The Company manages conduct risk through a number of means including ensuring appropriate clarity of communications; applying product design, claims management and sales and advice processes that are focused on fair outcomes to customers; seeking customer feedback; maintaining proper controls and adhering to Board-approved policies and processes including its Code of Conduct. Conduct Risk is incorporated in risk management and compliance activities, including Risk and Control Assessments, internal events reporting, emerging risk assessments, and other measurement, monitoring and reporting activities.

STRATEGIC RISK

Risk Description
Strategic risk arises as a result of failures of internal planning, ineffective strategic decision-making, major regulatory changes, macroeconomic or country risk events, or changes to the external environment manifesting over the medium to long term. In addition, strategic risk includes risks associated with the Company's holding company structure, potential future acquisitions and ongoing access to product distribution.

Strategic Risk Management
The Company manages strategic risk through proactive engagement, industry representation and a rigorous strategic planning process. The Risk Function is engaged in the business planning cycle to ensure business strategies are in alignment with the Company's Risk Appetite. The Company's strategic plan is reviewed with the Board of Directors and Senior Management, with the Risk Function providing objective assessment of enterprise strategic risks and risk mitigation plans. Significant risks and opportunities are identified, and a review of the alignment with risk strategy and qualitative risk preferences is completed. Initiatives, including those related to new markets, distribution channels, product design and investments, are also subject to independent risk review.

Holding Company Structure Risk
As a holding company, the Company's ability to pay interest, dividends and other operating expenses and to meet its obligations generally depends upon receipt of sufficient funds from its principal subsidiaries and its ability to raise additional capital. In the event of the bankruptcy, liquidation or reorganization of any of these subsidiaries, insurance and investment contract liabilities of these subsidiaries will be completely provided for before any assets of such subsidiaries are made available for distribution to the Company; in addition, the other creditors of these subsidiaries will generally be entitled to the payment of their claims before any assets are made available for distribution to the Company except to the extent that the Company is recognized as a creditor of the relevant subsidiaries.

Any payment (including payment of interest and dividends) by the principal subsidiaries is subject to restrictions set forth in relevant insurance, securities, corporate and other laws and regulations which require that solvency and capital standards be maintained by Great-West Life, London Life, Canada Life, Great-West Financial, and their subsidiaries and certain subsidiaries of Putnam. There are considerable risks and benefits related to this structure.

Management closely monitors the solvency and capital positions of its principal subsidiaries opposite liquidity requirements at the holding company level. Additional liquidity is available through established lines of credit and the Company's demonstrated ability to access capital markets for funds. Management actively monitors the regulatory laws and regulations at both the holding company and operating company levels to ensure ongoing compliance.

Mergers and Acquisitions Risk
From time-to-time, the Company and its subsidiaries evaluate existing companies, businesses, products and services, and such review could result in the Company or its subsidiaries acquiring or disposing of businesses. In the ordinary course of their operations, the Company and its subsidiaries consider and discuss with third parties the purchase or sale of companies, businesses or business segments. If effected, such transactions could be material to the Company in size or scope, and could result in changes in the value of the securities of the Company, including the common shares of the Company.

The Company undergoes extensive due diligence upon any consideration of acquiring or disposing of businesses or companies. In its consideration of strategic acquisitions, the Company may determine it to be prudent to hold additional capital for contingencies that may arise during the integration period following an acquisition.

Product Distribution Risk

The Company's ability to market its products is significantly dependent on its access to a network of distribution channels and intermediaries. These intermediaries generally offer their clients products in addition to, and in competition with, the Company's products, and are not obligated to continue working with the Company. In addition, certain investors rely on consultants to advise them on the choice of advisor and the consultants may not always consider or recommend the Company. The loss of access to a distribution channel, the failure to maintain effective relationships with intermediaries or the failure to respond to changes in distribution channels could have a significant impact on the Company's ability to generate sales.

Product distribution risk is managed by maintaining a broad network of distribution relationships, with products distributed through numerous broker-dealers, managing general agencies, financial planners, banks and other financial institutions.

Environmental Risk

The Company may experience direct or indirect financial, operational or reputational impact stemming from environmental risk events, which include environmental issues, regulatory enforcement or costs associated with changes in environmental laws and regulations. The Company endeavors to respect the environment and to take a balanced and environmentally sustainable approach to conducting business. The Company has established environmental policies and guidelines pertaining to the acquisition and ongoing management of investment properties, loans secured by real property and investments in equity and fixed-income securities. These policies are approved by the Board of Directors and are reviewed annually.

EXPOSURES AND SENSITIVITIES

Insurance and Investment Contract Liabilities
The following illustrates the approximate impact to the Company’s earnings that would arise as a result of changes to management’s best estimate of certain assumptions used to determine the Company’s insurance contract liabilities.

	Increase (decrease) in net earnings	
	2017	2016
Mortality - 2% increase	**$ (296)**	$ (281)
Annuitant mortality - 2% decrease	**$ (446)**	$ (384)
Morbidity - 5% adverse change	**$ (256)**	$ (242)
Investment returns		
Parallel shift in yield curve		
1% increase	**$ —**	$ —
1% decrease	**$ —**	$ —
Change in interest rates		
1% increase	**$ 150**	$ 149
1% decrease	**$ (523)**	$ (491)
Change in equity values		
10% increase	**$ 48**	$ 43
10% decrease	**$ (85)**	$ (50)
Change in best estimate return assumptions for equities		
1% increase	**$ 439**	$ 407
1% decrease	**$ (470)**	$ (438)
Expenses - 5% increase	**$ (127)**	$ (117)
Policy termination and renewal - 10% adverse change	**$ (672)**	$ (608)

Although the Company takes steps to anticipate and minimize risks in general, unforeseen future events may have a negative impact on the Company's business, financial condition and results of operations.

