2017 Annual Report

Guiding our customers in a changing world

GREAT-WEST LIFECO INC.

GREAT-WEST LIFECO INC.

Corporate profile

Great-West Lifeco Inc. is an international financial services holding company with interests in life insurance, health insurance, retirement and investment services, asset management and reinsurance businesses. Great-West Lifeco has operations in Canada, the United States and Europe through Great-West Life, London Life, Canada Life, Irish Life, Great-West Financial and Putnam Investments. Great-West Lifeco and its companies have over $1.3 trillion in consolidated assets under administration and are members of the Power Financial Corporation group of companies. Great-West Lifeco trades on the Toronto Stock Exchange (TSX) under the ticker symbol GWO.

More online

Visit our website to get a digital copy of our annual report and access more information, such as our current credit ratings.

Greatwestlifeco.com

Contents

The financial information in this report is presented in millions of Canadian dollars for the period ended December 31, 2017 unless otherwise indicated.

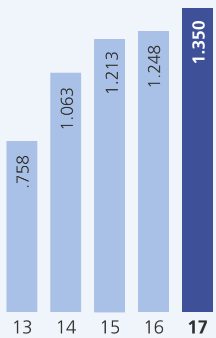
Readers are referred to the Cautionary Notes regarding forward-looking information and non-IFRS financial measures on page 16 of this report.

We’re investing in new technologies to allow our customers to connect with us when, where and how they choose. We’re developing innovative solutions to meet the evolving needs of diverse markets. And, more than ever, we’re providing the guidance to help customers feel confident in their choices.

Highlights

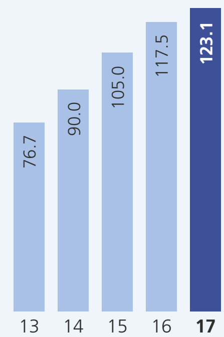
Solid performance across our businesses

Total Assets Under Administration



$1.350 trillion

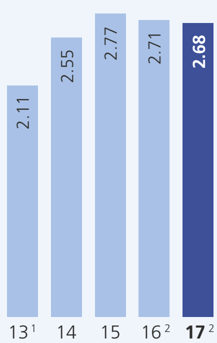
Premiums and Deposits



$123.1 billion

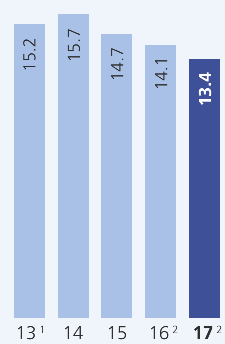
Delivering shareholder value

Earnings Per Common Share



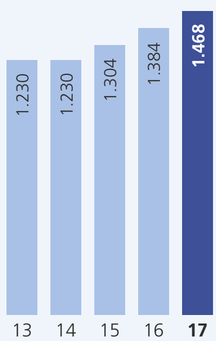
$2.68

Return on Common Shareholders' Equity



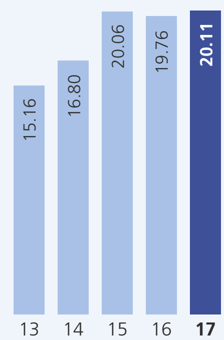
13.4%

Dividends Per Common Share



$1.468

Book Value Per Common Share



$20.11

Information is presented on an operating[1] or adjusted[2] basis, non-IFRS financial measures.

Providing guidance, flexibility and choice

With more than 30 million customer relationships worldwide, we provide guidance and innovative solutions to give customers more choice and flexibility to reach their goals.

30+ million
Customer relationships

$30+ billion
Benefits paid to customers

23,300
Employees

260,000
Advisor relationships

Focused on customer outcomes in a changing world

Delivering on our commitments today and for generations to come: Anticipating and meeting our customers' changing needs for guidance, access and transparency

Jeffrey Orr
Chair of the Board

Paul Mahon
President and
Chief Executive Officer

Our customers' needs and expectations are being reshaped by technology, shifting demographics and the impacts of globalization. At the same time, our operating environment is being challenged by continuing low interest rates, while regulators are becoming more focused on customer outcomes and heightened capital standards.

Within this environment, Great-West Lifeco delivered solid results across all of our businesses in 2017. We sustained our strong and stable capital position and industry-leading credit ratings. We are finding the right balance between delivering solid results today, with investing in a strong foundation to drive sustainable growth in the future. While our approaches vary across our operating regions, they share a common strategy that is focused on customer outcomes in a changing world, and strong risk management to ensure we deliver on our current and future commitments.

In the pages that follow, you'll see examples of the many ways we are anticipating and meeting our customers' needs for guidance, access and transparency.

Advancing our understanding of diverse customer needs

Customer needs are diverse and changing, driven by factors such as an aging boomer generation, young millennials becoming first-time customers, and the impact of globalization. We also know that customers expect services and products that are tailored to their unique needs and preferences.

This is why we are developing a deeper understanding of the customer on a segmented basis, learning as we engage with customers across multiple touchpoints over a lifetime. In Canada, for example, we launched a pilot to help millennials save for the future while paying down student debt. In the United States, Empower Retirement's income projection tool motivates plan members to step up their retirement savings based on their particular life situation and needs. Through investments in automation and innovation, we are focused on simplifying products, ensuring customers get good value, and providing service in multiple languages to meet the needs of our multicultural society.

We believe in the value of advice. *Households that worked with an advisor grew assets by nearly 4 times compared to non-advised households.*

2016 report: The Gamma Factor and the Value of Financial Advice, by the Center for Interuniversity Research and Analysis of Organizations (CIRANO)

Advice is at the core of what we do, and our advisors are central to our ability to deliver on our customers' needs today and into the future. A study by CIRANO in 2016 shows that households that work with an advisor are significantly better off financially than their peers. We have invested in enabling our advisors. In Canada for example, we created an integrated organization of leading independent advisors whose business owner and entrepreneur clients need specialized service and support. In the United States, Putnam's innovative analysis tool, FundVisualizer, helps advisors digitally evaluate and compare over 30,000 mutual funds, electronic traded funds and indexes.

At the same time, the advisory landscape across the world is being reshaped by changing regulations. As a trusted market leader that brings global perspectives, we are actively engaging with regulators and the industry to help shape regulatory outcomes for the benefit of consumers, while sustaining a strong advice channel.

Leveraging technology to enhance customer reach, access and transparency

We are leveraging technology such as automation, digital interfaces, artificial intelligence and robotics to enhance customer reach, access and transparency. Our ultimate objective is to deliver a better customer experience at a lower cost.

We have engaged with fintech companies through our investment in Portag3 Ventures. This has allowed us to establish connections with the fintech community, leading to partnerships and outsourcing arrangements that will help deliver innovation and differentiation.

We also extended our customer reach by investing in new channels – for example, with the acquisition of Financial Horizons Group, the leading Canadian organization focused on supporting insurance advisor practices.

In the United Kingdom we extended our reach through acquiring Retirement Advantage, bringing 30,000 new customers and expanding our retirement income offering with new innovative products. In Ireland and Germany we are enabling stronger capabilities to meet broker needs; and in Germany, building out new systems that extend our reach to group pension customers.

In today's online, interconnected world, our brands play an increasingly important role in helping extend our reach. In Canada, we are reviewing our multiple brands to ensure they support a changing, more digitally-connected customer.

Investing in our people and our communities to build a more sustainable future

Our workforce is shifting from paper and physical process work to technology and knowledge-based jobs. We're investing in training, finding the right talent, and putting in place the building blocks to meet the needs of a diverse and multicultural employee population, reflective of our customers. Our internal leadership forums in 2017 featured sessions for our management teams on diversity and inclusion, unconscious bias training, leader measurement and succession planning. We are developing the next generation of leaders, and leveraging talent across our organization.

Our businesses are transforming to better focus on the customer. Transformation is not easy, and we thank our employees for their commitment and ongoing support.

We increased our focus on investor relations in 2017, which has provided us greater opportunity to listen to investors, and share insights into how our businesses are evolving.

In our communities, we fostered collaboration with others to build stronger communities and a more sustainable future for generations to come, such as our investment in the creation of a Leadership Institute at the University of Manitoba.

How we will win in delivering for customers in generations to come

The companies that succeed in winning customers' business and loyalty over the long term will be those that understand and meet their unique needs; conduct business in a manner that is open, transparent and sustainable; and embrace technology to drive productivity, innovation and service.

We are focused on creating shareholder value by building businesses that excel at meeting customers' changing needs in a changing world. We are doing so both by organic means and by expanding our capabilities through acquisitions, while ensuring we have an overall portfolio of businesses with exposure to the markets, products and services that will deliver long-term sustainable growth to our shareholders.

Thank you

We thank our customers for the trust you place in us. We also thank our employees and advisors for helping deliver service and guidance to meet our customers' changing needs and deliver on our commitments for today and for generations to come.

Jeffrey Orr
Chair of the Board

Paul Mahon
President and
Chief Executive Officer

Strong governance underpins positive outcomes for customers

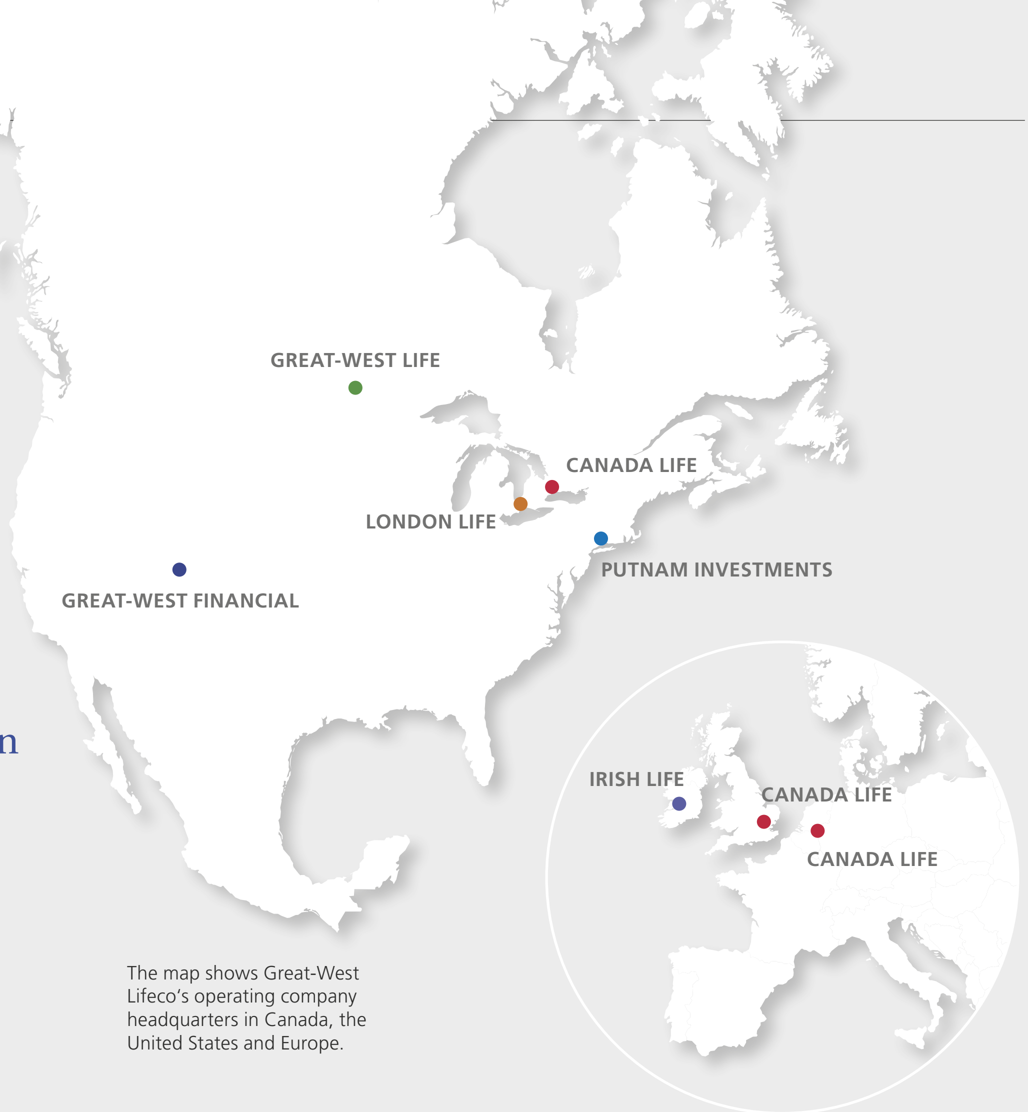
Great-West Lifeco believes good corporate governance is essential to creating positive outcomes for customers and delivering consistently strong long-term performance for shareholders.

We thank our Directors for their valuable contribution to the governance and affairs of our companies.

At Great-West Lifeco's 2017 annual meeting we announced the retirement of two Directors from our Board. Dr. Emőke Szathmáry had served as a Director of the Corporation for 11 years. Raymond Royer had been a Director for nine years, serving as Chair of the Audit Committee since his election to the Board in May 2009.

At the 2017 Annual Meeting, three new Board members were elected: Deborah Barrett, David Fuller and Donald Raymond. Ms. Barrett was most recently Chief Financial Officer at The Woodbridge Company Limited until her retirement in March 2017. Mr. Fuller is Executive Vice-President of TELUS Corporation and is President, TELUS Consumer and Small Business Solutions. Mr. Raymond is Managing Partner and Chief Investment Officer at Alignvest Management Corporation and Alignvest Investment Management Corporation.

Leadership in markets where we do business



Great-West Lifeco's companies operate in Canada, the United States and Europe.

The map shows Great-West Lifeco's operating company headquarters in Canada, the United States and Europe.

The Great-West Life Assurance Company
Established 1891

London Life
Established 1874

Canada Life
Established 1847

Great-West Financial
Established 1907

Putnam Investments
Established 1937

Irish Life
Established 1939

Canada highlights

"We are building on our core strengths and investing in new capabilities to position us to continue to meet the changing needs of both customers and advisors."

Stefan Kristjanson
President and Chief Operating Officer
Canada

Financial Horizons Group extends our reach in Canada

In July we completed the acquisition of Financial Horizons Group, Canada's leading independent Managing General Agency (MGA). This strategic acquisition gives us a strong presence in Canada's growing independent MGA sector. Financial Horizons Group provides life, health, employee benefits, pension, investments, structured settlements, and risk management products and services through a network of 6,600 advisors across Canada.

Aligning our operations

In 2017, we finished building our teams within the new structure established in late 2016. With teams in place within the individual and group customer business units, along with a new strategic customer marketing function, we are focused on continuing to enhance our understanding of our customers and delivering an exceptional experience. We're also investing in digital and innovative capabilities and services that will help achieve our vision: putting the customer at the centre of what we do.

Supporting strong advice

This year, we brought together Gold Key, Wealth & Estate Planning Group and select Freedom 55 Financial advisors as one new organization – Wealth and Insurance Solutions Enterprise (WISE). WISE is a distinguished organization for leading, independent advisors who provide customers (often affluent business owners and entrepreneurs) with specialized advice. We plan to invest significantly to continue to support a high quality value proposition to allow these elite advisors to provide even better service to customers.

Great-West Life wins Life and Health Insurer of the Year

Great-West Life was named Life and Health Insurer of the Year by Insurance Business Canada at the 2017 Insurance Business Awards. This award of excellence is presented to the company that stands out by providing top-tier life and health insurance products to consumers and businesses in Canada.

Innovative office design provides advisors with customer-focused spaces

In 2017, Freedom 55 Financial officially opened their first two *office of the future* Financial Centres in Markham, Ontario and St. John's, Newfoundland. This innovative design provides flexible, digitally enhanced and customer-focused spaces to better meet the changing needs of customers and advisors. The new offices enable Freedom 55 Financial advisors to connect with customers remotely and respond to their varying expectations and preferences.

WAYFINDER

Providing a consolidated view of path to retirement

Wayfinder™, our new digital platform for Canadian group pension plan customers, enables customers to see a consolidated picture of their retirement savings from various financial institutions and provides them with personalized guidance to achieve their retirement goals. The pilot was completed and Wayfinder is achieving results. Those customers who followed savings recommendations through the pilot increased their savings on average by $2,000 more per year.

13 million
Customer relationships

$1.2 billion
Participating policyholder dividends paid

58 million
Health and dental claims paid

$9.4 billion
Benefits paid to customers

$13.5 million
Contributed to communities

Helping recent grads save for retirement earlier

Half of graduates enter the workforce with student debt and take on average 10 years to repay, often delaying retirement savings.* That is why, in October, we announced a first-in-Canada, student loan retirement and savings pilot program to select employers. With this pilot, as employees of participating group benefits plans pay down their student loans, it triggers an employer-matched contribution to their group retirement and savings plan.

* Canadian University Survey Consortium 2015 Graduating University Student Survey Master Report
http://www.cusc-ccreu.ca/CUSC_2015_Graduating_Master%20Report_English.pdf

U.S. highlights

“The Great-West Lifeco U.S. companies are playing a significant role in positively impacting millions of American workers, investors and businesses across the nation through a dynamic, innovative and thoughtful approach to financial well-being.”

Robert L. Reynolds
President and CEO
Great-West Lifeco U.S. LLC

Putnam INVESTMENTS

Putnam continues strong performance across asset classes

At the end of December 2017, nearly 95% of the firm’s fund assets performed at levels above Lipper median for the one-year period and 85% were above median for five years. Additionally, nearly half of Putnam’s mutual fund assets performed in the Lipper top quartile for the one-year period and nearly 55% were top quartile on a five-year basis.

Investing through the lens of environmental, social and governance is becoming increasingly synonymous with good long-term investing.

Sustainable investing team marks expansion of Putnam’s ESG capabilities

In 2017, Putnam established a sustainable investing team, as the firm moved to expand its environmental, social and governance (ESG) investment capabilities to further serve the institutional and retail marketplaces. Using a highly integrated approach across all of Putnam’s investment platforms, the firm is committed to identifying and pursuing opportunities in the burgeoning ESG realm through the development and management of new investment strategies, driven by rigorous analysis of current and emerging market trends.

Putnam’s FundVisualizer helps advisors evaluate over 30,000 investment products

Putnam’s FundVisualizer – a much-acclaimed practice management tool for financial intermediaries – was named best mobile application at the 2017 mutual fund service and technology awards. The firm’s innovative analysis tool, designed to help advisors evaluate and compare over 30,000 mutual funds, ETFs and indexes, was recognized for excellence in its contribution to the fund marketplace. Earlier in the year, Putnam’s FundVisualizer received a prestigious Appy Award, honoring extraordinary, user-friendly applications on mobile, social and web-based platforms.

Empower Health Savings Account integrates healthcare and retirement savings in one seamless experience

With estimated U.S. retirement healthcare expenses projected to consume a third of one's retirement savings on average, these costs should be a part of everyone's financial plan. Empower Retirement is making it easy for individuals and their employers to take on this challenge. The new Empower Health Savings Account fully integrates healthcare and retirement savings into one seamless online experience. Individuals are now better able to save for their true future financial needs and remove some of the guesswork of financial planning. Employers benefit from the new offering as well – enjoying streamlined administration through a single online information source.

2x the market

Empower Retirement grew participant base at twice the industry average in 2017

Empower Retirement earned the trust of 36,000+ employers and 8.2 million Americans in 2017

#1 with advisors

Empower Retirement named top U.S. provider by retirement plan advisors in six of 10 categories

Independent survey ranked Empower tops in six categories, including Value for Price, Fee Structure for Advisors and Best Overall Service

28 years

Putnam Investments honored for 28 consecutive years of service excellence by DALBAR, Inc.

3.5 million

Shareholder accounts at Putnam Investments

Three new alternative investment strategies help Putnam clients navigate the markets

Putnam launched three new alternative investment strategies in 2017, designed to provide a mix of modern portfolio construction tools to help financial advisors and their clients navigate changing market conditions. The funds, focused on risk parity, market neutral and managed futures strategies, are sub-advised by Putnam affiliate, PanAgora Asset Management.

EMPOWER RETIREMENT™

Empower Retirement offers unrivalled online retirement planning

Empower Retirement offers an unrivalled online retirement planning experience that uses personal data to help individuals better understand their future income needs. Now, as the second-largest retirement service provider in the U.S., Empower is using historical data to make the case. A study covering six years of data shows that when individuals are given a customized projection of their monthly retirement income they tend to save more – 15% more – according to a recent Empower white paper. Empower's income projection tools include many ways for retirement investors to model savings scenarios and then implement those changes with just a few clicks of the mouse.

Europe highlights

"We are making significant investments to build key new capabilities for our customers so that we are able to sustain the strong positions that we have in our chosen markets and grow, both organically and through acquisition."