ACCOUNTING POLICIES

SUMMARY OF CRITICAL ACCOUNTING ESTIMATES

The preparation of financial statements in accordance with IFRS requires management to make estimates, judgments and assumptions that affect the reported amounts of assets and liabilities, and disclosure of contingent assets and liabilities at the reporting date, and the reported amounts of revenue and expenses during the reporting period. The results of the Company reflect management's judgments regarding the impact of prevailing global credit, equity and foreign exchange market conditions. The estimation of insurance contract liabilities relies upon investment credit ratings. The Company's practice is to use third-party independent credit ratings where available.

The significant accounting estimates include the following:

Fair Value Measurement

Financial and other instruments held by the Company include portfolio investments, various derivative financial instruments, debentures and other debt instruments.

Financial instrument carrying values reflect the liquidity of the markets and the liquidity premiums embedded in the market pricing methods the Company relies upon.

The Company’s assets and liabilities recorded at fair value 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.

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 3 inputs utilize one or more significant inputs that are not based on observable market inputs and include situations where there is little, if any, market activity for the asset or liability.

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.

Refer to note 8 in the Company's December 31, 2017 annual consolidated financial statements for disclosure of the Company's financial instruments fair value measurement by hierarchy level as at December 31, 2017.

Fair values for bonds classified as fair value through profit or loss or available-for-sale are determined using quoted market prices. Where prices are not quoted in a normally active market, fair values are determined by valuation models primarily using observable market data inputs. Market values for bonds and mortgages classified as loans and receivables are determined by discounting expected future cash flows using current market rates.

Fair values for public stocks are generally determined by the last bid price for the security from the exchange where it is principally traded. Fair values for stocks for which there is no active market are determined by discounting expected future cash flows based on expected dividends and where market value cannot be measured reliably, fair value is estimated to be equal to cost. Fair values for investment properties are determined using independent appraisal services and include management adjustments for material changes in property cash flows, capital expenditures or general market conditions in the interim period between appraisals.

Investment impairment

Investments are reviewed regularly on an individual basis to determine impairment status. The Company considers various factors in the impairment evaluation process, including, but not limited to, the financial condition of the issuer, specific adverse conditions affecting an industry or region, decline in fair value not related to interest rates, bankruptcy or defaults and delinquency in payments of interest or principal. Investments are deemed to be impaired when there is no longer reasonable assurance of timely collection of the full amount of the principal and interest due. The fair value of an investment is not a definitive indicator of impairment, as it may be significantly influenced by other factors including the remaining term to maturity and liquidity of the asset, however, market price must be taken into consideration when evaluating impairment.

For impaired mortgages and bonds classified as loans and receivables, provisions are established or write-offs made to adjust the carrying value to the net realizable amount. Wherever possible, the fair value of collateral underlying the loans or observable market price is used to establish the estimated realizable value. For impaired available-for-sale bonds, recorded at fair value, the accumulated loss recorded in accumulated other comprehensive income (loss) is reclassified to net investment income. Impairments on available-for-sale debt instruments are reversed if there is objective evidence that a permanent recovery has occurred. All gains and losses on bonds classified or designated as fair value through profit or loss are already recorded in income; therefore, a reduction due to impairment of these assets will be recorded in net investment income. As well, when determined to be impaired, interest is no longer accrued and previous interest accruals are reversed.

Goodwill and intangibles impairment testing

Goodwill and indefinite life intangible assets are tested for impairment annually or more frequently if events indicate that impairment may have occurred. Intangible assets that were previously impaired are reviewed at each reporting date for evidence of reversal. In the event that certain conditions have been met, the Company would be required to reverse the impairment charge or a portion thereof.

Goodwill and indefinite life intangible assets have been allocated to cash generating unit groupings, representing the lowest level that the assets are monitored for internal reporting purposes. Goodwill and indefinite life intangible assets are tested for impairment by comparing the carrying value of each cash generating unit grouping containing the assets to its recoverable amount. The recoverable amount is the higher of the asset's fair value less costs of disposal and value-in-use, which is calculated using the present value of estimated future cash flows expected to be generated. An impairment loss is recognized for the amount by which the asset's carrying amount exceeds its recoverable amount.

Insurance and investment contract liabilities

Insurance and investment contract liabilities represent the amounts required, in addition to future premiums and investment income, to provide for future benefit payments, policyholder dividends, commission and policy administrative expenses for all insurance and annuity policies in-force with the Company. The Appointed Actuaries of the Company's subsidiaries are responsible for determining the amount of the liabilities to make appropriate provisions for the Company's obligations to policyholders. The Appointed Actuaries determine the liabilities for insurance contracts using generally accepted actuarial practices, according to the standards established by the Canadian Institute of Actuaries. The valuation uses the Canadian Asset Liability Method (CALM). This method involves the projection of future events in order to determine the amount of assets that must be set aside currently to provide for all future obligations and involves a significant amount of judgment.

In the computation of insurance contract liabilities, valuation assumptions have been made regarding rates of mortality/morbidity, investment returns, levels of operating expenses, rates of policy termination and rates of utilization of elective policy options or provisions. The valuation assumptions use best estimates of future experience together with a margin for adverse deviation. These margins are necessary to provide for possibilities of mis-estimation and/or future deterioration in the best-estimate assumptions and provide reasonable assurance that insurance contract liabilities cover a range of possible outcomes. Margins are reviewed periodically for continued appropriateness.

Investment contract liabilities are measured at fair value determined using discounted cash flows utilizing the yield curves of financial instruments with similar cash flow characteristics.

The methods for arriving at these valuation assumptions are outlined below:

Mortality – A life insurance mortality study is carried out annually for each major block of insurance business. The results of each study are used to update the Company's experience valuation mortality tables for that business. When there is insufficient data, use is made of the latest industry experience to derive an appropriate valuation mortality assumption. Improvement scales for life insurance and annuitant mortality are updated periodically based on population and industry studies, product specific considerations, as well as professional guidance. In addition, appropriate provisions have been made for future mortality deterioration on term insurance. A 2% increase in the best estimate assumption would cause a decrease in net earnings of approximately $296 million.

Annuitant mortality is also studied regularly and the results used to modify established industry experience annuitant mortality tables. A 2% decrease in the best estimate assumption would cause a decrease in net earnings of approximately $446 million.

Morbidity – The Company uses industry developed experience tables modified to reflect emerging company experience. Both claim incidence and termination are monitored regularly and emerging experience is factored into the current valuation. For products for which morbidity is a significant assumption, a 5% decrease in best estimate termination assumptions for claim liabilities and a 5% increase in best-estimate incidence assumptions for active life liabilities would cause a decrease in net earnings of approximately $256 million.

Property and casualty reinsurance – Insurance contract liabilities for property and casualty reinsurance written by LRG are determined using accepted actuarial practices for property and casualty insurers in Canada. The insurance contract liabilities have been established using cash flow valuation techniques including discounting. The insurance contract liabilities are based on cession statements provided by ceding companies. In addition, insurance contract liabilities also include an amount for incurred but not reported losses, which may differ significantly from the ultimate loss development. The estimates and underlying methodology are continually reviewed and updated and adjustments to estimates are reflected in net earnings. LRG analyzes the emergence of claims experience against expected assumptions for each reinsurance contract separately and at the portfolio level. If necessary, a more in depth analysis is undertaken of the cedant experience.

***Investment return*s** – The assets which correspond to the different liability categories are segmented. For each segment, projected cash flows from the current assets and liabilities are used in CALM to determine insurance contract liabilities. Cash flows from assets are reduced to provide for asset default losses. Testing under several interest rate scenarios (including increasing and decreasing rates) is done to provide for reinvestment risk. The total provision for interest rates is sufficient to cover a broader or more severe set of risks than the minimum arising from the current Canadian Institute of Actuaries' prescribed scenarios.

The range of interest rates covered by these provisions is set in consideration of long-term historical results and is monitored quarterly with a full review annually. An immediate 1% parallel shift in the yield curve would not have a material impact on the Company's view of the range of interest rates to be covered by the provisions. If sustained, however, the parallel shift could impact the Company's range of scenarios covered.

The total provision for interest rates also considers the impact of the Canadian Institute of Actuaries' prescribed scenarios.

- The effect of an immediate 1% parallel increase in the yield curve on the prescribed scenarios resulted in interest rate changes to assets and liabilities that will offset each other with no impact to net earnings.
- The effect of an immediate 1% parallel decrease in the yield curve on the prescribed scenarios resulted in interest rate changes to assets and liabilities that will offset each other with no impact to net earnings.

Another way of measuring the interest rate risk associated with this assumption is to determine the effect on the insurance and investment contract liabilities impacting the shareholders' net earnings of the Company of a 1% change in the Company's view of the range of interest rates to be covered by these provisions.

- The effect of an immediate 1% increase in the low and high end of the range of interest rates recognized in the provisions would be to decrease these insurance and investment contract liabilities by approximately $215 million causing an increase in net earnings of approximately $150 million.
- The effect of an immediate 1% decrease in the low and high end of the range of interest rates recognized in the provisions would be to increase these insurance and investment contract liabilities by approximately $720 million causing a decrease in net earnings of approximately $523 million.

In addition to interest rates, the Company is also exposed to movements in equity markets.

Some insurance and investment contract liabilities are supported by investment properties, common stocks and private equities; for example segregated fund products and products with long-tail cash flows. Generally, these liabilities will fluctuate in line with equity values. There will be additional impacts on these liabilities as equity values fluctuate.

- A 10% increase in equity values would be expected to additionally decrease non-participating insurance and investment contract liabilities by approximately $58 million, causing an increase in net earnings of approximately $48 million.
- A 10% decrease in equity values would be expected to additionally increase non-participating insurance and investment contract liabilities by approximately $109 million, causing a decrease in net earnings of approximately $85 million.

The best-estimate return assumptions for equities are primarily based on long-term historical averages. Changes in the current market could result in changes to these assumptions and will impact both asset and liability cash flows.

- A 1% increase in the best estimate assumption would be expected to decrease non-participating insurance contract liabilities by approximately $542 million causing an increase in net earnings of approximately $439 million.
- A 1% decrease in the best estimate assumption would be expected to increase non-participating insurance contract liabilities by approximately $591 million causing a decrease in net earnings of approximately $470 million.

Expenses – Contractual policy expenses (e.g., sales commissions) and tax expenses are reflected on a best estimate basis. Expense studies for indirect operating expenses are updated regularly to determine an appropriate estimate of future operating expenses for the liability type being valued. Improvements in unit operating expenses are not projected. An inflation assumption is incorporated in the estimate of future operating expenses consistent with the interest rate scenarios projected under CALM as inflation is assumed to be correlated with new money interest rates. A 5% increase in the best estimate maintenance unit expense assumption would cause a decrease in net earnings of approximately $127 million.

Policy termination – Studies to determine rates of policy termination are updated regularly to form the basis of this estimate. Industry data is also available and is useful where the Company has no experience with specific types of policies or its exposure is limited. The Company has significant exposures in respect of the T-100 and Level Cost of Insurance Universal Life products in Canada and policy renewal rates at the end of the term for renewable term policies in Canada and Reinsurance. Industry experience has guided the Company's assumptions for these products as its own experience is very limited. A 10% adverse change in the best-estimate policy termination and renewal assumptions would cause a decrease in net earnings of approximately $672 million.