Arshil Jamal
President and Chief Operating Officer
Europe

retirement advantage

Acquisition of Retirement Advantage extends our reach in the U.K.

Canada Life U.K. completed its acquisition of financial services provider Retirement Advantage in January 2018, bringing 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 strengthens Canada Life's scale and capabilities in the growing United Kingdom retirement income market. It will also further strengthen our position as a leading insurer in the U.K., where we've operated since 1903, by broadening our product suite to include equity release mortgages.

Helping companies de-risk their pension funds with bulk annuities

In the U.K. we have been helping companies de-risk and improve the returns on their pension funds by actively developing our place in the bulk annuities market. One example was a company securing a new £207 million bulk annuity with Canada Life as part of a phased de-risking campaign. The timing of the purchase helped them to achieve the year's best pricing, while also helping fund their pension benefits for pensioners.

Securing pensions for the future through reinsurance

In many countries, an aging population is creating new challenges that are putting new strains on pension plans. Through our Reinsurance business, we have developed innovative longevity-risk structures to help our clients secure and stabilize the future retirement income of their employee pensioners. These solutions can be used for organizations of varying sizes, from those with more than 7,500 pensioners to those with fewer than 200 pensioners.

Irish Life receives top quartile customer service satisfaction score

Irish Life passed a major milestone in our customer experience program, branded intouch, when we achieved a top quartile customer satisfaction score for the first time. The score is benchmarked against hundreds of companies in the U.K. and Ireland across all sectors, not just financial services, and measures how strong an organization is in doing best what matters most to its customers. Improved digital services for customers, the introduction of web chat, innovative new products, and the combined efforts of our employees to make every customer touchpoint count, all contributed to the achievement of this record customer satisfaction score.


intouch NEWS

CUSTOMER SATISFACTION 87%

HITS TOP QUARTILE!

Irish Life

5.1 million
Customer relationships

$16.7 billion
Benefits paid to customers

$255 billion
Assets under administration

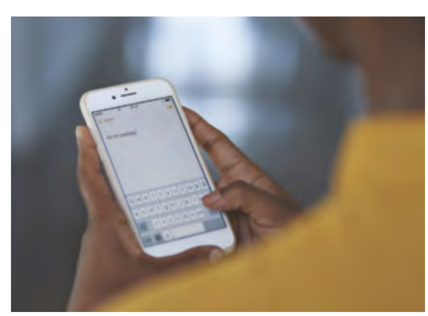
87%
Customer satisfaction score in Ireland

Helping customers on their health and wellness journey

Irish Life Health recently launched a new proposition for the corporate market called 4D Health. These plans take a fresh view of health and well-being going above and beyond the traditional approach of Hospital coverage. The four dimensions to these new products are Well-being, Diagnosis, Treatment and Recovery. This approach is what differentiates Irish Life Health and ensures that wherever the customer is on their health journey they have relevant and meaningful benefits to meet their needs. The new Health business was successfully integrated, and the business continues to grow and win some exciting new corporate businesses.

Online process for new business shortens time frame in Germany

In Germany, Canada Life has continued its journey using modern, digital technology to make it easier for our brokers and customers to do business with us. Our online underwriting and application submission process has now been enhanced to allow for a smartphone or tablet-based electronic signature facility. This enables a much smoother new business process, which provides customers with certainty of coverage in a shorter time frame.



Stronger communities and sustainable practices

Our companies and employees are connected by a shared sense of responsibility to give back and help build stronger communities. Through employee volunteering, workplace campaigns and corporate donations, we are making a positive impact on the world around us. Furthermore, our companies' commitment to sustainability motivates us to reduce the impact of our operations through continuous improvement.

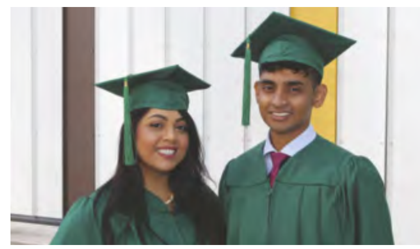
Environmental sustainability

Our companies strive to help build a more sustainable future for generations to come, and one of the ways we contribute is through our work to reduce the environmental impact of our operations. This past year we began reporting for the first time on a consolidated basis, on the environmental impact of our operations around the world.

In addition to the recognition we have received for reducing our environmental impact, we are committed to continuous improvement of our operations. For example, this past year we opened a new child care centre in Winnipeg, creating 100 new child care spaces in the city. The building is heated and cooled with an energy efficient geothermal system that has a near-zero greenhouse gas footprint.

Helping youth graduate

In Canada, we are giving back through our Stronger Communities Together™ program. For example, since 2003, we have supported Pathways to Education in their efforts to help kids in low-income communities graduate from high school – increasing graduation rates for students in the program by 85%. In 2017, we renewed our commitment with a $500,000 commitment. We have also been able to create unique experiences for their students, such as meeting Formula 1 driver Lance Stroll and Canadian Olympic hero Alexandre Despatie.



Making a difference for those diagnosed with cancer

Every year, our employees in the U.K. choose four charities to support through a monthly payroll giving program which is matched by the company. These include one national charity and one local charity in each of our mainland U.K. offices. In 2017, Macmillan was chosen as the national charity. Macmillan supports hundreds of thousands of people who have been diagnosed with cancer by providing expert information and medical, practical, emotional, financial and personal support.

Promoting healthy and active lifestyles

Irish Life Staff Charities selects two charities to receive donations collected throughout the year. In 2017, the charities selected were Our Lady's Children's Hospital, Crumlin and Multiple Sclerosis Ireland, with the €340,000 raised divided evenly between the two charities. In addition to the charities selected by employees, Irish Life is also supporting the Gaelic Athletic Association's Healthy Club Project which encourages these clubs to get involved to support communities in pursuit of better physical, social and mental well-being.

Giving kids equipment to get in the game

Through partnerships with three NFL teams and Good Sports, we provided more than 80,000 children in low-income communities with sports equipment specific to the needs of their school. Ninety employees in Boston, Denver and Kansas City volunteered their time to organize equipment for distribution. Through a relationship that Good Sports has with national sporting goods manufacturers and retailers, new equipment was purchased at highly discounted prices, stretching Empower's $135,000 donation to purchase the equivalent of more than $300,000 in equipment.

12% reduction

In absolute greenhouse gas emissions

*2014 to 2016. Please see greatwestlifeco.com for more information.

5% reduction

In absolute energy consumption from non-renewable fuel sources, purchased electricity and steam

*2014 to 2016. Please see greatwestlifeco.com for more information.

$17.6 million

Contribution to communities in 2017

Score: A-

Carbon Disclosure Project (CDP)

Being there in times of need

In 2017, Hurricanes Harvey, Irma and Maria caused devastating destruction and displaced thousands of people. Our companies and our U.S. employees responded by donating to relief efforts to help those most impacted. In addition, we are playing a role in financing the recovery and rebuilding activities through our property catastrophe coverage to reinsurance companies. In meeting our promises on these claims, we are supporting our clients and partners in managing through this difficult situation.

Supporting employee-led initiatives

In the United States, Great-West Financial's Associates Community Together (ACT) program encourages employees to give back to their communities. As part of that, the payroll giving campaign raised more than $500,000 for communities nation-wide, surpassing previous campaigns on record. Employee pledges for charitable causes closest to their hearts are matched 1:1 by the company.

Investing in the leaders of the future

In 2017, we announced that our companies, along with Investors Group and Power Corporation of Canada, would be investing in the creation of a Leadership Institute at the University of Manitoba. This Institute will help develop the next generation of leaders. The future leaders who benefit from this Institute will also have a positive impact outside of the companies where they work. Just as previous generations have done, they will be leaders in our communities who will help build a more prosperous society.

Management's Discussion and Analysis

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 Dec. 31 2017	Sept. 30 2017	Dec. 31 2016	For the twelve months ended 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:

2017 Adjustments

	Segment					
	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

	December 31, 2017		December 31, 2016	
Region				
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			Total
		Canada	United States	Europe	
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	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

	Payments due by period						
At December 31, 2017	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

- 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)

Products and Services

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

Distribution (2)

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.

Market Position

- 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)

Products and Services

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

Distribution

- 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.

(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 (1)	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 • 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)
PRODUCTS AND SERVICES • 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
DISTRIBUTION • 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 • 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
Products and Services ***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
Distribution ***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 ended	
	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

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)

(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

INSURANCE & ANNUITIES (CONT'D)

MARKET POSITION (CONT'D)

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

PRODUCTS AND SERVICES

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

DISTRIBUTION

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
- 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 U.S.
- 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

PRODUCTS AND SERVICES

Life
- Yearly renewable term
- Co-insurance
- Modified co-insurance
- Capital relief solutions

Property & Casualty
- Catastrophe retrocession

Annuity / Longevity
- Payout annuity
- Longevity protection
- Fixed annuity

DISTRIBUTION
- 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 returns – 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 2017	Defined benefit pension plans 2016	Other post-employment benefits 2017	Other post-employment benefits 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 2017	1% increase 2016	1% decrease 2017	1% decrease 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.
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.
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

	Years ended December 31		
(in $ millions, except per share amounts)	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

(in $ millions, except per share amounts)	2017 Q4	2017 Q3	2017 Q2	2017 Q1	2016 Q4	2016 Q3	2016 Q2	2016 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

	2017				2016			
Period ended	**Dec. 31**	Sept. 30	June 30	Mar. 31	Dec. 31	Sept. 30	June 30	Mar. 31
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.

Financial Reporting Responsibility

The consolidated financial statements are the responsibility of management and are prepared in accordance with International Financial Reporting Standards (IFRS). The financial information contained elsewhere in the annual report is consistent with that in the consolidated financial statements. The consolidated financial statements necessarily include amounts that are based on management's best estimates. These estimates are based on careful judgments and have been properly reflected in the consolidated financial statements. In the opinion of management, the accounting practices utilized are appropriate in the circumstances and the consolidated financial statements present fairly, in all material respects, the financial position of the Company and the results of its operations and its cash flows in accordance with IFRS.

In carrying out its responsibilities, management maintains appropriate internal control over financial reporting designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements in accordance with IFRS.

The consolidated financial statements were approved by the Board of Directors, which has oversight responsibilities with respect to financial reporting. The Board of Directors carries out this responsibility principally through the Audit Committee, which comprises independent directors. The Audit Committee is charged with, among other things, the responsibility to:

- Review the interim and annual consolidated financial statements and report thereon to the Board of Directors.
- Review internal control procedures.
- Review the independence of the external auditors and the terms of their engagement and recommend the appointment and compensation of the external auditors to the Board of Directors.
- Review other audit, accounting and financial reporting matters as required.

In carrying out the above responsibilities, this Committee meets regularly with management, and with both the Company's external and internal auditors to review their respective audit plans and to review their audit findings. The Committee is readily accessible to the external and internal auditors.

The Board of Directors of each of The Great-West Life Assurance Company and Great-West Life & Annuity Insurance Company appoints an Actuary who is a Fellow of the Canadian Institute of Actuaries. The Actuary:

- Ensures that the assumptions and methods used in the valuation of policy liabilities are in accordance with accepted actuarial practice, applicable legislation and associated regulations and directives.
- Provides an opinion regarding the appropriateness of the policy liabilities at the balance sheet date to meet all policyholder obligations. Examination of supporting data for accuracy and completeness and analysis of assets for their ability to support the policy liabilities are important elements of the work required to form this opinion.

Deloitte LLP Chartered Professional Accountants, as the Company's external auditors, have audited the consolidated financial statements. The Independent Auditor's Report to the Shareholders is presented following the consolidated financial statements. Their opinion is based upon an examination conducted in accordance with Canadian generally accepted auditing standards, performing such tests and other procedures as they consider necessary in order to obtain reasonable assurance that the consolidated financial statements present fairly, in all material respects, the financial position of the Company and the results of its operations and its cash flows in accordance with IFRS.

Paul Mahon	**Garry MacNicholas**
President and Chief Executive Officer	Executive Vice-President and Chief Financial Officer

February 8, 2018

Consolidated Statements of Earnings

(in Canadian $ millions except per share amounts)

For the years ended December 31	2017	2016
Income		
Premium income		
Gross premiums written	**$ 38,306**	$ 35,050
Ceded premiums	**(4,359)**	(3,925)
Total net premiums	**33,947**	31,125
Net investment income (note 5)		
Regular net investment income	**6,141**	6,252
Changes in fair value through profit or loss	**1,466**	3,903
Total net investment income	**7,607**	10,155
Fee and other income	**5,454**	5,101
	47,008	46,381
Benefits and expenses		
Policyholder benefits		
Gross	**30,801**	28,315
Ceded	**(2,214)**	(2,103)
Total net policyholder benefits	**28,587**	26,212
Policyholder dividends and experience refunds	**1,800**	1,502
Changes in insurance and investment contract liabilities	**5,256**	6,961
Total paid or credited to policyholders	**35,643**	34,675
Commissions	**2,410**	2,602
Operating and administrative expenses (note 28)	**4,833**	4,799
Premium taxes	**463**	411
Financing charges (note 15)	**300**	302
Amortization of finite life intangible assets and impairment reversal (note 10)	**168**	177
Restructuring expenses (note 29)	**259**	63
Loss on assets held for sale (note 6)	**202**	–
Earnings before income taxes	**2,730**	3,352
Income taxes (note 27)	**422**	396
Net earnings before non-controlling interests	**2,308**	2,956
Attributable to non-controlling interests (note 19)	**30**	192
Net earnings	**2,278**	2,764
Preferred share dividends (note 21)	**129**	123
Net earnings – common shareholders	**$ 2,149**	$ 2,641
Earnings per common share (note 21)		
Basic	**$ 2.173**	$ 2.668
Diluted	**$ 2.170**	$ 2.663

Consolidated Statements of Comprehensive Income

(in Canadian $ millions)

For the years ended December 31	2017	2016
Net earnings	**$ 2,278**	$ 2,764
Other comprehensive income		
Items that may be reclassified subsequently to Consolidated Statements of Earnings		
Unrealized foreign exchange gains (losses) on translation of foreign operations	**(495)**	(1,485)
Unrealized foreign exchange gains (losses) on euro debt designated as hedges of the net investment in foreign operations	**(90)**	42
Income tax (expense) benefit	**12**	(6)
Unrealized gains (losses) on available-for-sale assets	**(35)**	115
Income tax (expense) benefit	**9**	(10)
Realized (gains) losses on available-for-sale assets	**(30)**	(80)
Income tax expense	**5**	12
Unrealized gains (losses) on cash flow hedges	**10**	107
Income tax (expense) benefit	**(4)**	(40)
Realized (gains) losses on cash flow hedges	**407**	2
Income tax benefit	**(160)**	(1)
Non-controlling interests	**68**	48
Income tax (expense) benefit	**(14)**	(10)
Total items that may be reclassified	**(317)**	(1,306)
Items that will not be reclassified to Consolidated Statements of Earnings		
Re-measurements on defined benefit pension and other post-employment benefit plans (note 24)	**(57)**	(231)
Income tax (expense) benefit	**(8)**	60
Non-controlling interests	**12**	6
Income tax (expense) benefit	**(3)**	(1)
Total items that will not be reclassified	**(56)**	(166)
Total other comprehensive income (loss)	**(373)**	(1,472)
Comprehensive income	**$ 1,905**	$ 1,292

Consolidated Balance Sheets

(in Canadian $ millions)

December 31	2017	2016
Assets		(note 34)
Cash and cash equivalents (note 4)	**$ 3,551**	$ 3,259
Bonds (note 5)	**120,204**	116,773
Mortgage loans (note 5)	**22,185**	21,651
Stocks (note 5)	**8,864**	8,665
Investment properties (note 5)	**4,851**	4,340
Loans to policyholders	**8,280**	8,467
	167,935	163,155
Assets held for sale (note 6)	**169**	–
Funds held by ceding insurers (note 7)	**9,893**	10,781
Goodwill (note 10)	**6,179**	5,977
Intangible assets (note 10)	**3,732**	3,972
Derivative financial instruments (note 30)	**384**	528
Owner occupied properties (note 11)	**706**	649
Fixed assets (note 11)	**303**	304
Other assets (note 12)	**2,424**	2,263
Premiums in course of collection, accounts and interest receivable	**4,647**	4,311
Reinsurance assets (note 13)	**5,045**	5,627
Current income taxes	**134**	170
Deferred tax assets (note 27)	**930**	1,593
Investments on account of segregated fund policyholders (note 14)	**217,357**	200,403
Total assets	**$ 419,838**	$ 399,733
Liabilities		
Insurance contract liabilities (note 13)	**$ 159,524**	$ 155,940
Investment contract liabilities (note 13)	**1,841**	2,009
Debentures and other debt instruments (note 16)	**5,617**	5,980
Capital trust securities (note 17)	**160**	161
Funds held under reinsurance contracts	**373**	320
Derivative financial instruments (note 30)	**1,336**	2,012
Accounts payable	**2,684**	2,049
Other liabilities (note 18)	**3,752**	3,836
Current income taxes	**464**	494
Deferred tax liabilities (note 27)	**1,194**	1,521
Investment and insurance contracts on account of segregated fund policyholders (note 14)	**217,357**	200,403
Total liabilities	**394,302**	374,725
Equity		
Non-controlling interests (note 19)		
Participating account surplus in subsidiaries	**2,771**	2,782
Non-controlling interests in subsidiaries	**164**	224
Shareholders' equity		
Share capital (note 20)		
Preferred shares	**2,714**	2,514
Common shares	**7,260**	7,130
Accumulated surplus	**12,098**	11,465
Accumulated other comprehensive income (note 25)	**386**	746
Contributed surplus	**143**	147
Total equity	**25,536**	25,008
Total liabilities and equity	**$ 419,838**	$ 399,733

Approved by the Board of Directors:

Jeffrey Orr
Chair of the Board

Paul Mahon
President and Chief Executive Officer

Consolidated Statements of Changes in Equity

(in Canadian $ millions)

	December 31, 2017					
	Share capital	Contributed surplus	Accumulated surplus	Accumulated other comprehensive income (loss)	Non-controlling interests	Total equity
Balance, beginning of year	**$ 9,644**	**$ 147**	**$ 11,465**	**$ 746**	**$ 3,006**	**$ 25,008**
Net earnings	**–**	**–**	**2,278**	**–**	**30**	**2,308**
Other comprehensive income (loss)	**–**	**–**	**–**	**(373)**	**(63)**	**(436)**
	9,644	**147**	**13,743**	**373**	**2,973**	**26,880**
Dividends to shareholders						
Preferred shareholders (note 21)	**–**	**–**	**(129)**	**–**	**–**	**(129)**
Common shareholders	**–**	**–**	**(1,453)**	**–**	**–**	**(1,453)**
Shares exercised and issued under share-based payment plans (note 20)	**143**	**(62)**	**–**	**–**	**48**	**129**
Share-based payment plans expense	**–**	**58**	**–**	**–**	**–**	**58**
Equity settlement of Putnam share-based plans	**–**	**–**	**–**	**–**	**(57)**	**(57)**
Dividends to Putnam non-controlling interests	**–**	**–**	**–**	**–**	**(26)**	**(26)**
Shares purchased and cancelled under Normal Course Issuer Bid (note 20)	**(63)**	**–**	**–**	**–**	**–**	**(63)**
Excess of redemption proceeds over stated capital per Normal Course Issuer Bid (note 20)	**50**	**–**	**(50)**	**–**	**–**	**–**
Issuance of preferred shares (note 20)	**200**	**–**	**–**	**–**	**–**	**200**
Preferred share issue costs (note 20)	**–**	**–**	**(3)**	**–**	**–**	**(3)**
Dilution gain on non-controlling interests	**–**	**–**	**3**	**–**	**(3)**	**–**
Disposal of investment in associate (note 5)	**–**	**–**	**(13)**	**13**	**–**	**–**
Balance, end of year	**$ 9,974**	**$ 143**	**$ 12,098**	**$ 386**	**$ 2,935**	**$ 25,536**

	December 31, 2016					
	Share capital	Contributed surplus	Accumulated surplus	Accumulated other comprehensive income (loss)	Non-controlling interests	Total equity
Balance, beginning of year	$ 9,670	$ 135	$ 10,416	$ 2,218	$ 2,821	$ 25,260
Net earnings	–	–	2,764	–	192	2,956
Other comprehensive income (loss)	–	–	–	(1,472)	(43)	(1,515)
	9,670	135	13,180	746	2,970	26,701
Dividends to shareholders						
Preferred shareholders (note 21)	–	–	(123)	–	–	(123)
Common shareholders	–	–	(1,369)	–	–	(1,369)
Shares exercised and issued under share-based payment plans (note 20)	31	(60)	–	–	62	33
Share-based payment plans expense	–	72	–	–	–	72
Equity settlement of Putnam share-based plans	–	–	–	–	(39)	(39)
Shares purchased and cancelled under Normal Course Issuer Bid (note 20)	(267)	–	–	–	–	(267)
Excess of redemption proceeds over stated capital per Normal Course Issuer Bid (note 20)	210	–	(210)	–	–	–
Dilution loss on non-controlling interests	–	–	(13)	–	13	–
Balance, end of year	$ 9,644	$ 147	$ 11,465	$ 746	$ 3,006	$ 25,008