Utilization of elective policy options – There are a wide range of elective options embedded in the policies issued by the Company. Examples include term renewals, conversion to whole life insurance (term insurance), settlement annuity purchase at guaranteed rates (deposit annuities) and guarantee re-sets (segregated fund maturity guarantees). The assumed rates of utilization are based on company or industry experience when it exists and when not on judgment considering incentives to utilize the option. Generally, whenever it is clearly in the best interests of an informed policyholder to utilize an option, then it is assumed to be elected.

Policyholder dividends and adjustable policy features – Future policyholder dividends and other adjustable policy features are included in the determination of insurance contract liabilities with the assumption that policyholder dividends or adjustable benefits will change in the future in response to the relevant experience. The dividend and policy adjustments are determined consistent with policyholders' reasonable expectations, such expectations being influenced by the participating policyholder dividend policies and/or policyholder communications, marketing material and past practice. It is the Company's expectation that changes will occur in policyholder dividend scales or adjustable benefits for participating or adjustable business respectively, corresponding to changes in the best estimate assumptions, resulting in an immaterial net change in insurance contract liabilities. Where underlying guarantees may limit the ability to pass all of this experience back to the policyholder, the impact of this non-adjustability impacting shareholders' net earnings is reflected in the impacts of changes in best estimate assumptions above.

Income taxes – The Company is subject to income tax laws in various jurisdictions. The Company's operations are complex and related income tax interpretations, regulations and legislation that pertain to its activities are subject to continual change. As multinational life insurance companies, the Company's primary Canadian operating subsidiaries are subject to a regime of specialized rules prescribed under the *Income Tax Act (Canada)* for purposes of determining the amount of the Companies' income that will be subject to tax in Canada.

The Company utilizes tax planning strategies involving multiple jurisdictions to obtain tax efficiencies. The Company continually assesses the uncertainty associated with these strategies and holds an appropriate level of provisions for uncertain income tax positions. Accordingly, the provision for income taxes represents management's interpretation of the relevant income tax laws and its estimate of current and deferred income tax implications of the transactions and events during the period. Deferred income tax assets and liabilities are recorded based on expected future income tax rates and management's assumptions regarding the expected timing of the reversal of temporary differences. The Company has substantial deferred income tax assets. The recognition of deferred income tax assets depends on management's assumption that future earnings will be sufficient to realize the deferred benefit. The amount of the asset recorded is based on management's best estimate of the timing of the reversal of the asset.

The audit and review activities of the Canada Revenue Agency and other jurisdictions' tax authorities affect the ultimate determination of the amounts of income taxes payable or receivable, deferred income tax assets or liabilities and income tax expense. Therefore, there can be no assurance that income taxes will be payable as anticipated and/or the amount and timing of receipt or use of the income tax related assets will be as currently expected. Management's experience indicates the taxation authorities are more aggressively pursuing perceived income tax issues and have increased the resources they put to these efforts.

Employee future benefits – The Company’s subsidiaries maintain contributory and non-contributory defined benefit and defined contribution pension plans for certain employees and advisors. The defined benefit pension plans provide pensions based on length of service and final average pay. For most plans, active plan participants share in the cost of benefits through employee contributions in respect of current service. Certain pension payments are indexed on either an ad hoc basis or a guaranteed basis. The determination of the defined benefit obligation reflects pension benefits in accordance with the terms of the plans. The assets supporting the funded pension plans are held in separate trusteed pension funds. The obligations for the wholly unfunded plans are included in other liabilities and are supported by general assets. The significant defined benefit plans of the Company's subsidiaries are closed to new entrants with plans in several geographies also closed to future defined benefit accruals. All new hires and employees who previously accrued defined benefits in the closed plans are eligible only for defined contribution benefits. The Company’s defined benefit plan exposure will continue to be reduced in future years. The defined contribution pension plans provide pension benefits based on accumulated employee and subsidiary Company contributions. The Company’s subsidiaries also provide post-employment health, dental and life insurance benefits to eligible employees, advisors and their dependents. These plans are also closed to new entrants. For further information on the Company’s pension plans and other post-employment benefits refer to note 24 in the Company's December 31, 2017 annual consolidated financial statements.

For the defined benefit plans of the Company's subsidiaries, service costs and net interest costs are recognized in the Consolidated Statements of Earnings. Service costs include current service cost, administration expenses, past service costs and the impact of curtailments and settlements. The impact of curtailments and special termination benefits resulting from the Canadian transformation were recognized as part of restructuring costs. Re-measurements of the defined benefit liability (asset) due to asset returns less (greater) than interest income, actuarial losses (gains) and changes in the asset ceiling are recognized immediately in the Consolidated Statements of Comprehensive Income.

Accounting for defined benefit pension and other post-employment benefits requires estimates of expected increases in compensation levels, indexation of certain pension payments, trends in health-care costs, the period of time over which benefits will be paid, as well as the appropriate discount rates for past and future service liabilities. These assumptions are determined by management using actuarial methods, and are reviewed and approved annually. Emerging experience that differs from the assumptions will be revealed in future valuations and will affect the future financial position of the plans and net periodic benefit costs.