Consolidated Statements of Cash Flows

(in Canadian $ millions)

For the years ended December 31	2017	2016
Operations		
Earnings before income taxes	**$ 2,730**	$ 3,352
Income taxes paid, net of refunds received	**(314)**	(223)
Adjustments:		
Change in insurance and investment contract liabilities	**4,391**	7,128
Change in funds held by ceding insurers	**857**	505
Change in funds held under reinsurance contracts	**50**	18
Change in reinsurance assets	**830**	(567)
Changes in fair value through profit or loss	**(1,466)**	(3,903)
Other	**(321)**	(56)
	6,757	6,254
Financing Activities		
Issue of common shares (note 20)	**126**	31
Issue of preferred shares (note 20)	**200**	–
Share issue costs (note 20)	**(3)**	–
Purchased and cancelled common shares (note 20)	**(63)**	(267)
Issue of senior unsecured notes (note 16)	**925**	–
Repayment of subordinated debentures (note 16)	**(1,284)**	–
Issue of euro-denominated debt (note 16)	**–**	706
Increase (decrease) in line of credit	**24**	(31)
Increase (decrease) in debentures and other debt instruments	**(2)**	8
Dividends paid on common shares	**(1,453)**	(1,369)
Dividends paid on preferred shares	**(129)**	(123)
	(1,659)	(1,045)
Investment Activities		
Bond sales and maturities	**26,854**	29,949
Mortgage loan repayments	**2,837**	2,616
Stock sales	**3,443**	2,717
Investment property sales	**72**	427
Change in loans to policyholders	**(165)**	48
Business acquisitions, net of cash and cash equivalents acquired (note 3)	**(291)**	(33)
Investment in bonds	**(30,419)**	(34,186)
Investment in mortgage loans	**(3,643)**	(3,264)
Investment in stocks	**(3,127)**	(2,737)
Investment in investment properties	**(339)**	(102)
	(4,778)	(4,565)
Effect of changes in exchange rates on cash and cash equivalents	**(28)**	(198)
Increase in cash and cash equivalents	**292**	446
Cash and cash equivalents, beginning of year	**3,259**	2,813
Cash and cash equivalents, end of year	**$ 3,551**	$ 3,259
Supplementary cash flow information		
Interest income received	**$ 5,108**	$ 5,303
Interest paid	**296**	294
Dividend income received	**238**	251

Notes to Consolidated Financial Statements

(in Canadian $ millions except per share amounts)

1. Corporate Information

Great-West Lifeco Inc. (Lifeco or the Company) is a publicly listed company (Toronto Stock Exchange: GWO), incorporated and domiciled in Canada. The registered address of the Company is 100 Osborne Street North, Winnipeg, Manitoba, Canada, R3C 1V3. Lifeco is a member of the Power Corporation of Canada group of companies and its direct parent is Power Financial Corporation (Power Financial).

Lifeco is a financial services holding company with interests in the life insurance, health insurance, retirement savings, investment management and reinsurance businesses, primarily in Canada, the United States and Europe through its operating subsidiaries including 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) and Putnam Investments, LLC (Putnam).

The consolidated financial statements (financial statements) of the Company as at and for the year ended December 31, 2017 were approved by the Board of Directors on February 8, 2018.

2. Basis of Presentation and Summary of Accounting Policies

The consolidated financial statements of the Company have been prepared in compliance with International Financial Reporting Standards (IFRS), as issued by the International Accounting Standards Board (IASB). Consistent accounting policies were applied in the preparation of the consolidated financial statements of the subsidiaries of the Company.

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.

The Company retroactively restated the classification of current taxes to deferred taxes on the Consolidated Balance Sheets. The change in accounting policy resulted in decreases to deferred tax assets of $252, deferred tax liabilities of $124, and current income tax liabilities of $55 with an increase in current income tax assets of $73 respectively at December 31, 2016. These adjustments and reclassifications had no impact on the total equity or net earnings of the Company (note 34).

Basis of Consolidation

The consolidated financial statements of the Company were prepared as at and for the year ended December 31, 2017 with comparative information for December 31, 2016. Subsidiaries are fully consolidated from the date of acquisition, being the date on which the Company obtains control, and continue to be consolidated until the date that such control ceases. The Company has control when it has the power to direct the relevant activities, has significant exposure to variable returns from these activities and has the ability to use its power to affect the variable returns. All intercompany balances, transactions, income and expenses and profits or losses, including dividends resulting from intercompany transactions, are eliminated on consolidation.

Use of Significant Judgments, Estimates and Assumptions

In preparation of these consolidated financial statements, management is required to make significant judgments, estimates and assumptions that affect the reported amounts of assets, liabilities, net earnings and related disclosures. Although some uncertainty is inherent in these judgments and estimates, management believes that the amounts recorded are reasonable. Key sources of estimation uncertainty and areas where significant judgments have been made are listed below and discussed throughout the notes to these consolidated financial statements including:

- Management uses independent qualified appraisal services to determine the fair value of investment properties, which utilize judgments and estimates. These appraisals are adjusted by applying management judgments and estimates for material changes in property cash flows, capital expenditures or general market conditions (note 5).
- Management uses judgment in determining the assets to be included in a disposal group. The Company uses estimates in the determination of the fair value for disposal groups (note 6).
- In the determination of the fair value of financial instruments, the Company's management exercises judgment in the determination of fair value inputs, particularly those items categorized within level 3 of the fair value hierarchy (note 9).
- Cash generating unit groupings for goodwill and indefinite life intangible assets have been determined by management as the lowest level that the assets are monitored for internal reporting purposes, which requires management judgment in the determination of the lowest level of monitoring (note 10).
- Management evaluates the future benefit for initial recognition and measurement of goodwill and intangible assets as well as testing the recoverable amounts. The determination of the carrying value and recoverable amounts of the cash generating unit groupings for goodwill and intangible assets relies upon the determination of fair value or value-in-use using valuation methodologies (note 10).

- Judgments are used by management in determining whether deferred acquisition costs and deferred income reserves can be recognized on the Consolidated Balance Sheets. Deferred acquisition costs are recognized if management determines the costs meet the definition of an asset and are incremental and related to the issuance of the investment contract. Deferred income reserves are amortized on a straight-line basis over the term of the policy (notes 12 and 18).
- Management uses judgment to evaluate the classification of insurance and reinsurance contracts to determine whether these arrangements should be accounted for as insurance, investment or service contracts.
- The actuarial assumptions, such as interest rates, inflation, policyholder behaviour, mortality and morbidity of policyholders, used in the valuation of insurance and certain investment contract liabilities under the Canadian Asset Liability Method require significant judgment and estimation (note 13).
- The actuarial assumptions used in determining the expense and benefit obligations for the Company's defined benefit pension plans and other post-employment benefits requires significant judgment and estimation. Management reviews previous experience of its plan members and market conditions including interest rates and inflation rates in evaluating the assumptions used in determining the expense for the current year (note 24).
- The Company operates within various tax jurisdictions where significant management judgments and estimates are required when interpreting the relevant tax laws, regulations and legislation in the determination of the Company's tax provisions and the carrying amounts of its tax assets and liabilities (note 27).
- Management applies judgment in assessing the recoverability of the deferred income tax asset carrying values based on future years' taxable income projections (note 27).
- Legal and other provisions are recognized resulting from a past event which, in the judgment of management, has resulted in a probable outflow of economic resources which would be passed to a third-party to settle the obligation. Management uses judgment to evaluate the possible outcomes and risks in determining the best estimate of the provision at the balance sheet date (note 31).
- The operating segments of the Company, which are the segments reviewed by the Company's Chief Executive Officer to assess performance and allocate resources within the Company, are aligned with the Company's geographic operations. Management applies judgment in the aggregation of the business units into the Company's operating segments (note 33).
- The Company consolidates all subsidiaries and entities which management determines that the Company controls. Control is evaluated on the ability of the Company to direct the activities of the subsidiary or entity to derive variable returns and management uses judgment in determining whether control exists. Judgment is exercised in the evaluation of the variable returns and in determining the extent to which the Company has the ability to exercise its power to generate variable returns.
- Management uses judgments, such as the determination of the risks and benefits associated with the transaction that are used in determining whether the Company retains the primary obligation with a client in sub-advisor arrangements. Where the Company retains the risks and benefits, revenue and expenses are recorded on a gross basis.
- Within the Consolidated Statements of Cash Flows, purchases and sales of portfolio investments are recorded within investment activities due to management's judgment that these investing activities are long-term in nature.
- The results of the Company reflect management's judgments regarding the impact of prevailing global credit, equity and foreign exchange market conditions. The provision for future credit losses within the Company's insurance contract liabilities relies upon investment credit ratings. The Company's practice is to use third-party independent credit ratings where available. Management judgment is required when setting credit ratings for instruments that do not have a third-party rating.

The significant accounting policies are as follows:

(a) Portfolio Investments

Portfolio investments include bonds, mortgage loans, stocks and investment properties. Portfolio investments are classified as fair value through profit or loss, available-for-sale, held-to-maturity, loans and receivables, equity-method investments or as non-financial instruments based on management's intention relating to the purpose and nature of the instrument or characteristics of the investment. The Company has not classified any investments as held-to-maturity.

Investments in bonds and stocks normally actively traded on a public market or where fair value can be reliably measured are either designated or classified as fair value through profit or loss or classified as available-for-sale on a trade date basis. A financial asset is designated as fair value through profit or loss on initial recognition if it eliminates or significantly reduces an accounting mismatch. Changes in the fair value of financial assets designated as fair value through profit or loss are generally offset by changes in insurance contract liabilities, since the measurement of insurance contract liabilities is determined with reference to the assets supporting the liabilities. A financial asset is classified as fair value through profit or loss on initial recognition if it is part of a portfolio that is actively traded for the purpose of earning investment income. Fair value through profit or loss investments are recognized at fair value on the Consolidated Balance Sheets with realized and unrealized gains and losses reported in the Consolidated Statements of Earnings. Available-for-sale investments are recognized at fair value on the Consolidated Balance Sheets with unrealized gains and losses recorded in other comprehensive income. Realized gains and losses on available-for-sale investments are reclassified from other comprehensive income and recorded in the Consolidated Statements of Earnings when the investment is sold. Interest income earned on both fair value through profit or loss and available-for-sale bonds is recorded as net investment income in the Consolidated Statements of Earnings.

2. Basis of Presentation and Summary of Accounting Policies (cont'd)

Investments in stocks where a fair value cannot be measured reliably are classified as available–for–sale and carried at cost. Investments in stocks for which the Company exerts significant influence over but does not control are accounted for using the equity method of accounting. Investments in stocks over which the Company exerts significant influence but does not control include the Company's investment in an affiliated company, IGM Financial Inc. (IGM), a member of the Power Financial group of companies.

Investments in mortgages and bonds not normally actively traded on a public market are classified as loans and receivables and are carried at amortized cost net of any allowance for credit losses. Interest income earned and realized gains and losses on the sale of investments classified as loans and receivables are recorded in the Consolidated Statements of Earnings and included in net investment income.

Investment properties are real estate held to earn rental income or for capital appreciation. Investment properties are initially measured at cost and subsequently carried at fair value on the Consolidated Balance Sheets. All changes in fair value are recorded as net investment income in the Consolidated Statements of Earnings. Properties held to earn rental income or for capital appreciation that have an insignificant portion that is owner occupied or where there is no intent to occupy on a long-term basis are classified as investment properties. Properties that do not meet these criteria are classified as owner occupied properties. Property that is leased that would otherwise be classified as investment property if owned by the Company is also included within investment properties.

Fair Value Measurement

Financial instrument carrying values necessarily reflect the prevailing market liquidity and the liquidity premiums embedded within the market pricing methods that the Company relies upon.

Fair value movement on the assets supporting insurance contract liabilities is a major factor in the movement of insurance contract liabilities. Changes in the fair value of bonds designated or classified as fair value through profit or loss that support insurance and investment contract liabilities are largely offset by corresponding changes in the fair value of liabilities except when the bond has been deemed impaired.

The following is a description of the methodologies used to value instruments carried at fair value:

Bonds – Fair Value Through Profit or Loss and Available-for-Sale

Fair values for bonds classified and designated as fair value through profit or loss or available-for-sale are determined with reference to quoted market bid prices primarily provided by third-party independent pricing sources. Where prices are not quoted in a normally active market, fair values are determined by valuation models. The Company maximizes the use of observable inputs when measuring fair value. The Company obtains quoted prices in active markets, when available, for identical assets at the balance sheet date to measure bonds at fair value in its fair value through profit or loss and available-for-sale portfolios.

The Company estimates the fair value of bonds not traded in active markets by referring to actively traded securities with similar attributes, dealer quotations, matrix pricing methodology, discounted cash flow analyses and/or internal valuation models. This methodology considers such factors as the issuer's industry, the security's rating, term, coupon rate and position in the capital structure of the issuer, as well as, yield curves, credit curves, prepayment rates and other relevant factors. For bonds that are not traded in active markets, valuations are adjusted to reflect illiquidity, and such adjustments generally are based on available market evidence. In the absence of such evidence, management's best estimate is used.

Bonds and Mortgages – Loans and Receivables

For disclosure purposes only, fair values for bonds and mortgages classified as loans and receivables are determined by discounting expected future cash flows using current market rates for similar instruments. Valuation inputs typically include benchmark yields and risk-adjusted spreads based on current lending activities and market activity.

Stocks – Fair Value Through Profit or Loss and Available-for-Sale

Fair values for stocks traded on an active market 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 is typically based upon alternative valuation techniques such as discounted cash flow analysis, review of price movement relative to the market and utilization of information provided by the underlying investment manager. The Company maximizes the use of observable inputs when measuring fair value. The Company obtains quoted prices in active markets, when available, for identical assets at the balance sheet date to measure stocks at fair value in its fair value through profit or loss and available-for-sale portfolios.

Investment Properties

Fair values for investment properties are determined using independent qualified 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. The determination of the fair value of investment property requires the use of estimates including future cash flows (such as future leasing assumptions, rental rates, capital and operating expenditures) and discount, reversionary and overall capitalization rates applicable to the asset based on current market conditions. Investment property under construction is valued at fair value if such values can be reliably determined; otherwise they are recorded at cost.

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 objective evidence that timely collection of future cash flows can no longer be reliably estimated. 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 is 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 net realizable value. For impaired available-for-sale bonds recorded at fair value, the accumulated loss recorded in accumulated other comprehensive income 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 net investment income; therefore a reduction due to impairment of these assets will be recorded in net investment income.

Securities Lending

The Company engages in securities lending through its securities custodians as lending agents. Loaned securities are not derecognized, and continue to be reported within invested assets, as the Company retains substantial risks and rewards and economic benefits related to the loaned securities.

(b) Transaction Costs

Transaction costs are expensed as incurred for financial instruments classified as fair value through profit or loss. Transaction costs for financial assets classified as available-for-sale or loans and receivables are added to the value of the instrument at acquisition and taken into net earnings using the effective interest method. Transaction costs for financial liabilities classified as other than fair value through profit or loss are included in the value of the instrument issued and taken into net earnings using the effective interest method.

(c) Cash and Cash Equivalents

Cash and cash equivalents comprise cash, current operating accounts, overnight bank and term deposits with maturities of three months or less held for the purpose of meeting short-term cash requirements. Net payments in transit and overdraft bank balances are included in other liabilities.

(d) Trading Account Assets

Trading account assets consist of investments in sponsored funds, open ended investment companies and sponsored unit-trusts, which are carried at fair value based on the net asset value of these funds. Investments in these assets are included in other assets on the Consolidated Balance Sheets with realized and unrealized gains and losses reported in the Consolidated Statements of Earnings.

(e) Debentures and Other Debt Instruments and Capital Trust Securities

Debentures and other debt instruments and capital trust securities are initially recorded on the Consolidated Balance Sheets at fair value and subsequently carried at amortized cost using the effective interest method with amortization expense recorded in financing charges in the Consolidated Statements of Earnings. These liabilities are derecognized when the obligation is cancelled or redeemed.

(f) Other Assets and Other Liabilities

Other assets, which include prepaid expenses, deferred acquisition costs, finance leases receivable and miscellaneous other assets, are measured at cost or amortized cost. Other liabilities, which include deferred income reserves, bank overdraft and other miscellaneous liabilities are measured at cost or amortized cost.

Provisions are recognized within other liabilities when the Company has a present obligation, either legal or constructive, as a result of a past event, and it is probable that an outflow of resources embodying economic benefits will be required to settle the obligation and a reliable estimate can be made of the amount to settle the obligation. The amounts recognized for provisions are management's best estimates of the expenditures required to settle the obligation at the balance sheet date. The Company recognizes a provision for restructuring when a detailed formal plan for the restructuring has been established and that the plan has raised a valid expectation in those affected that the restructuring will occur.

Pension and other post-employment benefits also included within other assets and other liabilities are measured in accordance with note 2(x).

(g) Disposal Group Classified As Held For Sale

Disposal groups are classified as held for sale when the carrying amount will be recovered through a sale transaction rather than continuing use. The fair value of a disposal group is measured at the lower of its carrying amount and fair value less costs to sell. Any impairment loss for the disposal group is recognized as a reduction to the carrying amount of the disposal group.

Disposal group assets classified as held for sale are presented separately on the Company's Consolidated Balance Sheets. Losses from assets held for sale are presented separately in the Company's Consolidated Statements of Earnings.

2. Basis of Presentation and Summary of Accounting Policies (cont'd)

(h) Derivative Financial Instruments

The Company uses derivative products as risk management instruments to hedge or manage asset, liability and capital positions, including fee and investment income. The Company's policy guidelines prohibit the use of derivative instruments for speculative trading purposes.

The Company includes disclosure of the maximum credit risk, future credit exposure, credit risk equivalent and risk weighted equivalent in note 30 as prescribed by the Office of the Superintendent of Financial Institutions (OSFI) in Canada.

All derivatives including those that are embedded in financial and non-financial contracts that are not closely related to the host contracts are recorded at fair value on the Consolidated Balance Sheets. The method of recognizing unrealized and realized fair value gains and losses depends on whether the derivatives are designated as hedging instruments. For derivatives that are not designated as hedging instruments, unrealized and realized gains and losses are recorded in net investment income in the Consolidated Statements of Earnings. For derivatives designated as hedging instruments, unrealized and realized gains and losses are recognized according to the nature of the hedged item.

Derivatives are valued using market transactions and other market evidence whenever possible, including market based inputs to models, broker or dealer quotations or alternative pricing sources with reasonable levels of price transparency. When models are used, the selection of a particular model to value a derivative depends on the contractual terms of, and specific risks inherent in, the instrument, as well as the availability of pricing information in the market. The Company generally uses similar models to value similar instruments. Valuation models require a variety of inputs, including contractual terms, market prices and rates, yield curves, credit curves, measures of volatility, prepayment rates and correlations of such inputs.

To qualify for hedge accounting, the relationship between the hedged item and the hedging instrument must meet several strict conditions on documentation, probability of occurrence, hedge effectiveness and reliability of measurement. If these conditions are not met, the relationship does not qualify for hedge accounting treatment and both the hedged item and the hedging instrument are reported independently as if there was no hedging relationship.

Where a hedging relationship exists, the Company documents all relationships between hedging instruments and hedged items, as well as its risk management objectives and strategy for undertaking various hedge transactions. This process includes linking derivatives that are used in hedging transactions to specific assets and liabilities on the Consolidated Balance Sheets or to specific firm commitments or forecasted transactions. The Company also assesses, both at the hedge's inception and on an ongoing basis, whether derivatives that are used in hedging transactions are effective in offsetting changes in fair values or cash flows of hedged items. Hedge effectiveness is reviewed quarterly through correlation testing. Hedge accounting is discontinued when the hedging no longer qualifies for hedge accounting.

Derivatives not designated as hedges for accounting purposes

For derivative investments not designated as accounting hedges, changes in fair value are recorded in net investment income.

Fair value hedges

For fair value hedges, changes in fair value of both the hedging instrument and the hedged risk are recorded in net investment income and consequently any ineffective portion of the hedge is recorded immediately in net investment income.