Actuarial assumptions - employee future benefits At December 31	Defined benefit pension plans		Other post-employment benefits	
	2017	2016	**2017**	2016
Actuarial assumptions used to determine benefit cost				
Discount rate - past service liabilities	**3.3 %**	3.8 %	**3.8 %**	4.1%
Discount rate - future service liabilities	**3.4 %**	3.8 %	**4.3 %**	4.5%
Rate of compensation increase	**3.2 %**	3.2 %	**—**	—
Future pension increases[1]	**1.1 %**	1.5 %	**—**	—
Actuarial assumptions used to determine defined benefit obligation				
Discount rate - past service liabilities	**3.1 %**	3.3 %	**3.5 %**	3.8%
Rate of compensation increase	**3.1 %**	3.2 %	**—**	—
Future pension increases[1]	**1.3 %**	1.1 %	**—**	—
Medical cost trend rates:				
Initial medical cost trend rate			**5.0 %**	5.1%
Ultimate medical cost trend rate			**4.5 %**	4.5%
Year ultimate trend rate is reached			**2029**	2029

(1) Represents the weighted average of plans subject to future pension increases.

Actuarial assumptions – The period of time over which benefits are assumed to be paid is based on best estimates of future mortality, including allowances for mortality improvements. This estimate is subject to considerable uncertainty, and judgment is required in establishing this assumption. As mortality assumptions are significant in measuring the defined benefit obligation, the mortality assumptions applied by the Company take into consideration such factors as age, gender and geographic location, in addition to an estimation of future improvements in longevity.

The mortality tables are reviewed at least annually, and assumptions are in accordance with accepted actuarial practices. Emerging plan experience is reviewed and considered in establishing the best estimate for future mortality.

As these assumptions relate to factors that are long-term in nature, they are subject to a degree of uncertainty. Differences between actual experience and the assumptions, as well as changes in the assumptions resulting from changes in future expectations, result in increases or decreases in the pension and post-employment benefits expense and defined benefit obligation in future years. There is no assurance that the plans will be able to earn assumed rates of return, and market driven changes to assumptions could impact future contributions and expenses.

The following table indicates the impact of changes to certain key assumptions related to pension and post-employment benefits.

Impact of a change of 1.0% in actuarial assumptions on defined benefit obligation	**1% increase**		**1% decrease**	
	2017	2016	**2017**	2016
Defined benefit pension plans:				
Impact of a change to the discount rate	**$ (1,187)**	$ (1,138)	**$ 1,553**	$ 1,458
Impact of a change to the rate of compensation increase	**313**	303	**(270)**	(264)
Impact of a change to the rate of inflation	**582**	550	**(514)**	(498)
Other post-employment benefits:				
Impact of a change to assumed medical cost trend rates	**32**	33	**(27)**	(28)
Impact of a change to the discount rate	**(43)**	(46)	**52**	56

To measure the impact of a change in an assumption, all other assumptions were held constant. It is expected that there would be interaction between at least some of the assumptions.

Funding – The Company's subsidiaries have both funded and unfunded pension plans as well as other post-employment benefit plans that are unfunded. The Company's subsidiaries' funded pension plans are funded to or above the amounts required by relevant legislation. During the year, the Company's subsidiaries contributed $250 million ($190 million in 2016) to the pension plans and made benefit payments of $19 million ($19 million in 2016) for post-employment benefits. The Company's subsidiaries expect to contribute $280 million to the benefit pension plans and make benefit payments of $20 million for post-employment benefits in 2018.

INTERNATIONAL FINANCIAL REPORTING STANDARDS

Due to the evolving nature of International Financial Reporting Standards (IFRS), there are a number of IFRS changes that impacted the Company in 2017, as well as standards that could impact the Company in future reporting periods. The Company actively monitors future IFRS changes proposed by the International Accounting Standards Board (IASB) to assess if the changes to the standards may have an impact on the Company's results or operations.

The Company adopted the narrow scope amendments to IFRS for IAS 7 *Statement of Cash Flows*, IAS 12 *Income Taxes* and *Annual Improvements 2014 - 2016 Cycle* for the amendment to IFRS 12 *Disclosure of Interest in Other Entities,* effective January 1, 2017. The adoption of these narrow scope amendments did not have a significant impact on the Company's consolidated financial statements.

Effective January 1, 2017, the Company has changed the accounting policy to classify the provision for tax uncertainties as current or deferred based on how a disallowance of the underlying uncertain tax treatment would impact the tax provision accrual as of the balance sheet date. Previously, tax uncertainties were booked as current. In addition, the Company has changed its accounting policy for the netting of U.S. deferred tax balances. The Company continues to net deferred tax balances when the Company has the legally enforceable right to offset current tax assets and liabilities and the deferred tax balances relate to entities within the same consolidated tax group. The Company no longer considers the expected order of usage. The accounting policy changes present more reliable and relevant information to financial statement users.

For a further description of the impact of the accounting policy change, refer to note 2 of the Company's annual consolidated financial statements for the period ended December 31, 2017.

IFRS that have changed or may change subsequent to 2017 and could impact the Company in future reporting periods, are set out in the following table:

New Standard	Summary of Future Changes
IFRS 15 - *Revenue from Contracts with Customers*	In May 2014, the IASB issued IFRS 15, *Revenue from Contracts with Customers,* which replaces IAS 11, *Construction Contracts* and IAS 18, *Revenue*. The standard provides a single revenue recognition standard to align the financial reporting of revenue from contracts with customers and related costs. The Company will recognize revenue when it transfers goods or services to a customer in the amount of the consideration the Company expects to receive from the customer. Revenue arising from insurance contracts, leases, and financial instruments are out of scope of the new standard. The Company will be adopting the standard on its effective date of January 1, 2018. The Company has concluded that there will not be a material change in the timing of revenue recognition. The presentation of certain revenues and expenses in the financial statements will change between being reported on a gross versus net basis and others from net to gross. There is no significant net earnings impact, however, there will be an approximate $100 million increase in fee income and a corresponding increase in operating expenses, mostly in the U.S. segment.
IFRS 16 - *Leases*	In January 2016, the IASB issued IFRS 16, *Leases*, which introduces new guidance for identifying leases as well as a new right-of-use accounting model for lessees, replacing the operating and finance lease accounting models that currently exist. The new accounting model will generally require all lessees to recognize lease assets and liabilities on the balance sheet, initially measured at the present value of unavoidable lease payments for all leases with a maximum possible term of more than 12 months. In contrast to the significant changes for lessees, the new standard will retain many key aspects of the current lessor accounting model. The standard is effective January 1, 2019. The Company is evaluating the impact of the adoption of this standard, however it is not yet possible to provide a reliable estimate of the impact on the Company's consolidated financial statements.

New Standard	Summary of Future Changes
IFRS 17 - *Insurance Contracts*	In May 2017, the IASB issued IFRS 17, *Insurance Contracts*, which will replace IFRS 4, *Insurance Contracts.* IFRS 17 sets out the requirements for the recognition, measurement, presentation and disclosures of insurance contracts a company issues and reinsurance contracts it holds. IFRS 17 introduces new measurement models depending on the nature of the contracts. IFRS 17 requires entities to measure insurance contract liabilities on the balance sheet as the total of: (a) the fulfilment cash flows - the current estimates of amounts that the company expects to collect from premiums and pay out for claims, benefits and expenses, including an adjustment for the timing and risk of those amounts; and (b) the contractual service margin - the future profit for providing insurance coverage. The future profit for providing insurance coverage is recognized in profit or loss over time as the insurance coverage is provided. IFRS 17 also requires the Company to distinguish between groups of contracts expected to be profit making and groups of contracts expected to be onerous. The Company is required to update the fulfilment cash flows at each reporting date, using current estimates of the amount, timing and uncertainty of cash flows and discount rates. The Company is currently in the planning phase of its project which includes assessing the financial statement impact of adopting IFRS 17, identifying potential business impacts, developing a detailed project plan, assessing resource requirements, and providing training to staff. The adoption of IFRS 17 is a significant initiative for the Company supported by a formal governance framework, for which substantial resources are being dedicated to ensure proper implementation. The new standard is effective for annual periods beginning on or after January 1, 2021. IFRS 17 will affect how the Company accounts for its insurance contracts and how it reports financial performance in the consolidated statement of earnings. The Company is currently assessing the impact that IFRS 17 will have on the Consolidated Financial Statements. The Company expects this standard to have a significant impact on the timing of earnings recognition for its insurance contracts and a significant impact on how insurance contract results are presented and disclosed in the consolidated financial statements.

New Standard	Summary of Future Changes
IFRS 9 - *Financial Instruments*	In July 2014, the IASB issued a final version of IFRS 9, *Financial Instruments* (IFRS 9) to replace IAS 39, *Financial Instruments: Recognition and Measurement*. The standard provides changes to financial instruments accounting for the following: • classification and measurement of financial instruments based on a business model approach for managing financial assets and the contractual cash flow characteristics of the financial asset; • impairment based on an expected loss model; and • hedge accounting that incorporates the risk management practices of an entity. In September 2016, the IASB issued an amendment to IFRS 4, *Insurance Contracts*. The amendment "Applying IFRS 9, Financial Instruments with IFRS 4, *Insurance Contracts*" provides qualifying insurance companies with two options to address the potential volatility associated with implementing the IFRS 9 standard before the new proposed insurance contract standard is effective. The two options are as follows: • *Deferral Approach* - provides the option to defer implementation of IFRS 9 until the year 2021 or the effective date of the new insurance contract standard, whichever is earlier; or • *Overlay Approach* - provides the option to recognize the volatility that could arise when IFRS 9 is applied within other comprehensive income, rather than profit or loss. The Company qualifies for the amendment and will be applying the deferral approach to allow adoption of both IFRS 9 and IFRS 17, *Insurance Contracts* simultaneously on January 1, 2021. In October 2017, the IASB issued an amendment to IFRS 9 that certain prepayable financial assets with negative compensation can be measured at amortized cost or fair value through other comprehensive income instead of fair value through profit or loss under a certain condition. The Company continues to evaluate the impact for the adoption of this standard with the adoption of IFRS 17, *Insurance Contracts.*
Annual Improvements 2014 - 2016 Cycle	In December 2016, the IASB issued *Annual Improvements 2014 - 2016 Cycle* as part of its ongoing process to efficiently deal with non-urgent narrow scope amendments to IFRS. Three amendments were included in this issue relating to IFRS 12, *Disclosure of Interests in Other Entities,* IFRS 1, *First-time Adoption of International Financial Reporting Standards*, and IAS 28, *Investments in Associates and Joint Ventures*. The amendments to IFRS 12 were effective January 1, 2017 and did not have a significant impact on the Company's consolidated financial statements. The amendments to IFRS 1 and IAS 28 are effective January 1, 2018. Adoption of these amendments will not have an impact on the Company's consolidated financial statements.
IAS 40 - *Investment Property*	In December 2016, the IASB issued an amendment to IAS 40, *Investment Property* to clarify the requirements on transfers to, or from, investment property. The amendment is effective January 1, 2018. The Company does not anticipate a significant impact from the adoption of this standard.
IFRS 2 - *Share-based Payment*	In June 2016, the IASB issued narrow scope amendments to IFRS 2, *Share-based Payments* clarifying how to account for certain types of share-based payment transactions. The amendment is effective January 1, 2018. The Company does not anticipate a significant impact from the adoption of this standard.