The Company currently has no instruments designated as fair value hedges.

Cash flow hedges

For cash flow hedges, the effective portion of the changes in fair value of the hedging instrument is recorded in the same manner as the hedged item while the ineffective portion is recognized immediately in net investment income. Gains and losses that accumulate in other comprehensive income are recorded in net investment income in the same period the hedged item affects net earnings. Gains and losses on cash flow hedges are immediately reclassified from other comprehensive income to net investment income if and when it is probable that a forecasted transaction is no longer expected to occur.

The Company currently uses interest rate swaps and cross-currency swaps designated as cash flow hedges.

Net investment hedges

For net investment hedges, the effective portion of changes in the fair value of the hedging instrument are recorded in other comprehensive income while the ineffective portion is recognized immediately in net investment income. The unrealized foreign exchange gains (losses) on the instruments are recorded within accumulated other comprehensive income and will be reclassified into net earnings when the Company disposes of the foreign operation.

The Company currently has instruments designated as net investment hedges.

(i) Embedded Derivatives

An embedded derivative is a component of a host contract that modifies the cash flows of the host contract in a manner similar to a derivative, according to a specified interest rate, financial instrument price, foreign exchange rate, underlying index or other variable. Embedded derivatives are treated as separate contracts and are recorded at fair value if their economic characteristics and risks are not closely related to those of the host contract and the host contract is not itself recorded at fair value through the Consolidated Statements of Earnings. Embedded derivatives that meet the definition of an insurance contract are accounted for and measured as an insurance contract.

(j) Foreign Currency Translation

The Company operates with multiple functional currencies. The Company's consolidated financial statements are presented in Canadian dollars as this presentation is most meaningful to financial statement users. For those subsidiaries with different functional currencies, exchange rate differences arising from the translation of monetary items that form part of the net investment in the foreign operation are recorded in unrealized foreign exchange gains (losses) on translation of foreign operations in other comprehensive income.

For the purpose of presenting consolidated financial statements, assets and liabilities are translated into Canadian dollars at the rate of exchange prevailing at the balance sheet dates and all income and expense items are translated at an average of daily rates. Unrealized foreign currency translation gains and losses on translation of the Company's net investment in its foreign operations are presented separately as a component of other comprehensive income. Unrealized gains and losses will be recognized proportionately in net investment income in the Consolidated Statements of Earnings when there has been a disposal of the investment in the foreign operations.

Foreign currency translation gains and losses on foreign currency transactions of the Company are included in net investment income.

(k) Loans to Policyholders

Loans to policyholders are classified as loans and receivables and measured at amortized cost. Loans to policyholders are shown at their unpaid principal balance and are fully secured by the cash surrender values of the policies. Carrying value of loans to policyholders approximates their fair value.

(l) Reinsurance Contracts

The Company, in the normal course of business, is a user of reinsurance in order to limit the potential for losses arising from certain exposures and a provider of reinsurance. Assumed reinsurance refers to the acceptance of certain insurance risks by the Company underwritten by another company. Ceded reinsurance refers to the transfer of insurance risk, along with the respective premiums, to one or more reinsurers who will share the risks. To the extent that assuming reinsurers are unable to meet their obligations, the Company remains liable to its policyholders for the portion reinsured. Consequently, allowances are made for reinsurance contracts which are deemed uncollectible.

Reinsurance contracts are insurance contracts and undergo the classification as described within the Insurance and Investment Contract Liabilities section of this note. Assumed reinsurance premiums, commissions and claim settlements, as well as the reinsurance assets associated with insurance and investment contracts, are accounted for in accordance with the terms and conditions of the underlying reinsurance contract. Reinsurance assets are reviewed for impairment on a regular basis for any events that may trigger impairment. The Company considers various factors in the impairment evaluation process, including but not limited to, collectability of amounts due under the terms of the contract. The carrying amount of a reinsurance asset is adjusted through an allowance account with any impairment loss being recorded in the Consolidated Statements of Earnings.

Any gains or losses on buying reinsurance are recognized in the Consolidated Statements of Earnings immediately at the date of purchase in accordance with the Canadian Asset Liability Method.

Assets and liabilities related to reinsurance are reported on a gross basis on the Consolidated Balance Sheets. The amount of liabilities ceded to reinsurers is estimated in a manner consistent with the claim liability associated with reinsured risks.

(m) Funds Held by Ceding Insurers/Funds Held Under Reinsurance Contracts

On the asset side, funds held by ceding insurers are assets that would normally be paid to the Company but are withheld by the cedant to reduce potential credit risk. Under certain forms of reinsurance contracts it is customary for the cedant to retain amounts on a funds withheld basis supporting the insurance or investment contract liabilities ceded. For the funds withheld assets where the underlying asset portfolio is managed by the Company, the credit risk is retained by the Company. The funds withheld balance where the Company assumes the credit risk is measured at the fair value of the underlying asset portfolio with the change in fair value recorded in net investment income. See note 7 for funds held by ceding insurers that are managed by the Company. Other funds held by ceding insurers are general obligations of the cedant and serve as collateral for insurance contract liabilities assumed from cedants. Funds withheld assets on these contacts do not have fixed maturity dates, their release generally being dependent on the run-off of the corresponding insurance contract liabilities.

On the liability side, funds held under reinsurance contracts consist mainly of amounts retained by the Company from ceded business written on a funds withheld basis. The Company withholds assets related to ceded insurance contract liabilities in order to reduce credit risk.

(n) Business Combinations, Goodwill and Intangible Assets

Business combinations are accounted for using the acquisition method. The Company identifies and classifies, in accordance with the Company's accounting policies, all assets acquired and liabilities assumed as at the acquisition date. Goodwill represents the excess of purchase consideration over the fair value of net assets of the acquired subsidiaries of the Company. Following initial recognition, goodwill is measured at cost less accumulated impairment losses.

Intangible assets represent finite life and indefinite life intangible assets of acquired subsidiaries of the Company and software acquired or internally developed by the Company. Finite life intangible assets include the value of technology/software, certain customer contracts and distribution channels. These finite life intangible assets are amortized over their estimated useful lives, typically ranging between 3 and 30 years.

Indefinite life intangible assets include brands and trademarks, certain customer contracts and the shareholders' portion of acquired future participating account profits. Amounts are classified as indefinite life intangible assets when based on an analysis of all the relevant factors, there is no foreseeable limit to the period over which the asset is expected to generate net cash inflows for the Company. The identification of indefinite life intangible assets is made by reference to relevant factors such as product life cycles, potential obsolescence, industry stability and competitive position. Following initial recognition, indefinite life intangible assets are measured at cost less accumulated impairment losses.

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 loss 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. An impairment loss is recognized for the amount by which the asset's carrying amount exceeds its recoverable amount.

The recoverable amount is the higher of the asset's fair value less costs of disposal and value-in-use.

Finite life intangible assets are reviewed annually to determine if there are indicators of impairment and assess whether the amortization periods and methods are appropriate. If indicators of impairment have been identified, a test for impairment is performed and then the amortization of these assets is adjusted or impairment is recognized as necessary.

(o) Revenue Recognition

Premiums for all types of insurance contracts, and contracts with limited mortality or morbidity risk, are generally recognized as revenue when due and collection is reasonably assured.

Interest income on bonds and mortgages is recognized and accrued using the effective yield method.

Dividend income is recognized when the right to receive payment is established. This is the ex-dividend date for listed stocks, and usually the notification date or date when the shareholders have approved the dividend for private equity instruments.

Investment property income includes rents earned from tenants under lease agreements and property tax and operating cost recoveries. Rental income leases with contractual rent increases and rent-free periods are recognized on a straight-line basis over the term of the lease.

Fee and other income primarily includes fees earned from management of segregated fund assets, proprietary mutual funds assets, fees earned on administrative services only Group health contracts, commissions and fees earned from management services. Fee and other income is recognized when services are rendered and the amount can be reasonably estimated.

The Company has sub-advisor arrangements where the Company retains the primary obligation with the client; as a result, fee income earned is reported on a gross basis with the corresponding sub-advisor expense recorded in operating and administrative expenses.

(p) Owner Occupied Properties and Fixed Assets

Property held for own use and fixed assets are carried at cost less accumulated depreciation and impairments. Depreciation is expensed to write-off the cost of assets, over their estimated useful lives, using the straight-line method, on the following bases:

Owner occupied properties	15 – 20 years
Furniture and fixtures	5 – 10 years
Other fixed assets	3 – 10 years

Depreciation methods, useful lives and residual values are reviewed at least annually and adjusted if necessary.

(q) Deferred Acquisition Costs

Included in other assets are deferred acquisition costs. These are recognized as assets if the costs are incremental and incurred due to the contract being issued and are primarily amortized on a straight-line basis over the policy term, not to exceed 20 years.

(r) Segregated Funds

Segregated funds assets and liabilities arise from contracts where all financial risks associated with the related assets are borne by policyholders and are presented separately on the Consolidated Balance Sheets. The assets and liabilities are set equal to the fair value of the underlying asset portfolio. Investment income and changes in fair value of the segregated fund assets are offset by a corresponding change in the segregated fund liabilities.

(s) Insurance and Investment Contract Liabilities

Contract Classification

When significant insurance risk exists, the Company's products are classified at contract inception as insurance contracts, in accordance with IFRS 4, *Insurance Contracts* (IFRS 4). Significant insurance risk exists when the Company agrees to compensate policyholders or beneficiaries of the contract for specified uncertain future events that adversely affect the policyholder and whose amount and timing is unknown. Refer to note 13 for discussion of insurance risk.

In the absence of significant insurance risk, the contract is classified as an investment contract or service contract. Investment contracts with discretionary participating features are accounted for in accordance with IFRS 4 and investment contracts without discretionary participating features are accounted for in accordance with IAS 39, *Financial Instruments: Recognition & Measurement*. The Company has not classified any contracts as investment contracts with discretionary participating features.

Investment contracts may be reclassified as insurance contracts after inception if insurance risk becomes significant. A contract that is classified as an insurance contract at contract inception remains as such until all rights and obligations under the contract are extinguished or expire.

Investment contracts are contracts that carry financial risk, which is the risk of a possible future change in one or more of the following: interest rate, commodity price, foreign exchange rate, or credit rating. Refer to note 8 for discussion of Financial Instruments Risk Management.

Measurement

Insurance 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 subsidiary companies 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. 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/for 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.

(t) Deferred Income Reserves

Included in other liabilities are deferred income reserves relating to investment contracts. These are amortized on a straight-line basis to recognize the initial policy fees over the policy term, not to exceed 20 years.

(u) Income Taxes

The income tax expense for the period represents the sum of current income tax and deferred income tax. Income tax is recognized as an expense or income in profit or loss except to the extent that it relates to items that are recognized outside profit or loss (whether in other comprehensive income or directly in equity), in which case the income tax is also recognized outside profit or loss.

Current Income Tax

Current income tax is based on taxable income for the year. Current income tax liabilities (assets) for the current and prior periods are measured at the amount expected to be paid to (recovered from) the taxation authorities using the tax rates that have been enacted or substantively enacted at the balance sheet date in each respective jurisdiction. Current income tax assets and current income tax liabilities are offset if a legally enforceable right exists to offset the recognized amounts and the entity intends either to settle on a net basis, or to realize the assets and settle the liabilities simultaneously.

A provision for tax uncertainties which meet the probable threshold for recognition is measured based on the probability weighted average approach. The provision for tax uncertainties will be classified 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.

Deferred Income Tax

Deferred income tax is the tax expected to be payable or recoverable on differences arising between the carrying amounts of assets and liabilities in the consolidated financial statements and the corresponding tax bases used in the computation of taxable income and is accounted for using the balance sheet liability method. Deferred income tax liabilities are generally recognized for all taxable temporary differences and deferred income tax assets are recognized to the extent that it is probable that taxable profits will be available against which deductible temporary differences, unused tax losses and carryforwards can be utilized.

Recognition is based on the fact that it is probable that the entity will have taxable profits and/or tax planning opportunities available to allow the deferred income tax asset to be utilized. Changes in circumstances in future periods may adversely impact the assessment of the recoverability. The uncertainty of the recoverability is taken into account in establishing the deferred income tax assets. The Company's annual financial planning process provides a significant basis for the measurement of deferred income tax assets.

Deferred income tax assets and liabilities are measured at the tax rates expected to apply in the year when the asset is realized or the liability is settled, based on tax rates (and tax laws) that have been enacted or substantively enacted at the balance sheet date. Deferred income tax assets and deferred income tax liabilities are offset if a legally enforceable right exists to net current income tax assets against current income tax liabilities and the deferred income taxes relate to the same taxable entity and the same taxation authority.

The carrying amount of deferred income tax assets is reviewed at each balance sheet date and reduced to the extent that it is no longer probable that sufficient taxable profit will be available to allow all or part of the deferred income tax asset to be utilized. Unrecognized deferred income tax assets are reassessed at each balance sheet date and are recognized to the extent that it has become probable that future taxable profit will allow the deferred income tax asset to be recovered.

Deferred income tax liabilities are recognized for taxable temporary differences arising on investments in subsidiaries and associates, except where the group controls the timing of the reversal of the temporary difference and it is probable that the temporary differences will not reverse in the foreseeable future.

(v) Policyholder Benefits

Policyholder benefits include benefits and claims on life insurance contracts, maturity payments, annuity payments and surrenders. Gross benefits and claims for life insurance contracts include the cost of all claims arising during the year and settlement of claims. Death claims and surrenders are recorded on the basis of notifications received. Maturities and annuity payments are recorded when due.

(w) Repurchase Agreements

The Company accounts for certain forward settling to be announced "TBA" security transactions as derivatives as the Company does not regularly accept delivery of such securities when issued.

(x) Pension Plans and Other Post-Employment Benefits

The Company's subsidiaries maintain contributory and non-contributory defined benefit pension plans for certain employees and advisors. The Company's subsidiaries also provide post-employment health, dental and life insurance benefits to eligible employees, advisors and their dependents.

The present value of the defined benefit obligations and the related current service cost is determined using the projected unit credit method (note 24). Pension plan assets are recorded at fair value.

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. To determine the net interest costs (income) recognized in the Consolidated Statements of Earnings, the Company's subsidiaries apply a discount rate to the net benefit liability (asset), where the discount rate is determined by reference to market yields at the beginning of the year on high quality corporate bonds.

For the defined benefit plans of the Company's subsidiaries, re-measurements of the net defined benefit liability (asset) due to asset returns less (greater) than interest income, actuarial losses (gains) and changes in the asset ceiling are recognized in the Consolidated Statements of Comprehensive Income.

The Company's subsidiaries also maintain defined contribution pension plans for certain employees and advisors. For the defined contribution plans of the Company's subsidiaries, the current service costs are recognized in the Consolidated Statements of Earnings.

(y) Equity

Financial instruments issued by the Company are classified as share capital if they represent a residual interest in the assets of the Company. Preferred share capital is classified as equity if it is non-redeemable, or retractable only at the Company's option and any dividends are discretionary. Incremental costs that are directly attributable to the issue of share capital are recognized as a deduction from equity, net of income tax.

Contributed surplus represents the vesting expense on unexercised equity instruments under share-based payment plans.

Accumulated other comprehensive income (loss) represents the total of the unrealized foreign exchange gains (losses) on translation of foreign operations, the unrealized foreign exchange gains (losses) on euro debt designated as a hedge of the net investment of foreign operations, the unrealized gains (losses) on available-for-sale assets, the unrealized gains (losses) on cash flow hedges, and the re-measurements on defined benefit pension and other post-employment benefit plans net of tax, where applicable.

Non-controlling interests in subsidiaries represents the proportion of equity that is attributable to minority shareholders.

Participating account surplus in subsidiaries represents the proportion of equity attributable to the participating account of the Company's subsidiaries.

(z) Share-Based Payments

The Company provides share-based compensation to certain employees and Directors of the Company and its subsidiaries.

The Company follows the fair value based method of accounting for the valuation of compensation expense for shares and share options granted to employees under its stock option plans (note 23). This share-based payment expense is recognized in operating and administrative expenses in the Consolidated Statements of Earnings and as an increase to contributed surplus over the vesting period of the granted options. When options are exercised, the proceeds received, along with the amount in contributed surplus, are transferred to share capital.

The Company and certain of its affiliates have established Deferred Share Unit Plans (DSU Plans) in which Directors of the Company participate. Units issued under the DSU Plans vest when granted. The Company recognizes an increase in operating and administrative expenses for the units granted under the DSU Plans. The Company recognizes a liability for units granted under the DSU Plans which is re-measured at each reporting period based on the market value of the Company's common shares.

Certain employees of the Company are entitled to participate in the Performance Share Unit Plan (PSU Plan). Units issued under the Performance Share Unit Plan vest over a three year period. The Company uses the fair value method to recognize compensation expense for the units granted under the plan over the vesting period with a corresponding increase in the liability based on the market value of the Company's common shares.

The Company has an Employee Share Ownership Program (ESOP) where, subject to certain conditions being met, the Company will match contributions up to a maximum amount. The Company's contributions are expensed within operating and administrative expenses as incurred.

(aa) Earnings Per Common Share

Earnings per common share is calculated using net earnings after preferred share dividends and the weighted average number of common shares outstanding. Diluted earnings per share is calculated by adjusting common shareholders' net earnings and the weighted average number of common shares outstanding for the effects of all potential dilutive common shares assuming that all convertible instruments are converted and outstanding options are exercised.

(ab) Leases

Leases that do not transfer substantially all the risks and rewards of ownership are classified as operating leases. Payments made under operating leases, where the Company is the lessee, are charged to net earnings over the period of use.

Where the Company is the lessor under an operating lease for its investment property, the assets subject to the lease arrangement are presented within the Consolidated Balance Sheets. Income from these leases is recognized in the Consolidated Statements of Earnings on a straight-line basis over the lease term.

Investments in a lease that transfers substantially all the risks and rewards of ownership to the lessee are classified as a finance lease. The Company is the lessor under a finance lease and the investment is recognized as a receivable at an amount equal to the net investment in the lease, which is represented as the present value of the minimum lease payments due from the lessee and is presented within the Consolidated Balance Sheets. Payments received from the lessee are apportioned between the recognition of finance lease income and the reduction of the finance lease receivable. Income from the finance leases is recognized in the Consolidated Statements of Earnings at a constant periodic rate of return on the Company's net investment in the finance lease.

(ac) Operating Segments

Operating segments have been identified based on internal reports that are regularly reviewed by the Company's Chief Executive Officer to allocate resources and assess performance of segments. The Company's reportable operating segments are categorized by geographic region and include Canada, the United States and Europe. The Canada segment comprises the Individual Customer and Group Customer business units. Great-West Financial and Putnam are reported in the United States segment. The Europe segment comprises Insurance & Annuities and Reinsurance. The Lifeco Corporate segment represents activities and transactions that are not directly attributable to the measurement of the operating segments of the Company.

2. Basis of Presentation and Summary of Accounting Policies (cont'd)

(ad) Future Accounting Policies

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 Contract*s 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 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 but there is an approximate $100 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.
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 insurance 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 Statements of Earnings. The Company is currently assessing the impact that IFRS 17 will have on its 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.
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* (IFRS 4). 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*.

New Standard	Summary of Future Changes
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 Payment* 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.
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, *Business Combinations*, IFRS 11, *Joint Arrangements*, IAS 12, *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.

3. Business Acquisitions

(a) Financial Horizons Group

On July 31, 2017, the Company, through its wholly-owned subsidiary Great-West Life, completed the acquisition of all the common shares of Financial Horizons Group Inc. (FHG), a Canadian Managing General Agency that offers access to life and health insurance, employee benefits, pensions, investments, structured settlements and risk management products and services to advisors across Canada.

As at December 31, 2017, the comprehensive valuation of the fair value of the net assets acquired, including intangible assets and completion of the purchase price allocation, was finalized. The revenue and net earnings of FHG were not significant to the results of the Company.

(b) Retirement Advantage

On January 2, 2018, the Company, through its indirect wholly-owned subsidiary The Canada Life Group (UK) Ltd., acquired Retirement Advantage, a financial services provider based in the United Kingdom that offers retirement and equity release services.

Due to the recent closing of the acquisition of Retirement Advantage, the valuation and initial purchase price accounting for the business combination are not complete as at the date of release of these annual consolidated financial statements. As a result, the Company has not provided amounts recognized as at the acquisition date for major classes of assets acquired and liabilities assumed, including goodwill.

The allocation of the purchase price will be finalized after a comprehensive evaluation of the fair value of net assets acquired has been completed.

Net earnings from Retirement Advantage will not be material to the consolidated financial statements.

4. Cash and Cash Equivalents

Cash and cash equivalents include amounts held at the Lifeco holding company level and amounts held in Lifeco's consolidated subsidiary companies.