New Standard	Summary of Future Changes
IFRIC 22 - *Foreign Currency Transactions and Advance Consideration*	In December 2016, the IASB issued IFRIC Interpretation 22, *Foreign Currency Transactions and Advance Consideration* that provides requirements about which exchange rate to use in reporting foreign currency transactions when payment is made or received in advance. The interpretation is effective January 1, 2018. The Company does not anticipate a significant impact from the adoption of this standard.
Annual Improvements 2015 - 2017 cycle	In December 2017, the IASB issued *Annual Improvements 2015 - 2017 Cycle* as part of its ongoing process to efficiently deal with non-urgent narrow scope amendments to IFRS. Four amendments were included in this issue relating to IFRS 3, *Income Taxes* and IAS 23*, Borrowing Costs.* The amendments are effective January 1, 2019. The Company is evaluating the impact of the adoption of these amendments.
IAS 28 - *Investments in Associates and Joint Ventures*	In October 2017, the IASB issued amendments to IAS 28, *Investments in Associates and Joint Ventures*. The amendments clarify that a company is to account for long-term interests in an associate or joint venture using IFRS 9, *Financial Instruments* when the equity method is not applied. The amendments are effective January 1, 2019. The Company is evaluating the impact of the adoption of these amendments.
IFRIC 23 - *Uncertainty over Income Tax Treatments*	In June 2017, the IASB issued IFRIC 23, *Uncertainty over Income Tax Treatments.* The interpretation clarifies how to apply the recognition and measurement requirements in IAS 12, *Income Taxes*, when there is uncertainty over income tax treatments. The interpretation is effective for periods beginning on or after January 1, 2019. The Company does not anticipate a significant impact from the adoption of this standard.

OTHER INFORMATION

SELECTED ANNUAL INFORMATION

(in $ millions, except per share amounts)	Years ended December 31		
	2017	2016[4]	2015
Total revenue	**$ 47,008**	$ 46,381	$ 33,820
Net earnings - common shareholders			
Net earnings	**2,149**	2,641	2,762
Net earnings per common share			
Basic	**2.173**	2.668	2.774
Diluted	**2.170**	2.663	2.768
Total assets			
Total assets[4]	**$ 419,838**	$ 399,733	$ 399,935
Proprietary mutual funds and institutional net assets	**278,954**	259,215	252,480
Total assets under management	**698,792**	658,948	652,415
Other assets under administration	**651,121**	589,291	560,102
Total assets under administration	**$ 1,349,913**	$ 1,248,239	$ 1,212,517
Total liabilities[4]	**$ 394,302**	374,725	$ 374,675
Dividends paid per share			
Series F First Preferred	**1.4750**	1.4750	1.4750
Series G First Preferred	**1.3000**	1.3000	1.3000
Series H First Preferred	**1.21252**	1.21252	1.21252
Series I First Preferred	**1.1250**	1.1250	1.1250
Series L First Preferred	**1.41250**	1.41250	1.41250
Series M First Preferred	**1.450**	1.450	1.450
Series N First Preferred	**0.544000**	0.544000	0.912500
Series O First Preferred[1]	**0.466386**	0.449219	—
Series P First Preferred	**1.350**	1.350	1.350
Series Q First Preferred	**1.2875**	1.2875	1.2875
Series R First Preferred	**1.200**	1.200	1.200
Series S First Preferred[2]	**1.312500**	1.312500	1.312500
Series T First Preferred[3]	**0.798**	—	—
Common	**1.468**	1.384	1.304

(1) The Series O First Preferred Shares were issued on December 31, 2015.
(2) The Series S First Preferred Shares were issued on May 22, 2014. The first dividend payment was made on September 30, 2014 in the amount of $0.47106 per share. Regular quarterly dividends are $0.328125 per share.
(3) The Series T First Preferred Shares were issued on May 18, 2017. The first dividend payment was made on September 29, 2017 in the amount of $0.476200 per share. Regular quarterly dividends are $0.321875 per share.
(4) Comparative figures have been reclassified as described in note 2 and note 34 to the Company's December 31, 2017 annual consolidated financial statements.

QUARTERLY FINANCIAL INFORMATION

Quarterly financial information (in $ millions, except per share amounts)	**2017**				2016			
	Q4	Q3	Q2	Q1	Q4	Q3	Q2	Q1
Total revenue[1]	**$ 12,888**	$ 10,198	$ 11,048	$ 12,874	$ 7,814	$ 13,408	$ 12,807	$ 12,352
Common shareholders								
Net earnings								
Total	**392**	581	585	591	676	674	671	620
Basic - per share	**0.397**	0.587	0.591	0.598	0.686	0.682	0.675	0.625
Diluted - per share	**0.396**	0.587	0.590	0.597	0.685	0.681	0.674	0.623
Adjusted net earnings [2]								
Total	**734**	582	712	619	698	689	675	623
Basic - per share	**0.742**	0.589	0.719	0.627	0.709	0.697	0.679	0.628
Diluted - per share	**0.741**	0.588	0.718	0.625	0.707	0.696	0.678	0.626

(1) Revenue includes the changes in fair value through profit or loss on investment assets.

(2) Adjusted net earnings attributable to common shareholders is a non-IFRS measures of earnings performance. Adjustments for 2017 are detailed in footnote 6 to the Selected Consolidated Financial Information table of this MD&A. The fourth quarter of 2016 included restructuring costs of $20 million related to Putnam and $2 million related to the Financial Services business unit. The third quarter of 2016 included restructuring costs of $13 million related to the Insurance & Annuities business unit and $2 million related to the Financial Services business unit. The second quarter of 2016 included restructuring costs of $3 million related to the Financial Services business unit and $1 million related to the Insurance & Annuities business unit. The first quarter of 2016 included restructuring costs of $2 million related to the Financial Services business unit and $1 million related to the Insurance & Annuities business unit.

Lifeco's consolidated net earnings attributable to common shareholders were $392 million for the fourth quarter of 2017 compared to $676 million reported a year ago. On a per share basis, this represents $0.397 per common share ($0.396 million diluted) for the fourth quarter of 2017 compared to $0.686 per common share ($0.685 diluted) a year ago.