	2017	2016
Cash	$ **2,029**	$ 1,559
Short-term deposits	**1,522**	1,700
Total	$ **3,551**	$ 3,259

At December 31, 2017 cash of $244 was restricted for use by the Company ($185 at December 31, 2016) in respect of cash held in trust for reinsurance agreements or with regulatory authorities, cash held under certain indemnity arrangements, client monies held by brokers and cash held in escrow.

5. Portfolio Investments

(a) Carrying values and estimated fair values of portfolio investments are as follows:

	2017		2016	
	Carrying value	**Fair value**	Carrying value	Fair value
Bonds				
Designated fair value through profit or loss (1)	**$ 88,062**	**$ 88,062**	$ 85,739	$ 85,739
Classified fair value through profit or loss (1)	**1,836**	**1,836**	2,586	2,586
Available-for-sale	**12,347**	**12,347**	11,478	11,478
Loans and receivables	**17,959**	**19,470**	16,970	18,484
	120,204	**121,715**	116,773	118,287
Mortgage loans				
Residential	**8,905**	**9,083**	8,062	8,260
Commercial	**13,280**	**13,922**	13,589	14,290
	22,185	**23,005**	21,651	22,550
Stocks				
Designated fair value through profit or loss (1)	**8,097**	**8,097**	7,606	7,606
Available-for-sale	**55**	**55**	48	48
Available-for-sale, at cost (2)	**348**	**348**	391	391
Equity method (3) (4)	**364**	**406**	620	610
	8,864	**8,906**	8,665	8,655
Investment properties	**4,851**	**4,851**	4,340	4,340
Total	**$ 156,104**	**$ 158,477**	$ 151,429	$ 153,832

(1) A financial asset is designated as fair value through profit or loss on initial recognition if it eliminates or significantly reduces an accounting mismatch. Changes in the fair value of financial assets designated as fair value through profit or loss are generally offset by changes in insurance contract liabilities, since the measurement of insurance contract liabilities is determined with reference to the assets supporting the liabilities.

A financial asset is classified as fair value through profit or loss on initial recognition if it is part of a portfolio that is actively traded for the purpose of earning investment income.

(2) Fair value cannot be reliably measured, therefore the investments are held at cost.

(3) During 2017, the investment in Allianz Ireland, an investment previously held through the Company's indirect wholly owned subsidiary Irish Life Group Limited with a carrying value of $192, was disposed of by the Company resulting in a gain of $16 recorded in net investment income. The carrying value of the investment reflected $13 of actuarial losses from the associate's pension plan (note 24). These actuarial losses were transferred within equity from accumulated other comprehensive income to accumulated surplus.

(4) During 2017, the Company classified an equity method investment within the disposal group of assets held for sale (note 6).

(b) Carrying value of bonds and mortgages by term to maturity are as follows:

	2017			
	Term to maturity			
	1 year or less	**1–5 years**	**Over 5 years**	**Total**
Bonds	**$ 10,187**	**$ 26,926**	**$ 82,845**	**$ 119,958**
Mortgage loans	**1,425**	**6,611**	**14,115**	**22,151**
Total	**$ 11,612**	**$ 33,537**	**$ 96,960**	**$ 142,109**

	2016			
	Term to maturity			
	1 year or less	1–5 years	Over 5 years	Total
Bonds	$ 11,841	$ 26,601	$ 78,016	$ 116,458
Mortgage loans	1,259	6,764	13,571	21,594
Total	$ 13,100	$ 33,365	$ 91,587	$ 138,052

The above excludes the carrying value of impaired bonds and mortgage loans, as the ultimate timing of collectability is uncertain.

5. Portfolio Investments (cont'd)

(c) Certain stocks where equity method earnings are computed are discussed below:

Substantially all of the Company's equity method investments relate to the Company's investment, held through Great-West Life, in an affiliated company, IGM, a member of the Power Financial group of companies, over which it exerts significant influence but does not control. The Company's proportionate share of IGM's earnings is recorded in net investment income in the Consolidated Statements of Earnings. The Company owns 9,202,049 shares of IGM at December 31, 2017 (9,202,706 at December 31, 2016) representing a 3.82% ownership interest (3.83% at December 31, 2016). The Company uses the equity method to account for its investment in IGM as it exercises significant influence. Significant influence arises from several factors, including, but not limited to the following: common control of the Company and IGM by Power Financial, shared representation on the Boards of Directors of the Company and IGM, interchange of managerial personnel, and certain shared strategic alliances, significant intercompany transactions and service agreements that influence the financial and operating policies of both companies.

	2017	2016
Carrying value, beginning of year	$ **361**	$ 358
Equity method share of IGM net earnings	**22**	23
Dividends received	**(21)**	(20)
Carrying value, end of year	$ **362**	$ 361
Share of equity, end of year	$ **186**	$ 181
Fair value, end of year	$ **404**	$ 351

The Company and IGM both have a year-end date of December 31. The Company's year-end results are approved and reported before IGM publicly reports its financial result; therefore, the Company reports IGM's financial information by estimating the amount of earnings attributable to the Company, based on prior quarter information as well as consensus expectations, to complete equity method accounting. The difference between actual and estimated results is reflected in the subsequent quarter and is not material to the Company's consolidated financial statements.

IGM's financial information as at December 31, 2017 can be obtained in its publicly available information.

At December 31, 2017 and 2016 IGM owned 39,737,388 common shares of the Company.

(d) Included in portfolio investments are the following:

(i) Carrying amount of impaired investments

	2017	2016
Impaired amounts by classification		
Fair value through profit or loss	$ **233**	$ 283
Available-for-sale	**17**	10
Loans and receivables	**41**	79
Total	$ **291**	$ 372

The carrying amount of impaired investments includes $246 bonds, $34 mortgage loans and $11 stocks at December 31, 2017 ($315 bonds and $57 mortgage loans at December 31, 2016). The above carrying values for loans and receivables are net of allowances of $40 at December 31, 2017 and $43 at December 31, 2016.

(ii) The allowance for credit losses and changes in the allowance for credit losses related to investments classified as loans and receivables are as follows:

	2017			2016		
	Bonds	**Mortgage loans**	**Total**	Bonds	Mortgage loans	Total
Balance, beginning of year	$ **7**	$ **36**	$ **43**	$ –	$ 20	$ 20
Net provision for credit losses – in year	**–**	**9**	**9**	7	28	35
Write-offs, net of recoveries	**(7)**	**(5)**	**(12)**	–	(6)	(6)
Other (including foreign exchange rate changes)	**–**	**–**	**–**	–	(6)	(6)
Balance, end of year	$ **–**	$ **40**	$ **40**	$ 7	$ 36	$ 43

The allowance for credit losses is supplemented by the provision for future credit losses included in insurance contract liabilities.

(e) Net investment income comprises the following:

	2017					
	Bonds	**Mortgage loans**	**Stocks**	**Investment properties**	**Other**	**Total**
Regular net investment income:						
Investment income earned	**$ 4,294**	**$ 892**	**$ 263**	**$ 318**	**$ 463**	**$ 6,230**
Net realized gains						
Available-for-sale	**17**	**–**	**13**	**–**	**–**	**30**
Other classifications	**23**	**74**	**–**	**–**	**–**	**97**
Net allowances for credit losses on loans and receivables	**2**	**(9)**	**–**	**–**	**–**	**(7)**
Other income (expenses)	**–**	**–**	**–**	**(87)**	**(122)**	**(209)**
	4,336	**957**	**276**	**231**	**341**	**6,141**
Changes in fair value on fair value through profit or loss assets:						
Classified fair value through profit or loss	**(16)**	**–**	**3**	**–**	**–**	**(13)**
Designated fair value through profit or loss	**881**	**–**	**576**	**–**	**(154)**	**1,303**
Recorded at fair value through profit or loss	**–**	**–**	**–**	**176**	**–**	**176**
	865	**–**	**579**	**176**	**(154)**	**1,466**
Total	**$ 5,201**	**$ 957**	**$ 855**	**$ 407**	**$ 187**	**$ 7,607**

	2016					
	Bonds	Mortgage loans	Stocks	Investment properties	Other	Total
Regular net investment income:						
Investment income earned	$ 4,230	$ 921	$ 266	$ 325	$ 571	$ 6,313
Net realized gains						
Available-for-sale	80	–	4	–	–	84
Other classifications	30	51	–	–	–	81
Net allowances for credit losses on loans and receivables	(7)	(28)	–	–	–	(35)
Other income (expenses)	–	–	–	(84)	(107)	(191)
	4,333	944	270	241	464	6,252
Changes in fair value on fair value through profit or loss assets:						
Designated fair value through profit or loss	3,182	–	957	–	(297)	3,842
Recorded at fair value through profit or loss	–	–	–	61	–	61
	3,182	–	957	61	(297)	3,903
Total	$ 7,515	$ 944	$ 1,227	$ 302	$ 167	$ 10,155

Investment income earned comprises income from investments that are classified as available-for-sale, loans and receivables and investments classified or designated as fair value through profit or loss. Investment income from bonds and mortgages includes interest income and premium and discount amortization. Income from stocks includes dividends, distributions from private equity and equity income from the investment in IGM and Allianz Ireland, which was disposed of during 2017. Investment properties income includes rental income earned on investment properties, ground rent income earned on leased and sub-leased land, fee recoveries, lease cancellation income, and interest and other investment income earned on investment properties. Other income includes policyholder loan income, foreign exchange gains and losses, income earned from derivative financial instruments and other miscellaneous income.

(f) The carrying value of investment properties and changes in the carrying value of investment properties are as follows:

	2017	2016
Balance, beginning of year	**$ 4,340**	$ 5,237
Additions	**339**	102
Change in fair value through profit or loss	**176**	61
Disposals	**(72)**	(427)
Foreign exchange rate changes	**68**	(633)
Balance, end of year	**$ 4,851**	$ 4,340

(g) Transferred Financial Assets

The Company engages in securities lending to generate additional income. The Company's securities custodians are used as lending agents. Collateral, which exceeds the fair value of the loaned securities, is deposited by the borrower with the Company's lending agent and maintained by the lending agent until the underlying security has been returned. The fair value of the loaned securities is monitored on a daily basis by the lending agent who obtains or refunds additional collateral as the fair value of the loaned securities fluctuates. There was no cash collateral included in the collateral deposited with the Company's lending agent as of December 31, 2017 and December 31, 2016. In addition, the securities lending agent indemnifies the Company against borrower risk, meaning that the lending agent agrees contractually to replace securities not returned due to a borrower default. As at December 31, 2017, the Company had loaned securities (which are included in invested assets) with a fair value of $7,427 ($7,520 at December 31, 2016).

6. Assets Held For Sale

The Company has agreed in principle to dispose of an investment, which is expected to be finalized in the first quarter of 2018. The $169 fair value less cost to sell of the assets held for sale at December 31, 2017 comprise the Company's investment accounted for under the equity method and a customer contract related indefinite life intangible asset. The disposal group is presented within the Company's United States operating segment. The Company recognized a loss of $122 ($202 pre-tax) on recognition of the assets held for sale in the Consolidated Statements of Earnings.

Subsequent to year-end, the Company executed the final sale agreement.

7. Funds Held by Ceding Insurers

At December 31, 2017, the Company had amounts on deposit of $9,893 ($10,781 at December 31, 2016) for funds held by ceding insurers on the Consolidated Balance Sheets. Income and expenses arising from the agreements are included in net investment income in the Consolidated Statements of Earnings.

During 2016, the Company completed the transfer of approximately $1,600 of annuity business from The Equitable Life Assurance Company (Equitable Life) acquired during 2015.

During 2016, a subsidiary of the Company completed a portfolio transfer of approximately $1,300 whereby investment contract liabilities and supporting bonds and cash were acquired. The portfolio of investment contract liabilities had been previously reinsured by the Company on a funds withheld basis.

The details of the funds on deposit for certain agreements where the Company has credit risk are as follows:

(a) Carrying values and estimated fair values:

	2017		2016	
	Carrying value	**Fair value**	Carrying value	Fair value
Cash and cash equivalents	**$ 132**	**$ 132**	$ 214	$ 214
Bonds	**7,806**	**7,806**	8,391	8,391
Other assets	**106**	**106**	118	118
Total	**$ 8,044**	**$ 8,044**	$ 8,723	$ 8,723
Supporting:				
Reinsurance liabilities	**$ 7,777**	**$ 7,777**	$ 8,218	$ 8,218
Surplus	**267**	**267**	505	505
Total	**$ 8,044**	**$ 8,044**	$ 8,723	$ 8,723

(b) The following provides details of the carrying value of bonds included in the funds on deposit by issuer and industry sector:

	2017	2016
Bonds issued or guaranteed by:		
Treasuries	**$ 918**	$ 1,143
Government related	**1,424**	1,506
Agency securitized	**–**	3
Non-agency securitized	**891**	1,126
Financials	**1,834**	1,764
Communications	**159**	132
Consumer products	**606**	692
Energy	**244**	276
Industrials	**256**	252
Technology	**74**	72
Transportation	**196**	164
Utilities	**1,204**	1,228
Total long-term bonds	**7,806**	8,358
Short-term bonds	**–**	33
Total	**$ 7,806**	$ 8,391

(c) Asset quality

Bond Portfolio By Credit Rating

	2017	2016
AAA	**$ 714**	$ 618
AA	**3,204**	3,792
A	**3,240**	3,300
BBB	**439**	476
BB and lower	**209**	205
Total	**$ 7,806**	$ 8,391

8. Financial Instruments Risk Management

The Company has policies relating to the identification, measurement, management, monitoring and reporting of risks associated with financial instruments. The key risks related to financial instruments are credit risk, liquidity risk and market risk (currency, interest rate and equity). The Risk Committee of the Board of Directors is responsible for the oversight of the Company's key risks. See the "Risk Management and Control Practices" section in the Company's December 31, 2017 Management's Discussion and Analysis.

The following sections describe how the Company manages each of these risks.

(a) Credit Risk

Credit risk is the risk of loss resulting from an obligor's potential inability or unwillingness to fully meet its contractual obligations to the Company.

The following policies and procedures are in place to manage this risk:

- Investment policies are in place that minimize undue concentration within issuers, connected companies, industries or individual geographies.
- Investment limits specify minimum and maximum limits for each asset class.
- Identification of credit risk through an internal credit risk rating system which includes a detailed assessment of an obligor's creditworthiness. Internal credit risk ratings cannot be higher than the highest rating provided by certain independent ratings companies.
- Portfolios are monitored continuously, and reviewed regularly with the Risk Committee and the Investment Committee of the Board of Directors.
- Credit risk associated with derivative instruments is evaluated quarterly based on conditions that existed at the balance sheet date, using practices that are at least as conservative as those recommended by regulators. The Company seeks to mitigate derivative credit risk by setting rating based counterparty limits in investment policies and through collateral arrangements where possible.
- 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.
- Investment guidelines also specify collateral requirements.

(i) Maximum Exposure to Credit Risk

The following summarizes the Company's maximum exposure to credit risk related to financial instruments. The maximum credit exposure is the carrying value of the asset net of any allowances for losses.

	2017	2016
Cash and cash equivalents	**$ 3,551**	$ 3,259
Bonds		
Fair value through profit or loss	**89,898**	88,325
Available-for-sale	**12,347**	11,478
Loans and receivables	**17,959**	16,970
Mortgage loans	**22,185**	21,651
Loans to policyholders	**8,280**	8,467
Funds held by ceding insurers (1)	**9,893**	10,781
Reinsurance assets	**5,045**	5,627
Interest due and accrued	**1,334**	1,310
Accounts receivable	**2,154**	1,835
Premiums in course of collection	**1,159**	1,166
Trading account assets	**723**	516
Finance leases receivable	**350**	273
Other assets (2) (3)	**554**	721
Derivative assets	**384**	528
Total	**$ 175,816**	$ 172,907

(1) Includes $8,044 ($8,723 at December 31, 2016) of funds held by ceding insurers where the Company retains the credit risk of the assets supporting the liabilities ceded (note 7).

(2) Includes items such as current income taxes receivable and miscellaneous other assets of the Company (note 12).

(3) The Company reclassified current taxes to deferred taxes resulting in an increase to current income tax receivable of $73 on the Consolidated Balance Sheets at December 31, 2016 (note 34).

Credit risk is also mitigated by entering into collateral agreements. The amount and type of collateral required depends on an assessment of the credit risk of the counterparty. Guidelines are implemented regarding the acceptability of types of collateral and the valuation parameters. Management monitors the value of the collateral, requests additional collateral when needed and performs an impairment valuation when applicable. The Company has $77 of collateral received from counterparties as at December 31, 2017 ($149 at December 31, 2016) relating to derivative assets.

(ii) Concentration of Credit Risk

Concentrations of credit risk arise from exposures to a single debtor, a group of related debtors or groups of debtors that have similar credit risk characteristics in that they operate in the same geographic region or in similar industries. The characteristics are similar in that changes in economic or political environments may impact their ability to meet obligations as they come due.

The following provides details of the carrying value of bonds by issuer, industry sector and geographic distribution:

	2017			
	Canada	**United States**	**Europe**	**Total**
Bonds issued or guaranteed by:				
Treasuries	**$ 899**	**$ 263**	**$ 12,452**	**$ 13,614**
Government related	**19,322**	**3,570**	**7,557**	**30,449**
Agency securitized	**65**	**1,937**	**21**	**2,023**
Non-agency securitized	**2,073**	**5,232**	**1,761**	**9,066**
Financials	**3,872**	**4,070**	**5,493**	**13,435**
Communications	**782**	**1,304**	**1,015**	**3,101**
Consumer products	**3,159**	**3,714**	**3,238**	**10,111**
Energy	**1,806**	**2,041**	**866**	**4,713**
Industrials	**1,544**	**3,727**	**1,748**	**7,019**
Technology	**591**	**1,094**	**485**	**2,170**
Transportation	**2,407**	**828**	**1,144**	**4,379**
Utilities	**7,310**	**4,332**	**4,277**	**15,919**
Total long-term bonds	**43,830**	**32,112**	**40,057**	**115,999**
Short-term bonds	**2,474**	**78**	**1,653**	**4,205**
Total	**$ 46,304**	**$ 32,190**	**$ 41,710**	**$ 120,204**

	2016			
	Canada	United States	Europe	Total
Bonds issued or guaranteed by:				
Treasuries	$ 1,422	$ 786	$ 10,880	$ 13,088
Government related	18,379	3,903	6,765	29,047
Agency securitized	100	3,685	158	3,943
Non-agency securitized	2,392	4,293	1,875	8,560
Financials	3,167	3,268	5,245	11,680
Communications	634	1,336	970	2,940
Consumer products	2,799	3,305	3,224	9,328
Energy	1,618	2,102	986	4,706
Industrials	1,358	3,951	1,634	6,943
Technology	506	1,054	471	2,031
Transportation	2,246	826	1,095	4,167
Utilities	6,226	4,454	4,259	14,939
Total long-term bonds	40,847	32,963	37,562	111,372
Short-term bonds	3,871	10	1,520	5,401
Total	$ 44,718	$ 32,973	$ 39,082	$ 116,773

8. Financial Instruments Risk Management (cont'd)

The following provides details of the carrying value of mortgage loans by geographic location:

	2017			
	Single family residential	Multi-family residential	Commercial	Total
Canada	$ 2,139	$ 4,163	$ 6,840	$ 13,142
United States	–	2,190	3,257	5,447
Europe	–	413	3,183	3,596
Total	**$ 2,139**	**$ 6,766**	**$ 13,280**	**$ 22,185**

	2016			
	Single family residential	Multi-family residential	Commercial	Total
Canada	$ 2,075	$ 3,709	$ 7,108	$ 12,892
United States	–	1,895	3,274	5,169
Europe	–	383	3,207	3,590
Total	$ 2,075	$ 5,987	$ 13,589	$ 21,651

(iii) Asset Quality

Bond Portfolio By Credit Rating

	2017	2016
AAA	$ 24,889	$ 27,762
AA	32,405	29,816
A	40,328	37,787
BBB	21,449	20,116
BB and lower	1,133	1,292
Total	**$ 120,204**	$ 116,773

Derivative Portfolio By Credit Rating

	2017	2016
Over-the-counter contracts (counterparty ratings):		
AA	$ 135	$ 221
A	235	288
BBB	13	16
Exchange-traded	1	3
Total	**$ 384**	$ 528

(iv) Loans Past Due, But Not Impaired

Loans that are past due but not considered impaired are loans for which scheduled payments have not been received, but management has reasonable assurance of collection of the full amount of principal and interest due. The following provides carrying values of the loans past due, but not impaired:

	2017	2016
Less than 30 days	$ 1	$ 54
30 – 90 days	–	–
Greater than 90 days	1	2
Total	**$ 2**	$ 56

(v) The following outlines the future asset credit losses provided for in insurance contract liabilities. These amounts are in addition to the allowance for asset losses included with assets:

	2017	2016
Participating	$ 1,254	$ 1,155
Non-participating	1,637	1,791
Total	**$ 2,891**	$ 2,946

(b) Liquidity Risk

Liquidity risk is the risk that the Company will not be able to meet all cash outflow obligations as they come due. The following policies and procedures are in place to manage this risk:

- The Company closely manages operating liquidity through cash flow matching of assets and liabilities and forecasting earned and required yields, to ensure consistency between policyholder requirements and the yield of assets. Approximately 67% (approximately 67% in 2016) of insurance and investment contract liabilities are non-cashable prior to maturity or subject to fair value adjustments.
- Management closely monitors the solvency and capital positions of its principal subsidiaries opposite liquidity requirements at the holding company. Additional liquidity is available through established lines of credit or via capital market transactions. The Company maintains $350 of liquidity at the Lifeco level through committed lines of credit with Canadian chartered banks. As well, the Company maintains a $150 liquidity facility at Great-West Life, a U.S. $500 revolving credit agreement with a syndicate of banks for use by Putnam, and a U.S. $50 line of credit at Great-West Financial.

In the normal course of business the Company enters into contracts that give rise to commitments of future minimum payments that impact short-term and long-term liquidity. The following summarizes the principal repayment schedule of certain of the Company's financial liabilities.

	Payments due by period						
	Total	1 year	2 years	3 years	4 years	5 years	Over 5 years
Debentures and other debt instruments	$ 5,235	$ 200	$ –	$ 500	$ –	$ –	$ 4,535
Capital trust securities (1)	150	–	–	–	–	–	150
Purchase obligations	253	109	74	48	19	3	–
Pension contributions	300	300	–	–	–	–	–
Total	**$ 5,938**	**$ 609**	**$ 74**	**$ 548**	**$ 19**	**$ 3**	**$ 4,685**

(1) Payments due have not been reduced to reflect that the Company held capital trust securities of $37 principal amount ($52 carrying value).

(c) Market Risk

Market risk is the risk that the fair value or future cash flows of a financial instrument will fluctuate as a result of changes in market factors which include three types: currency risk, interest rate (including related inflation) risk and equity risk.

Caution Related to Risk Sensitivities

These consolidated financial statements include estimates of sensitivities and risk exposure measures for certain risks, such as the sensitivity due to specific changes in interest rate levels projected and market prices as at the valuation date. Actual results can differ significantly from these estimates for a variety of reasons including:

- Assessment of the circumstances that led to the scenario may lead to changes in (re)investment approaches and interest rate scenarios considered,
- Changes in actuarial, investment return and future investment activity assumptions,
- Actual experience differing from the assumptions,
- Changes in business mix, effective income tax rates and other market factors,
- Interactions among these factors and assumptions when more than one changes, and
- The general limitations of the Company's internal models.

For these reasons, the sensitivities should only be viewed as directional estimates of the underlying sensitivities for the respective factors based on the assumptions outlined above. Given the nature of these calculations, the Company cannot provide assurance that the actual impact on net earnings attributed to shareholders will be as indicated.

(i) Currency Risk

Currency risk relates to the Company operating and holding financial instruments in different currencies. For the assets backing insurance and investment contract liabilities that are not matched by currency, changes in foreign exchange rates can expose the Company to the risk of foreign exchange losses not offset by liability decreases. The Company has net investments in foreign operations. The Company's debt obligations are denominated in Canadian dollars, euros, and U.S. dollars. 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. 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 equity. Correspondingly, the Company's book value per share and capital ratios monitored by rating agencies are also impacted.

The following policies and procedures are in place to mitigate the Company's exposure to currency risk:

- The Company uses financial measures such as constant currency calculations to monitor the effect of currency translation fluctuations.
- Investments are normally made in the same currency as the liabilities supported by those investments. Segmented Investment Guidelines include maximum tolerances for unhedged currency mismatch exposures.
- For assets backing liabilities not matched by currency, the Company would normally convert the assets back to the currency of the liability using foreign exchange contracts.
- A 10% weakening of the Canadian dollar against foreign currencies would be expected to increase non-participating insurance and investment contract liabilities and their supporting assets by approximately the same amount resulting in an immaterial change to net earnings. A 10% strengthening of the Canadian dollar against foreign currencies would be expected to decrease non-participating insurance and investment contract liabilities and their supporting assets by approximately the same amount resulting in an immaterial change in net earnings.

(ii) Interest Rate Risk

Interest rate risk exists if asset and liability cash flows are not closely matched and interest rates change causing a difference in value between the asset and liability. The following policies and procedures are in place to mitigate the Company's exposure to interest rate risk:

- The Company utilizes a formal process for managing the matching of assets and liabilities. This involves grouping general fund assets and liabilities into segments. Assets in each segment are managed in relation to the liabilities in the segment.
- Interest rate risk is managed by investing in assets that are suitable for the products sold.
- Where these products have benefit or expense payments that are dependent on inflation (inflation-indexed annuities, pensions and disability claims) the Company generally invests in real return instruments to hedge its real dollar liability cash flows. Some protection against changes in the inflation index is 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.
- For products with fixed and highly predictable benefit payments, investments are made in fixed income assets or real estate whose cash flows closely match the liability product cash flows. Where assets are not available to match certain period cash flows, such as long-tail cash flows, a portion of these are invested in equities and the rest are duration matched. Hedging instruments are employed where necessary when there is a lack of suitable permanent investments to minimize loss exposure to interest rate changes. To the extent these cash flows are matched, protection against interest rate change is achieved and any change in the fair value of the assets will be offset by a similar change in the fair value of the liabilities.
- For products with less predictable timing of benefit payments, investments are made in fixed income assets with cash flows of a shorter duration than the anticipated timing of benefit payments, or equities as described below.
- The risk associated with the mismatch in portfolio duration and cash flow, asset prepayment exposure and the pace of asset acquisition are quantified and reviewed regularly.

Projected cash flows from the current assets and liabilities are used in the Canadian Asset Liability Method to determine insurance contract liabilities. Valuation assumptions have been made regarding rates of returns on supporting assets, fixed income, equity and inflation. The valuation assumptions use best estimates of future reinvestment rates and inflation assumptions with an assumed correlation together with margins for adverse deviation set in accordance with professional standards. These margins are necessary to provide for possibilities of misestimation 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.

Projected cash flows from fixed income assets used in actuarial calculations are reduced to provide for potential asset default losses. The net effective yield rate reduction averaged 0.13% (0.14% in 2016). The calculation for future credit losses on assets is based on the credit quality of the underlying asset portfolio.

Testing under a number of interest rate scenarios (including increasing, decreasing and fluctuating rates) is done to assess 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:

- At December 31, 2017 and December 31, 2016, the effect of an immediate 1% parallel increase in the yield curve on the prescribed scenarios results in interest rate changes to assets and liabilities that will offset each other with no impact to net earnings.
- At December 31, 2017 and December 31, 2016, the effect of an immediate 1% parallel decrease in the yield curve on the prescribed scenarios results 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 following provides information on the effect of an immediate 1% increase or 1% decrease in the interest rates at both the low and high end of the range of interest rates recognized in the provisions:

	2017		2016	
	1% increase	**1% decrease**	1% increase	1% decrease
Change in interest rates				
Increase (decrease) in non-participating insurance and investment contract liabilities	**$ (215)**	**$ 720**	$ (202)	$ 677
Increase (decrease) in net earnings	**$ 150**	**$ (523)**	$ 149	$ (491)

(iii) Equity Risk

Equity risk is the uncertainty associated with the valuation of assets and liabilities arising from changes in equity markets and other pricing risk. To mitigate pricing risk, the Company has investment policy guidelines in place that provide for prudent investment in equity markets within clearly defined limits. The risks associated with segregated fund guarantees have been mitigated through a hedging program for lifetime Guaranteed Minimum Withdrawal Benefit guarantees using equity futures, currency forwards, and interest rate derivatives. For policies with segregated fund guarantees, the Company generally determines insurance contract liabilities at a conditional tail expectation of 75 (CTE75) level.

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. The following provides information on the expected impacts of a 10% increase or 10% decrease in equity values:

	2017		2016	
	10% increase	**10% decrease**	10% increase	10% decrease
Change in equity values				
Increase (decrease) in non-participating insurance and investment contract liabilities	**$ (58)**	**$ 109**	$ (51)	$ 61
Increase (decrease) in net earnings	**$ 48**	**$ (85)**	$ 43	$ (50)

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. The following provides information on the expected impacts of a 1% increase or 1% decrease in the best estimate assumptions:

	2017		2016	
	1% increase	**1% decrease**	1% increase	1% decrease
Change in best estimate return assumptions for equities				
Increase (decrease) in non-participating insurance contract liabilities	**$ (542)**	**$ 591**	$ (504)	$ 552
Increase (decrease) in net earnings	**$ 439**	**$ (470)**	$ 407	$ (438)

(d) Enforceable Master Netting Arrangements or Similar Agreements

The Company enters into International Swaps and Derivative Association's (ISDA's) master agreements for transacting over-the-counter derivatives. The Company receives and pledges collateral according to the related ISDA's Credit Support Annexes. The ISDA's master agreements do not meet the criteria for offsetting on the Consolidated Balance Sheets because they create a right of set-off that is enforceable only in the event of default, insolvency, or bankruptcy.

For exchange-traded derivatives subject to derivative clearing agreements with the exchanges and clearinghouses, there is no provision for set-off at default. Initial margin is excluded from the table within this disclosure as it would become part of a pooled settlement process.

The Company's reverse repurchase agreements are also subject to right of set-off in the event of default. These transactions and agreements include master netting arrangements which provide for the netting of payment obligations between the Company and its counterparties in the event of default.

The table sets out the potential effect on the Company's Consolidated Balance Sheets on financial instruments that have been shown in a gross position where right of set-off exists under certain circumstances that do not qualify for netting on the Consolidated Balance Sheets.

	2017			
		Related amounts not set-off in the Balance Sheet		
	Gross amount of financial instruments presented in the Balance Sheet	Offsetting counterparty position (1)	Financial collateral received/ pledged (2)	Net exposure
Financial instruments – assets				
Derivative financial instruments	$ 384	$ (331)	$ (26)	$ 27
Reverse repurchase agreements (3)	29	–	(29)	–
Total financial instruments – assets	$ 413	$ (331)	$ (55)	$ 27
Financial instruments – liabilities				
Derivative financial instruments	$ 1,336	$ (331)	$ (359)	$ 646
Total financial instruments – liabilities	$ 1,336	$ (331)	$ (359)	$ 646

	2016			
		Related amounts not set-off in the Balance Sheet		
	Gross amount of financial instruments presented in the Balance Sheet	Offsetting counterparty position (1)	Financial collateral received/ pledged (2)	Net exposure
Financial instruments – assets				
Derivative financial instruments	$ 528	$ (341)	$ (131)	$ 56
Total financial instruments – assets	$ 528	$ (341)	$ (131)	$ 56
Financial instruments – liabilities				
Derivative financial instruments	$ 2,012	$ (341)	$ (403)	$ 1,268
Total financial instruments – liabilities	$ 2,012	$ (341)	$ (403)	$ 1,268

(1) Includes counterparty amounts recognized on the Consolidated Balance Sheets where the Company has a potential offsetting position (as described above) but does not meet the criteria for offsetting on the balance sheet, excluding collateral.

(2) Financial collateral presented above excludes overcollateralization and, for exchange-traded derivatives, initial margin. Financial collateral received on reverse repurchase agreements is held by a third party. Total financial collateral, including initial margin and overcollateralization, received on derivative assets was $77 ($159 at December 31, 2016), received on reverse repurchase agreements was $29 (nil at December 31, 2016), and pledged on derivative liabilities was $437 ($475 at December 31, 2016).

(3) Assets related to reverse repurchase agreements are included in bonds, on the Consolidated Balance Sheets.

9. Fair Value Measurement

The Company's assets and liabilities recorded at fair value have been categorized based upon the following fair value hierarchy:

Level 1: Fair value measurements utilize observable, quoted prices (unadjusted) in active markets for identical assets or liabilities that the Company has the ability to access. Assets and liabilities utilizing Level 1 inputs include actively exchange-traded equity securities, exchange-traded futures, and mutual and segregated funds which have available prices in an active market with no redemption restrictions.

Level 2: Fair value measurements utilize inputs other than quoted prices included in Level 1 that are observable for the asset or liability, either directly or indirectly. Level 2 inputs include quoted prices for similar assets and liabilities in active markets, and inputs other than quoted prices that are observable for the asset or liability, such as interest rates and yield curves that are observable at commonly quoted intervals. The fair values for some Level 2 securities were obtained from a pricing service. The pricing service inputs include, but are not limited to, benchmark yields, reported trades, broker/dealer quotes, issuer spreads, two-sided markets, benchmark securities, offers and reference data. Level 2 assets and liabilities include those priced using a matrix which is based on credit quality and average life, government and agency securities, restricted stock, some private bonds and equities, most investment-grade and high-yield corporate bonds, most asset-backed securities, most over-the-counter derivatives, and mortgage loans. Investment contracts that are measured at fair value through profit or loss are mostly included in the Level 2 category.

Level 3: Fair value measurements 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. The values of the majority of Level 3 securities were obtained from single broker quotes, internal pricing models, or external appraisers. Assets and liabilities utilizing Level 3 inputs generally include certain bonds, certain asset-backed securities, some private equities, investments in mutual and segregated funds where there are redemption restrictions, certain over-the-counter derivatives, and investment properties.

The following presents the Company's assets and liabilities measured at fair value on a recurring basis by hierarchy level:

	2017			
	Level 1	Level 2	Level 3	Total
Assets measured at fair value				
Cash and cash equivalents	$ 3,551	$ –	$ –	$ 3,551
Financial assets at fair value through profit or loss				
Bonds	–	89,833	65	89,898
Stocks	7,854	–	243	8,097
Total financial assets at fair value through profit or loss	7,854	89,833	308	97,995
Available-for-sale financial assets				
Bonds	–	12,347	–	12,347
Stocks	49	5	1	55
Total available-for-sale financial assets	49	12,352	1	12,402
Investment properties	–	–	4,851	4,851
Funds held by ceding insurers	132	7,806	–	7,938
Derivatives (1)	1	383	–	384
Assets held for sale	–	169	–	169
Other assets:				
Trading account assets	503	220	–	723
Total assets measured at fair value	**$ 12,090**	**$ 110,763**	**$ 5,160**	**$ 128,013**
Liabilities measured at fair value				
Derivatives (2)	$ 2	$ 1,334	$ –	$ 1,336
Investment contract liabilities	–	1,819	22	1,841
Total liabilities measured at fair value	**$ 2**	**$ 3,153**	**$ 22**	**$ 3,177**

(1) Excludes collateral received from counterparties of $77.

(2) Excludes collateral pledged to counterparties of $374.

There were no transfers of the Company's assets and liabilities between Level 1 and Level 2 in the year.

9. Fair Value Measurement (cont'd)

	2016			
	Level 1	Level 2	Level 3	Total
Assets measured at fair value				
Cash and cash equivalents	$ 3,259	$ –	$ –	$ 3,259
Financial assets at fair value through profit or loss				
Bonds	–	88,324	1	88,325
Stocks	7,520	6	80	7,606
Total financial assets at fair value through profit or loss	7,520	88,330	81	95,931
Available-for-sale financial assets				
Bonds	–	11,478	–	11,478
Stocks	47	–	1	48
Total available-for-sale financial assets	47	11,478	1	11,526
Investment properties	–	–	4,340	4,340
Funds held by ceding insurers	214	8,391	–	8,605
Derivatives (1)	3	525	–	528
Other assets:				
Trading account assets	302	213	1	516
Total assets measured at fair value	$ 11,345	$ 108,937	$ 4,423	$ 124,705
Liabilities measured at fair value				
Derivatives (2)	$ 1	$ 2,011	$ –	$ 2,012
Investment contract liabilities	–	1,989	20	2,009
Total liabilities measured at fair value	$ 1	$ 4,000	$ 20	$ 4,021

(1) Excludes collateral received from counterparties of $149.
(2) Excludes collateral pledged to counterparties of $425.

There were no transfers of the Company's assets and liabilities between Level 1 and Level 2 in the year.

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

	2017							
	Fair value through profit or loss bonds	Available-for-sale bonds	Fair value through profit or loss stocks (3)	Available-for-sale stocks	Investment properties	Other assets – trading account (4)	Total Level 3 assets	Investment contract liabilities
Balance, beginning of year	$ 1	$ –	$ 80	$ 1	$ 4,340	$ 1	$ 4,423	$ 20
Total gains								
Included in net earnings	1	–	10	–	176	–	187	–
Included in other comprehensive income (loss) (1)	4	–	(3)	–	68	–	69	–
Purchases	–	–	166	–	339	–	505	–
Sales	–	–	(14)	–	(72)	(1)	(87)	–
Other	–	–	–	–	–	–	–	2
Transfers into Level 3 (2)	60	–	4	–	–	–	64	–
Transfers out of Level 3 (2)	(1)	–	–	–	–	–	(1)	–
Balance, end of year	$ 65	$ –	$ 243	$ 1	$ 4,851	$ –	$ 5,160	$ 22
Total gains for the year included in net investment income	$ 1	$ –	$ 10	$ –	$ 176	$ –	$ 187	$ –
Change in unrealized gains for the year included in earnings for assets held at December 31, 2017	$ 1	$ –	$ 10	$ –	$ 151	$ –	$ 162	$ –

(1) Amount of other comprehensive income for investment properties represents the unrealized gains (losses) on foreign exchange.

(2) Transfers into Level 3 are due primarily to decreased observability of inputs in valuation methodologies. Transfers out of Level 3 are due primarily to increased observability of inputs in valuation methodologies as evidenced by corroboration of market prices with multiple pricing vendors or the lifting of redemption restrictions on investments in mutual and segregated funds.

(3) Includes investments in mutual and segregated funds where there are redemption restrictions. The fair value is based on observable, quoted prices.

(4) Includes illiquid equities where prices are not quoted; however, the Company does not believe changing the inputs to reasonably alternate assumptions would change the values significantly.

9. Fair Value Measurement (cont'd)

	2016							
	Fair value through profit or loss bonds	Available-for-sale bonds	Fair value through profit or loss stocks [3]	Available-for-sale stocks	Investment properties	Other assets – trading account [4]	Total Level 3 assets	Investment contract liabilities
Balance, beginning of year	$ 10	$ 1	$ 66	$ 1	$ 5,237	$ 5	$ 5,320	$ 27
Total gains								
Included in net earnings	–	–	2	–	61	–	63	–
Included in other comprehensive income (loss) [1]	–	–	–	–	(633)	–	(633)	–
Purchases	–	–	50	–	102	–	152	–
Sales	–	–	(38)	–	(427)	(5)	(470)	–
Other	–	–	–	–	–	–	–	(7)
Transfers into Level 3 [2]	–	–	–	–	–	1	1	–
Transfers out of Level 3 [2]	(9)	(1)	–	–	–	–	(10)	–
Balance, end of year	$ 1	$ –	$ 80	$ 1	$ 4,340	$ 1	$ 4,423	$ 20
Total gains for the year included in net investment income	$ –	$ –	$ 2	$ –	$ 61	$ –	$ 63	$ –
Change in unrealized gains for the year included in earnings for assets held at December 31, 2016	$ –	$ –	$ 3	$ –	$ 1	$ –	$ 4	$ –

(1) Amount of other comprehensive income for investment properties represents the unrealized gains (losses) on foreign exchange.

(2) Transfers into Level 3 are due primarily to decreased observability of inputs in valuation methodologies. Transfers out of Level 3 are due primarily to increased observability of inputs in valuation methodologies as evidenced by corroboration of market prices with multiple pricing vendors or the lifting of redemption restrictions on investments in mutual and segregated funds.

(3) Includes investments in mutual and segregated funds where there are redemption restrictions. The fair value is based on observable, quoted prices.

(4) Includes illiquid equities where prices are not quoted; however, the Company does not believe changing the inputs to reasonably alternate assumptions would change the values significantly.