Total revenue for the fourth quarter of 2017 was $12,888 million and comprises premium income of $8,506 million, regular net investment income of $1,564 million, a positive change in fair value through profit or loss on investment assets of $1,415 million and fee and other income of $1,403 million.

DISCLOSURE CONTROLS AND PROCEDURES

The Company’s disclosure controls and procedures are designed to provide reasonable assurance that information relating to the Company which is required to be disclosed in reports filed under provincial and territorial securities legislation is: (a) recorded, processed, summarized and reported within the time periods specified in the provincial and territorial securities legislation, and (b) accumulated and communicated to the Company's senior management, including the President and Chief Executive Officer and the Executive Vice-President and Chief Financial Officer, as appropriate, to allow timely decisions regarding required disclosure. Management evaluated the effectiveness of the Company's disclosure controls and procedures as at December 31, 2017 and, based on such evaluation, the President and Chief Executive Officer and the Executive Vice-President and Chief Financial Officer have concluded that the Company's disclosure controls and procedures are effective.

INTERNAL CONTROL OVER FINANCIAL REPORTING

The Company's internal control over financial reporting is designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with IFRS. The Company's management is responsible for establishing and maintaining effective internal control over financial reporting. All internal control systems have inherent limitations and may become ineffective because of changes in conditions. Therefore, even those systems determined to be effective can provide only reasonable assurance with respect to financial statement preparation and presentation.

The Company's management, under the supervision of the President and Chief Executive Officer and the Executive Vice-President and Chief Financial Officer, has evaluated the effectiveness of the Company's internal control over financial reporting based on the 2013 *Internal Control - Integrated Framework* (COSO Framework) published by the Committee of Sponsoring Organizations of the Treadway Commission. The Company's management adopted the revised 2013 COSO Framework in 2015 as the basis to evaluate the effectiveness of the Lifeco's internal control over financial reporting.

Management evaluated the effectiveness of the Company's internal control over financial reporting as at December 31, 2017 and, based on such evaluation, the President and Chief Executive Officer and the Executive Vice-President and Chief Financial Officer have concluded that the Company's internal control over financial reporting is effective and that there are no material weaknesses in the Company's internal control over financial reporting.

TRANSACTIONS WITH RELATED PARTIES

In the normal course of business, Great-West Life and Putnam enter into various transactions with related companies, which include providing insurance benefits and sub-advisory services to other companies within the Power Financial Corporation, Lifeco's parent, group of companies. In all cases, transactions were at market terms and conditions.

During the year, Great-West Life provided to and received from IGM Financial Inc. and its subsidiaries (IGM), a member of the Power Financial Corporation group of companies, certain administrative services. Great-West Life also provided life insurance, annuity and disability insurance products under a distribution agreement with IGM. London Life provided distribution services to IGM. All transactions were provided at market terms and conditions.

Segregated funds of the Company were invested in funds managed by Investors Group and Mackenzie Investments. The Company also has interests in mutual funds, open-ended investment companies and unit trusts. Some of these funds are managed by related parties of the Company and the Company receives management fees related to these services. All transactions were provided at market terms and conditions.

At December 31, 2017 the Company held $74 million ($42 million in 2016) of debentures issued by IGM.

During the normal course of business in 2017, the Company purchased residential mortgages of $137 million from IGM ($184 million in 2016).

The Company holds investments in Portag3 Ventures and other entities which invests in the FinTech sector. These investments are a corporate partnership with Power Financial Corporation and IGM.

The Company provides asset management and administrative services for employee benefit plans relating to pension and other post-employment benefits for employees of the Company and its subsidiaries. These transactions were provided at market terms and conditions

As at December 31, 2017 and December 31, 2016, there were no significant outstanding loans or guarantees and no loans or guarantees issued during 2017 or 2016 with related parties. There were no provisions for uncollectible amounts from related parties during 2017 or 2016.

TRANSLATION OF FOREIGN CURRENCY

Through its operating subsidiaries, Lifeco conducts business in multiple currencies. The four primary currencies are the Canadian dollar, the U.S. dollar, the British pound and the euro. Throughout this document, foreign currency assets and liabilities are translated into Canadian dollars at the market rate at the end of the reporting period. All income and expense items are translated at an average rate for the period. The rates employed are:

Translation of foreign currency Period ended	**Dec. 31 2017**	Sept. 30 2017	June 30 2017	Mar. 31 2017	Dec. 31 2016	Sept. 30 2016	June 30 2016	Mar. 31 2016
United States dollar								
Balance sheet	**$ 1.26**	$ 1.25	$ 1.30	$ 1.33	$ 1.34	$ 1.31	$ 1.30	$ 1.30
Income and expenses	**$ 1.27**	$ 1.25	$ 1.34	$ 1.32	$ 1.33	$ 1.31	$ 1.29	$ 1.37
British pound								
Balance sheet	**$ 1.70**	$ 1.67	$ 1.69	$ 1.67	$ 1.66	$ 1.71	$ 1.72	$ 1.87
Income and expenses	**$ 1.69**	$ 1.64	$ 1.72	$ 1.64	$ 1.66	$ 1.71	$ 1.85	$ 1.96
Euro								
Balance sheet	**$ 1.51**	$ 1.47	$ 1.48	$ 1.42	$ 1.42	$ 1.47	$ 1.44	$ 1.48
Income and expenses	**$ 1.50**	$ 1.47	$ 1.48	$ 1.41	$ 1.44	$ 1.46	$ 1.46	$ 1.51

Additional information relating to Lifeco, including Lifeco's most recent consolidated financial statements, CEO/CFO certification and Annual Information Form are available at www.sedar.com.