The following sets out information about significant unobservable inputs used at year-end in measuring assets and liabilities categorized as Level 3 in the fair value hierarchy:

Type of asset	Valuation approach	Significant unobservable input	Input value	Inter-relationship between key unobservable inputs and fair value measurement
Investment properties	Investment property valuations are generally determined using property valuation models based on expected capitalization rates and models that discount expected future net cash flows. The determination of the fair value of investment property requires the use of estimates such as future cash flows (such as future leasing assumptions, rental rates, capital and operating expenditures) and discount, reversionary and overall capitalization rates applicable to the asset based on current market rates.	Discount rate	Range of 2.6% – 10.3%	A decrease in the discount rate would result in an increase in fair value. An increase in the discount rate would result in a decrease in fair value.
		Reversionary rate	Range of 4.3% – 7.5%	A decrease in the reversionary rate would result in an increase in fair value. An increase in the reversionary rate would result in a decrease in fair value.
		Vacancy rate	Weighted average of 2.7%	A decrease in the expected vacancy rate would generally result in an increase in fair value. An increase in the expected vacancy rate would generally result in a decrease in fair value.

The following presents the Company's assets and liabilities disclosed at fair value on a recurring basis by hierarchy level:

	2017				
	Level 1	**Level 2**	**Level 3**	**Other assets/ liabilities not held at fair value**	**Total**
Assets disclosed at fair value					
Loans and receivables financial assets					
Bonds	$ –	$ 19,365	$ 105	$ –	$ 19,470
Mortgage loans	–	23,005	–	–	23,005
Loans to policyholders	–	8,280	–	–	8,280
Total loans and receivables financial assets	–	50,650	105	–	50,755
Available-for-sale financial assets					
Stocks (1)	–	–	–	348	348
Other stocks (2) (3)	404	–	–	2	406
Funds held by ceding insurers	–	–	–	106	106
Total assets disclosed at fair value	$ 404	$ 50,650	$ 105	$ 456	$ 51,615
Liabilities disclosed at fair value					
Debentures and other debt instruments	$ 428	$ 5,622	$ –	$ –	$ 6,050
Capital trust securities	–	221	–	–	221
Total liabilities disclosed at fair value	$ 428	$ 5,843	$ –	$ –	$ 6,271

(1) Fair value of certain stocks available for sale cannot be reliably measured, therefore, these investments are recorded at cost.

(2) Other stocks include the Company's investments in an affiliated company, IGM, a member of the Power Financial group of companies.

(3) During the fourth quarter of 2017, the Company classified an investment within a disposal group of assets held for sale (note 6).

	2016				
	Level 1	Level 2	Level 3	Other assets/ liabilities not held at fair value	Total
Assets disclosed at fair value					
Loans and receivables financial assets					
Bonds	$ –	$ 18,355	$ 129	$ –	$ 18,484
Mortgage loans	–	22,550	–	–	22,550
Loans to policyholders	–	8,467	–	–	8,467
Total loans and receivables financial assets	–	49,372	129	–	49,501
Available-for-sale financial assets					
Stocks (1)	–	–	–	391	391
Other stocks (2)	351	–	–	259	610
Funds held by ceding insurers	–	–	–	118	118
Total assets disclosed at fair value	$ 351	$ 49,372	$ 129	$ 768	$ 50,620
Liabilities disclosed at fair value					
Debentures and other debt instruments	$ 428	$ 6,001	$ –	$ –	$ 6,429
Capital trust securities	–	212	–	–	212
Total liabilities disclosed at fair value	$ 428	$ 6,213	$ –	$ –	$ 6,641

(1) Fair value of certain stocks available for sale cannot be reliably measured, therefore, these investments are recorded at cost.

(2) Other stocks include the Company's investments in an affiliated company, IGM, a member of the Power Financial group of companies and Allianz Ireland, an unlisted general insurance company operating in Ireland, which was disposed of during 2017.

10. Goodwill and Intangible Assets

(a) Goodwill

(i) The carrying value of goodwill and changes in the carrying value of goodwill are as follows:

	2017	2016
Balance, beginning of year	**$ 5,977**	$ 5,913
Business acquisitions (note 3)	**182**	95
Changes in foreign exchange rates	**20**	(31)
Balance, end of year	**$ 6,179**	$ 5,977

Accumulated goodwill impairment losses and changes in accumulated goodwill impairment losses are as follows:

	2017	2016
Balance, beginning of year	**$ 1,205**	$ 1,241
Changes in foreign exchange rates	**(72)**	(36)
Balance, end of year	**$ 1,133**	$ 1,205

(ii) Within each of the three operating segments, goodwill has been assigned to cash generating unit groupings, representing the lowest level in which goodwill is monitored for internal reporting purposes. Lifeco does not allocate insignificant amounts of goodwill and indefinite life intangible assets across multiple cash generating unit groupings. Goodwill is tested for impairment by comparing the carrying value of each cash generating unit grouping to which goodwill has been assigned to its recoverable amount as follows:

	2017	2016 (1)
Canada		
Group Customer	**$ 1,443**	$ 1,443
Individual Customer	**2,526**	2,344
Europe		
Insurance and Annuities	**2,015**	1,984
Reinsurance	**1**	1
United States		
Financial Services	**194**	205
Total	**$ 6,179**	$ 5,977

(1) Effective January 1, 2017, the Company realigned its Individual Insurance, Wealth Management and Group Insurance business units in the Canada segment into two business units: Individual Customer and Group Customer. The realignment resulted in a change to comparative figures within these cash generating unit groupings.

(b) Intangible Assets

Intangible assets of $3,732 ($3,972 as at December 31, 2016) include indefinite life and finite life intangible assets. The carrying value and changes in the carrying value of these intangible assets are as follows:

(i) Indefinite life intangible assets:

	2017			
	Brands and trademarks	Customer contract related	Shareholders' portion of acquired future participating account profit	Total
Cost				
Balance, beginning of year	**$ 979**	**$ 2,938**	**$ 354**	**$ 4,271**
Transfer to assets held for sale (note 6)	**–**	**(290)**	**–**	**(290)**
Changes in foreign exchange rates	**(15)**	**(153)**	**–**	**(168)**
Balance, end of year	**$ 964**	**$ 2,495**	**$ 354**	**$ 3,813**
Accumulated impairment				
Balance, beginning of year	**$ (157)**	**$ (1,084)**	**$ –**	**$ (1,241)**
Impairment reversal (1)	**20**	**–**	**–**	**20**
Changes in foreign exchange rates	**5**	**65**	**–**	**70**
Balance, end of year	**$ (132)**	**$ (1,019)**	**$ –**	**$ (1,151)**
Net carrying amount	**$ 832**	**$ 1,476**	**$ 354**	**$ 2,662**

(1) During 2017, the Company reversed an impairment loss of $20 initially recorded in 2008 related to certain Putnam brands and trademarks. The reversal has been recorded in the Consolidated Statements of Earnings within amortization of finite life intangible assets and impairment reversal.

	2016			
	Brands and trademarks	Customer contract related	Shareholders' portion of acquired future participating account profit	Total
Cost				
Balance, beginning of year	$ 1,020	$ 3,019	$ 354	$ 4,393
Transfer to finite life	–	(3)	–	(3)
Changes in foreign exchange rates	(41)	(78)	–	(119)
Balance, end of year	$ 979	$ 2,938	$ 354	$ 4,271
Accumulated impairment				
Balance, beginning of year	$ (162)	$ (1,116)	$ –	$ (1,278)
Changes in foreign exchange rates	5	32	–	37
Balance, end of year	$ (157)	$ (1,084)	$ –	$ (1,241)
Net carrying amount	$ 822	$ 1,854	$ 354	$ 3,030

(ii) Indefinite life intangible assets have been assigned to the cash generating unit groupings as follows:

	2017	2016 (1)
Canada		
Group Customer	**$ 354**	$ 354
Individual Customer	**619**	619
Europe		
Insurance and Annuities	**227**	216
United States		
Asset Management	**1,462**	1,841
Total	**$ 2,662**	$ 3,030

(1) Effective January 1, 2017, the Company realigned its Individual Insurance, Wealth Management and Group Insurance business units in the Canada segment into two business units: Individual Customer and Group Customer. The realignment resulted in a change to comparative figures within these cash generating unit groupings.

10. Goodwill and Intangible Assets (cont'd)

(iii) Finite life intangible assets:

	2017			
	Customer contract related	**Distribution channels**	**Technology/ Software**	**Total**
Amortization period range	**9 – 30 years**	**30 years**	**3 – 10 years**	
Amortization method	**Straight-line**	**Straight-line**	**Straight-line**	
Cost				
Balance, beginning of year	**$ 831**	**$ 106**	**$ 1,264**	**$ 2,201**
Additions	**154**	**–**	**187**	**341**
Changes in foreign exchange rates	**(10)**	**2**	**(36)**	**(44)**
Disposals	**–**	**–**	**(25)**	**(25)**
Balance, end of year	**$ 975**	**$ 108**	**$ 1,390**	**$ 2,473**
Accumulated amortization and impairment				
Balance, beginning of year	**$ (460)**	**$ (48)**	**$ (751)**	**$ (1,259)**
Changes in foreign exchange rates	**8**	**–**	**28**	**36**
Disposals	**–**	**–**	**8**	**8**
Amortization	**(53)**	**(4)**	**(131)**	**(188)**
Balance, end of year	**$ (505)**	**$ (52)**	**$ (846)**	**$ (1,403)**
Net carrying amount	**$ 470**	**$ 56**	**$ 544**	**$ 1,070**

During 2017, the Company recognized an impairment loss of $16 on software assets included in the provision for the Canadian Business Transformation (note 29).

	2016			
	Customer contract related	Distribution channels	Technology/ Software	Total
Amortization period range	9 – 30 years	30 years	3 – 10 years	
Amortization method	Straight-line	Straight-line	Straight-line	
Cost				
Balance, beginning of year	$ 810	$ 118	$ 1,106	$ 2,034
Additions	39	–	183	222
Transfer from indefinite life	3	–	–	3
Changes in foreign exchange rates	(21)	(12)	(25)	(58)
Balance, end of year	$ 831	$ 106	$ 1,264	$ 2,201
Accumulated amortization and impairment				
Balance, beginning of year	$ (418)	$ (49)	$ (646)	$ (1,113)
Changes in foreign exchange rates	8	5	18	31
Amortization	(50)	(4)	(123)	(177)
Balance, end of year	$ (460)	$ (48)	$ (751)	$ (1,259)
Net carrying amount	$ 371	$ 58	$ 513	$ 942

The weighted average remaining amortization period of the customer contract related and distribution channels are 14 and 16 years respectively (10 and 17 years respectively at December 31, 2016).

(c) Recoverable Amount

For the purposes of annual impairment testing, the Company allocates goodwill and indefinite life intangible assets to cash generating unit groupings. Any potential impairment of goodwill or indefinite life intangible assets is identified by comparing the recoverable amount of a cash generating unit grouping to its carrying value. Recoverable amount is based on fair value less cost of disposal.

Fair value is initially assessed with reference to valuation multiples of comparable publicly-traded financial institutions and precedent business acquisitions transactions. These valuation multiples may include price-to-earnings or price-to-book measures for life insurers and asset managers. This assessment may give regard to a variety of relevant considerations, including expected growth, risk and capital market conditions, among other factors. The valuation multiples used in assessing fair value represent Level 2 inputs.

In the fourth quarter of 2017, the Company conducted its annual impairment testing of goodwill and indefinite life 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. In addition, during the year ended December 31, 2017, management transferred a $290 customer contract-related intangible to assets held for sale (note 6).

Any reasonable changes in assumptions and estimates used in determining recoverable amounts of cash generating unit groupings is unlikely to cause carrying values to exceed recoverable amounts.

11. Owner Occupied Properties and Fixed Assets

The carrying value of owner occupied properties and the changes in the carrying value of owner occupied properties is as follows:

	2017	2016
Carrying value, beginning of year	$ 721	$ 715
Less: accumulated depreciation/impairments	(72)	(62)
Net carrying value, beginning of year	649	653
Additions	73	21
Disposals	–	(2)
Depreciation	(11)	(10)
Foreign exchange	(5)	(13)
Net carrying value, end of year	$ 706	$ 649

The net carrying value of fixed assets is $303 at December 31, 2017 ($304 at December 31, 2016).

The following provides details of the net carrying value of owner occupied properties and fixed assets by geographic location:

	2017	2016
Canada	$ 547	$ 548
United States	265	270
Europe	197	135
Total	$ 1,009	$ 953

There are no restrictions on the title of the owner occupied properties and fixed assets, nor are they pledged as security for debt.

12. Other Assets

	2017	2016
Deferred acquisition costs	**$ 633**	$ 597
Trading account assets [(1)]	**723**	516
Finance leases receivable	**350**	273
Defined benefit pension plan assets (note 24)	**193**	214
Prepaid expenses	**105**	112
Miscellaneous other assets	**420**	551
Total	**$ 2,424**	$ 2,263

(1) Includes bonds of $114 and stocks of $609 at December 31, 2017 (bonds of $141 and stocks of $375 at December 31, 2016).

Total other assets of $1,275 ($1,203 at December 31, 2016) are expected to be realized within 12 months from the reporting date. This amount excludes deferred acquisition costs, the changes in which are noted below.

Deferred acquisition costs	2017	2016
Balance, beginning of year	**$ 597**	$ 704
Additions	**139**	93
Amortization	**(86)**	(73)
Changes in foreign exchange rates	**24**	(74)
Disposals	**(41)**	(53)
Balance, end of year	**$ 633**	$ 597

Finance leases receivable

The Company has a finance lease on one property in Canada which has been leased for a 25-year term. The Company has four finance leases on properties in Europe. These properties have been leased for terms ranging between 27 and 40 years.

The finance lease receivable for the five properties, in aggregate, is as follows:

	2017	
	Minimum lease payments	Present value of minimum lease payments
One year	$ 27	$ 26
Over one to five years	107	85
Over five years	656	239
	790	350
Less: unearned finance lease income	440	–
Total finance leases receivable	**$ 350**	**$ 350**

The internal rate of return for the leases ranges between 3.7% and 7.5%.

13. Insurance and Investment Contract Liabilities

(a) Insurance and investment contract liabilities

	2017		
	Gross liability	**Reinsurance assets**	**Net**
Insurance contract liabilities	**$ 159,524**	**$ 5,045**	**$ 154,479**
Investment contract liabilities	**1,841**	**–**	**1,841**
Total	**$ 161,365**	**$ 5,045**	**$ 156,320**

	2016		
	Gross liability	Reinsurance assets	Net
Insurance contract liabilities	$ 155,940	$ 5,627	$ 150,313
Investment contract liabilities	2,009	–	2,009
Total	$ 157,949	$ 5,627	$ 152,322

(b) Composition of insurance and investment contract liabilities and related supporting assets

(i) The composition of insurance and investment contract liabilities is as follows:

	2017		
	Gross liability	**Reinsurance assets**	**Net**
Participating			
Canada	**$ 36,430**	**$ (356)**	**$ 36,786**
United States	**11,155**	**15**	**11,140**
Europe	**1,286**	**–**	**1,286**
Non-Participating			
Canada	**30,031**	**475**	**29,556**
United States	**28,814**	**272**	**28,542**
Europe	**53,649**	**4,639**	**49,010**
Total	**$ 161,365**	**$ 5,045**	**$ 156,320**

	2016		
	Gross liability	Reinsurance assets	Net
Participating			
Canada	$ 34,019	$ (443)	$ 34,462
United States	11,790	14	11,776
Europe	1,385	–	1,385
Non-Participating			
Canada	29,125	923	28,202
United States	29,081	309	28,772
Europe	52,549	4,824	47,725
Total	$ 157,949	$ 5,627	$ 152,322

13. Insurance and Investment Contract Liabilities (cont'd)

(ii) The composition of the assets supporting liabilities and equity is as follows:

	2017					
	Bonds	**Mortgage loans**	**Stocks**	**Investment properties**	**Other**	**Total**
Carrying value						
Participating liabilities						
Canada	**$ 17,262**	**$ 8,485**	**$ 5,032**	**$ 1,641**	**$ 4,010**	**$ 36,430**
United States	**5,220**	**447**	**–**	**–**	**5,488**	**11,155**
Europe	**928**	**27**	**110**	**48**	**173**	**1,286**
Non-participating liabilities						
Canada	**19,486**	**3,777**	**2,027**	**134**	**4,607**	**30,031**
United States	**23,400**	**4,268**	**–**	**–**	**1,146**	**28,814**
Europe	**33,037**	**3,569**	**262**	**2,810**	**13,971**	**53,649**
Other	**15,165**	**943**	**881**	**72**	**215,876**	**232,937**
Total equity	**5,706**	**669**	**552**	**146**	**18,463**	**25,536**
Total carrying value	**$ 120,204**	**$ 22,185**	**$ 8,864**	**$ 4,851**	**$ 263,734**	**$ 419,838**
Fair value	**$ 121,715**	**$ 23,005**	**$ 8,906**	**$ 4,851**	**$ 263,734**	**$ 422,211**

	2016 (note 34)					
	Bonds	Mortgage loans	Stocks	Investment properties	Other	Total
Carrying value						
Participating liabilities						
Canada	$ 16,311	$ 8,327	$ 4,828	$ 1,354	$ 3,199	$ 34,019
United States	5,597	451	–	–	5,742	11,790
Europe	988	32	123	56	186	1,385
Non-participating liabilities						
Canada	18,433	3,699	1,979	13	5,001	29,125
United States	23,820	4,005	–	–	1,256	29,081
Europe	31,550	3,557	236	2,679	14,527	52,549
Other	13,964	952	844	59	200,957	216,776
Total equity	6,110	628	655	179	17,436	25,008
Total carrying value	$ 116,773	$ 21,651	$ 8,665	$ 4,340	$ 248,304	$ 399,733
Fair value	$ 118,287	$ 22,550	$ 8,655	$ 4,340	$ 248,304	$ 402,136

Cash flows of assets supporting insurance and investment contract liabilities are matched within reasonable limits. Changes in the fair values of these assets are essentially offset by changes in the fair value of insurance and investment contract liabilities.

Changes in the fair values of assets backing capital and surplus, less related income taxes, would result in a corresponding change in surplus over time in accordance with investment accounting policies.

(c) Change in insurance contract liabilities

The change in insurance contract liabilities during the year was the result of the following business activities and changes in actuarial estimates:

	2017		
	Participating		
	Gross liability	Reinsurance assets	Net
Balance, beginning of year	**$ 47,176**	**$ (429)**	**$ 47,605**
Impact of new business	**(15)**	**–**	**(15)**
Normal change in force	**2,442**	**(2)**	**2,444**
Management action and changes in assumptions	**61**	**92**	**(31)**
With Profits Fund conversion	**(74)**	**–**	**(74)**
Impact of foreign exchange rate changes	**(734)**	**(2)**	**(732)**
Balance, end of year	**$ 48,856**	**$ (341)**	**$ 49,197**

	Non-participating			
	Gross liability	Reinsurance assets	Net	Total Net
Balance, beginning of year	**$ 108,764**	**$ 6,056**	**$ 102,708**	**$ 150,313**
Impact of new business	**6,550**	**210**	**6,340**	**6,325**
Normal change in force	**(2,737)**	**(162)**	**(2,575)**	**(131)**
Management action and changes in assumptions	**(1,222)**	**(971)**	**(251)**	**(282)**
With Profits Fund conversion	**74**	**–**	**74**	**–**
Business movement from/to external parties	**(344)**	**–**	**(344)**	**(344)**
Impact of foreign exchange rate changes	**(417)**	**253**	**(670)**	**(1,402)**
Balance, end of year	**$ 110,668**	**$ 5,386**	**$ 105,282**	**$ 154,479**

	2016		
	Participating		
	Gross liability	Reinsurance assets	Net
Balance, beginning of year	$ 45,844	$ (403)	$ 46,247
Impact of new business	35	–	35
Normal change in force	2,009	(26)	2,035
Management action and changes in assumptions	(229)	2	(231)
Impact of foreign exchange rate changes	(483)	(2)	(481)
Balance, end of year	$ 47,176	$ (429)	$ 47,605

	Non-participating			
	Gross liability	Reinsurance assets	Net	Total Net
Balance, beginning of year	$ 112,648	$ 5,534	$ 107,114	$ 153,361
Impact of new business	5,396	(326)	5,722	5,757
Normal change in force	966	824	142	2,177
Management action and changes in assumptions	(135)	335	(470)	(701)
Business movement from/to external parties	(113)	–	(113)	(113)
Impact of foreign exchange rate changes	(9,998)	(311)	(9,687)	(10,168)
Balance, end of year	$ 108,764	$ 6,056	$ 102,708	$ 150,313

Under fair value accounting, movement in the fair value of the supporting assets is a major factor in the movement of insurance contract liabilities. Changes in the fair value of assets are largely offset by corresponding changes in the fair value of liabilities. The change in the value of the insurance contract liabilities associated with the change in the value of the supporting assets is included in the normal change in force above.

In 2017, the major contributor to the increase in net insurance contract liabilities was the impact of new business of $6,325. This was partially offset by decreases due to the impact of foreign exchange rate changes of $1,402 primarily due to the lower U.S. dollar, business movement from/to external parties of $344 and management action and changes in assumptions of $282.

Net non-participating insurance contract liabilities decreased by $251 in 2017 due to management actions and assumption changes including a $61 decrease in Canada, a $200 decrease in Europe and a $10 increase in the United States.

13. Insurance and Investment Contract Liabilities (cont'd)

The decrease in Canada was primarily due to updated life mortality assumptions of $148, updated morbidity assumptions of $49, updated economic assumptions of $41 and modeling refinements of $5, partially offset by increases due to updated policyholder behaviour assumptions of $113, updated longevity assumptions of $59, updated provision for experience rated funds of $8 and updated provision for claims of $6.

The decrease in Europe was primarily due to updated longevity assumptions of $296 and updated economic assumptions of $180, partially offset by increases due to updated life mortality assumptions of $128, updated expense and tax assumptions of $41, updated policyholder behaviour assumptions of $61, modeling refinements of $32, updated provisions for claims of $7 and updated provisions of $5.

The increase in the United States was primarily due to updated expense and tax assumptions of $62, partially offset by updated life mortality assumptions of $44 and modeling refinements of $5.

Net participating insurance contract liabilities decreased by $31 in 2017 due to management actions and assumption changes. The decrease was primarily due to updated provisions for future policyholder dividends of $4,409 and expense and tax assumptions of $500, partially offset by increases due to lower investment returns of $4,257, updated mortality assumptions of $289, modeling refinements of $243 and updated policyholder behaviour assumptions of $89.

In 2016, the major contributors to the decrease in net insurance contract liabilities were the impact of foreign exchange rate changes of $10,168 primarily due to the lower British pound and management action and changes in assumptions of $701. This was partially offset by increases due to impact of new business of $5,757 and the normal changes in the in force business of $2,177, which was primarily due to the change in fair value.

Net non-participating insurance contract liabilities decreased by $470 in 2016 due to management actions and assumption changes including a $56 decrease in Canada, a $348 decrease in Europe and a $66 decrease in the United States.

The decrease in Canada was primarily due to updated morbidity assumptions of $86, updated provision for claims of $61 largely as a result of a decreased lag in reporting of Group health claims, updated longevity assumptions of $20 and modeling refinements of $8, partially offset by increases due to updated expense and tax assumptions of $91, updated economic assumptions of $20 and updated life mortality assumptions of $8.

The decrease in Europe was primarily due to updated longevity assumptions of $207, updated economic assumptions of $165, modeling refinements of $30, updated morbidity assumptions of $17 and updated policyholder behaviour assumptions of $9, partially offset by increases due to updated life mortality assumptions of $43 and updated expense and tax assumptions of $40.

The discount rate for valuing the reinsurance asset was updated in Ireland. This change in accounting estimate increased gross liabilities and reinsurance assets by $360 and had no impact on net liabilities or net earnings.

The decrease in the United States was primarily due to updated economic assumptions of $27, updated longevity assumptions of $19, updated life mortality assumptions of $17 and modeling refinements of $3.

Net participating insurance contract liabilities decreased by $231 in 2016 due to management actions and assumption changes. The decrease was primarily due to updated expense and tax assumptions of $153, higher investment returns of $102, provisions for future policyholder dividends of $19, updated mortality assumptions of $13 and updated morbidity assumptions of $2, partially offset by increases due updated policyholder behaviour assumptions of $29 and modeling refinements of $29.

(d) Change in investment contract liabilities measured at fair value

	2017	2016
Balance, beginning of year	**$ 2,009**	$ 2,253
Normal change in force business	**(171)**	(220)
Investment experience	**93**	93
Management action and changes in assumptions	**(22)**	(46)
Impact of foreign exchange rate changes	**(68)**	(71)
Balance, end of year	**$ 1,841**	$ 2,009

The carrying value of investment contract liabilities approximates their fair value. No investment contract liabilities have been reinsured.

(e) Gross premiums written and gross policyholder benefits

(i) Premium Income

	2017	2016
Direct premiums	**$ 25,199**	$ 23,772
Assumed reinsurance premiums	**13,107**	11,278
Total	**$ 38,306**	$ 35,050

(ii) Policyholder Benefits

	2017	2016
Direct	**$ 16,947**	$ 16,721
Assumed reinsurance	**13,854**	11,594
Total	**$ 30,801**	$ 28,315

(f) Actuarial Assumptions

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 misestimation 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.

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.

Annuitant mortality is also studied regularly and the results used to modify established industry experience annuitant mortality tables.

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.

Property and casualty reinsurance

Insurance contract liabilities for property and casualty reinsurance written by London Reinsurance Group (LRG), a subsidiary of London Life, 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 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 returns

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 the Canadian Asset Liability Method to determine insurance contract liabilities. Cash flows from assets are reduced to provide for asset default losses. Testing under several interest rate and equity scenarios (including increasing and decreasing rates) is done to provide for reinvestment risk (note 8(c)).

13. Insurance and Investment Contract Liabilities (cont'd)

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 the Canadian Asset Liability Method as inflation is assumed to be correlated with new money interest rates.

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 term for renewable term policies in Canada and Reinsurance. Industry experience has guided the Company's assumptions for these products as the Company's own experience is very limited.

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 on shareholders' earnings is reflected in the changes in best estimate assumptions above.

(g) Risk Management

(i) Insurance risk

Insurance risk is the risk that the insured event occurs and that there are large deviations between expected and actual actuarial assumptions including mortality, persistency, longevity, morbidity, expense variations and investment returns.

The Company is in the business of accepting risk associated with insurance contract liabilities. The objective of the Company is to mitigate its exposure to risk arising from these contracts through product design, product and geographical diversification, the implementation of the Company's underwriting strategy guidelines, and through the use of reinsurance arrangements.

The following provides information about the Company's insurance contract liabilities sensitivities to management's best estimate of the approximate impact as a result of changes in assumptions used to determine the Company's liability associated with these contracts.

	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)

Concentration risk may arise from geographic regions, accumulation of risks and market risk. The concentration of insurance risk before and after reinsurance by geographic region is described below.

	2017			2016		
	Gross liability	Reinsurance assets	Net	Gross liability	Reinsurance assets	Net
Canada	**$ 66,461**	**$ 119**	**$ 66,342**	$ 63,144	$ 480	$ 62,664
United States	**39,969**	**287**	**39,682**	40,871	323	40,548
Europe	**54,935**	**4,639**	**50,296**	53,934	4,824	49,110
Total	**$ 161,365**	**$ 5,045**	**$ 156,320**	$ 157,949	$ 5,627	$ 152,322

(ii) Reinsurance risk

Maximum limits per insured life benefit amount (which vary by line of business) are established for life and health insurance, and reinsurance is purchased for amounts in excess of those limits.

Reinsurance costs and recoveries as defined by the reinsurance agreement are reflected in the valuation with these costs and recoveries being appropriately calibrated to the direct assumptions.

Reinsurance contracts do not relieve the Company from its obligations to policyholders. Failure of reinsurers to honour their obligations could result in losses to the Company. The Company evaluates the financial condition of its reinsurers to minimize its exposure to significant losses from reinsurer insolvencies.

Certain of the reinsurance contracts are on a funds withheld basis where the Company retains the assets supporting the reinsured insurance contract liabilities, thus minimizing the exposure to significant losses from reinsurer insolvency on those contracts.

14. Segregated Funds and Other Structured Entities

The Company offers segregated fund products in Canada, the U.S. and Europe that are referred to as segregated funds, separate accounts and unit-linked funds in the respective region. These funds are contracts issued by insurers to segregated fund policyholders where the benefit is directly linked to the performance of the investments, the risks or rewards of the fair value movements and net investment income is realized by the segregated fund policyholders. The segregated fund policyholders are required to select the segregated funds that hold a range of underlying investments. While the Company has legal title to the investments, there is a contractual obligation to pass along the investment results to the segregated fund policyholder and the Company segregates these investments from those of the Company.

In Canada and the U.S., the segregated fund and separate account assets are legally separated from the general assets of the Company under the terms of the policyholder agreement and cannot be used to settle obligations of the Company. In Europe, the assets of the funds are functionally and constructively segregated from those of the Company. As a result of the legal and constructive arrangements of these funds, the assets and liabilities of these funds are presented as line items within the Consolidated Balance Sheets titled investments on account of segregated fund policyholders and with an equal liability titled investment and insurance contracts on account of segregated fund policyholders.

In circumstances where the segregated funds are invested in structured entities and are deemed to control the entity, the Company has presented the non-controlling ownership interest within the segregated funds for the risk of policyholders as equal and offsetting amounts in the assets and liabilities. The amounts presented within are $1,602 at December 31, 2017 ($1,547 at December 31, 2016).

Within the Consolidated Statements of Earnings, all segregated fund policyholders' income, including fair value changes and net investment income, is credited to the segregated fund policyholders and reflected in the assets and liabilities on account of segregated fund policyholders within the Consolidated Balance Sheets. As these amounts do not directly impact the revenues and expenses of the Company, these amounts are not included separately in the Consolidated Statements of Earnings.

Segregated Funds Guarantee Exposure

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. While these products are similar to mutual funds, there is a key difference from mutual funds as the segregated funds have certain guarantee features that protect the segregated fund policyholder from market declines in the underlying investments. These guarantees are the Company's primary exposure on these funds. The Company accounts for these guarantees within insurance and investment contract liabilities within the consolidated financial statements. In addition to the Company's exposure on the guarantees, the fees earned by the Company on these products are impacted by the market value of these funds.

In Canada, the Company offers retail 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.

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.

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 guaranteed minimum withdrawal benefits (GMWB) product in Canada, the U.S., and Germany, and previously offered GMWB product in Ireland. 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 ($3,917 at December 31, 2016).

For further details on the Company's risk and guarantee exposure and the management of these risks, refer to the Risk Management and Control Practice section of the Company's December 31, 2017 Management's Discussion and Analysis.

The following presents further details of the investments, determined in accordance with the relevant statutory reporting requirements of each region of the Company's operations, on account of segregated fund policyholders:

(a) Investments on account of segregated fund policyholders

	2017	2016
Cash and cash equivalents	$ 13,300	$ 12,487
Bonds	42,270	41,619
Mortgage loans	2,610	2,622
Stocks and units in unit trusts	93,465	81,033
Mutual funds	54,658	51,726
Investment properties	11,520	11,019
	217,823	200,506
Accrued income	373	359
Other liabilities	(2,441)	(2,009)
Non-controlling mutual funds interest	1,602	1,547
Total	$ 217,357	$ 200,403

(b) Investment and insurance contracts on account of segregated fund policyholders

	2017	2016
Balance, beginning of year	$ 200,403	$ 198,194
Additions (deductions):		
Policyholder deposits	24,885	21,358
Net investment income	2,704	2,379
Net realized capital gains on investments	5,298	4,275
Net unrealized capital gains on investments	5,361	6,311
Unrealized gains (losses) due to changes in foreign exchange rates	2,523	(10,584)
Policyholder withdrawals	(23,834)	(21,895)
Business and other acquisitions	–	193
Change in Segregated Fund investment in General Fund	(42)	8
Change in General Fund investment in Segregated Fund	(17)	(13)
Net transfer from General Fund	21	20
Non-controlling mutual funds interest	55	157
Total	16,954	2,209
Balance, end of year	$ 217,357	$ 200,403

(c) Investment income on account of segregated fund policyholders

	2017	2016
Net investment income	$ 2,704	$ 2,379
Net realized capital gains on investments	5,298	4,275
Net unrealized capital gains on investments	5,361	6,311
Unrealized gains (losses) due to changes in foreign exchange rates	2,523	(10,584)
Total	15,886	2,381
Change in investment and insurance contracts liability on account of segregated fund policyholders	15,886	2,381
Net	$ –	$ –

(d) Investments on account of segregated fund policyholders by fair value hierarchy level (note 9)

	2017			
	Level 1	Level 2	Level 3	Total
Investments on account of segregated fund policyholders (1)	$ 136,469	$ 70,034	$ 12,572	$ 219,075

(1) Excludes other liabilities, net of other assets, of $1,718.

	2016			
	Level 1	Level 2	Level 3	Total
Investments on account of segregated fund policyholders (1)	$ 125,829	$ 63,804	$ 12,045	$ 201,678

(1) Excludes other liabilities, net of other assets, of $1,275.

14. Segregated Funds and Other Structured Entities (cont'd)

During 2017, certain foreign stock holdings valued at $629 have been transferred from Level 1 to Level 2 ($18 were transferred from Level 2 to Level 1 at December 31, 2016) primarily based on the Company utilizing inputs in addition to quoted prices in active markets for certain foreign stock holdings at year end. Level 2 assets include those assets where fair value is not available from normal market pricing sources, where inputs are utilized in addition to quoted prices in active markets and where the Company does not have visibility through to the underlying assets.

As at December 31, 2017, $8,521 ($6,726 at December 31, 2016) of the segregated funds were invested in funds managed by related parties Investors Group and Mackenzie Investments, members of the Power Financial group of companies (note 26).

The following presents additional information about the Company's investments on account of segregated fund policyholders for which the Company has utilized Level 3 inputs to determine fair value:

	2017	2016
Balance, beginning of year	**$ 12,045**	$ 11,765
Total gains (losses) included in segregated fund investment income	**422**	(109)
Purchases	**926**	584
Sales	**(943)**	(370)
Transfers into Level 3	**137**	175
Transfers out of Level 3	**(15)**	–
Balance, end of year	**$ 12,572**	$ 12,045

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

In addition to the segregated funds, the Company has interests in a number of structured unconsolidated entities including mutual funds, open-ended investment companies, and unit trusts. These entities are created as investment strategies for its unit-holders based on the directive of each individual fund.

Some of these funds are managed by related parties of the Company and the Company receives management fees related to these services. Management fees can be variable due to performance of factors – such as markets or industries – in which the fund invests. Fee income derived in connection with the management of investment funds generally increases or decreases in direct relationship with changes of assets under management which is affected by prevailing market conditions, and the inflow and outflow of client assets.

Factors that could cause assets under management and fees to decrease include declines in equity markets, changes in fixed income markets, changes in interest rates and defaults, redemptions and other withdrawals, political and other economic risks, changing investment trends and relative investment performance. The risk is that fees may vary but expenses and recovery of initial expenses are relatively fixed, and market conditions may cause a shift in asset mix potentially resulting in a change in revenue.

During 2017, fee and other income earned by the Company resulting from the Company's interests in these structured entities was $4,557 ($4,323 during 2016).

Included within other assets (note 12) at December 31, 2017 is $632 ($435 at December 31, 2016) of investments by the Company in bonds and stocks of Putnam sponsored funds and $91 ($81 at December 31, 2016) of investments in stocks of sponsored unit trusts in Europe.

15. Financing Charges

Financing charges consist of the following:

	2017	2016
Operating charges:		
Interest on operating lines and short-term debt instruments	**$ 7**	$ 6
Financial charges:		
Interest on long-term debentures and other debt instruments	**253**	258
Interest on capital trust securities (note 17)	**11**	11
Other	**29**	27
	293	296
Total	**$ 300**	$ 302

16. Debentures and Other Debt Instruments

	2017		2016	
	Carrying value	Fair value	Carrying value	Fair value
Short-term				
Commercial paper and other short-term debt instruments with interest rates from 1.455% to 1.726% (0.670% to 0.792% at December 31, 2016), unsecured	$ **126**	$ **126**	$ 133	$ 133
Revolving credit facility with interest equal to LIBOR plus 0.70% (U.S. $240; U.S. $220 at December 31, 2016), unsecured	**302**	**302**	295	295
Total short-term	**428**	**428**	428	428
Capital:				
Current				
Lifeco				
6.14% Debentures due March 21, 2018, unsecured	**200**	**202**	200	211
Long-term				
Lifeco				
6.74% Debentures due November 24, 2031, unsecured	**193**	**270**	193	261
6.67% Debentures due March 21, 2033, unsecured	**393**	**542**	392	523
5.998% Debentures due November 16, 2039, unsecured	**342**	**460**	342	441
4.65% Debentures due August 13, 2020, unsecured	**499**	**529**	499	549
2.50% Debentures due April 18, 2023, unsecured, (500 euro)	**752**	**830**	706	778
1.75% Debentures due December 7, 2026, unsecured, (500 euro)	**749**	**786**	704	718
	2,928	**3,417**	2,836	3,270
Canada Life				
6.40% subordinated debentures due December 11, 2028, unsecured	**100**	**128**	100	128
Irish Life				
5.25% 200 euro subordinated debentures callable on February 8, 2017, includes associated fixed to floating swap, unsecured, were redeemed during the year	**–**	**–**	285	277
Great-West Life & Annuity Insurance Capital, LP				
6.625% Deferrable debentures due November 15, 2034, unsecured (U.S. $175)	**218**	**269**	231	240
Great-West Life & Annuity Insurance Capital, LP II				
Subordinated debentures due May 16, 2046, bearing an interest rate of 2.538% plus the 3-month LIBOR rate, unsecured (U.S. $300), with an interest rate swap to pay fixed interest of 4.68%	**378**	**376**	402	345
Great-West Lifeco Finance (Delaware) LP				
Senior notes due June 3, 2047, unsecured (U.S. $700), bearing an interest rate of 4.15%	**865**	**720**	–	–
Subordinated debentures due June 21, 2067 bearing an interest rate of 5.691% until first call par date of June 21, 2017 and, thereafter, at a rate equal to the Canadian 90-day Bankers' Acceptance rate plus 1.49%, unsecured, were redeemed during the year	**–**	**–**	999	994
Great-West Lifeco Finance (Delaware) LP II				
Subordinated debentures due June 26, 2068 bearing an interest rate of 7.127% until first call par date of June 26, 2018 and, thereafter, at a rate equal to the Canadian 90-day Bankers' Acceptance rate plus 3.78%, unsecured	**500**	**510**	499	536
Total long-term	**5,189**	**5,622**	5,552	6,001
Total	$ **5,617**	$ **6,050**	$ 5,980	$ 6,429

On February 8, 2017, Irish Life Assurance, an indirect wholly owned subsidiary of the Company, redeemed its 5.25% $284 (200 euro) subordinated debenture notes at their principal amount together with accrued interest.

On May 26, 2017, Great-West Lifeco Finance (Delaware) LP issued $925 (U.S. $700) 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 redeemed all $1,000 principal amount of its 5.691% subordinated debentures at a redemption price equal to 100% of the principal amount of the debentures, plus accrued interest up to but excluding the redemption date. The debentures were hedged using a cross-currency swap designated as a cash flow hedge. Upon redemption of the debentures, the gains on the debentures realized and the losses realized on the hedging instrument were recorded in the Consolidated Statements of Earnings with no impact on net earnings. The deferred income taxes related to this cash flow hedge resulted in a reduction to Other Comprehensive Income of $97 that had not previously been recorded (note 25).

16. Debentures and Other Debt Instruments (cont'd)

During 2016, Great-West Life & Annuity Insurance Capital, LP II, a subsidiary, elected to not call its U.S. $300 7.153% junior subordinated debentures with a first par call date of May 16, 2016 and a final maturity date of May 16, 2046. Beginning May 16, 2016, the debentures pay a floating rate of interest set at 3-month LIBOR plus 2.538%. Great-West Financial also entered into an external 30-year interest rate swap transaction to 2046 whereby it will pay a fixed 4.68% rate of interest and will receive a floating 3-month LIBOR plus 2.538% rate of interest on the notional principal amount.

On December 7, 2016 the Company issued 500 euro of 10 year senior bonds with an annual coupon rate of 1.75%. The bonds are listed on the Irish Stock Exchange. The euro-denominated debt has been designated as a hedge against the Company's net investment in euro-denominated foreign operations with changes in foreign exchange on the debt instrument recorded in other comprehensive income.

17. Capital Trust Securities

	2017		2016	
	Carrying value	**Fair value**	Carrying value	Fair value
Canada Life Capital Trust (CLCT)				
7.529% due June 30, 2052, unsecured	$ **150**	$ **221**	$ 150	$ 212
Acquisition related fair value adjustment	**10**	**–**	11	–
Total	$ **160**	$ **221**	$ 161	$ 212

CLCT, a trust established by Canada Life, had issued $150 of Canada Life Capital Securities – Series B (CLiCS – Series B), the proceeds of which were used by CLCT to purchase Canada Life senior debentures in the amount of $150.

Distributions and interest on the capital trust securities are classified as financing charges in the Consolidated Statements of Earnings (note 15). The fair value for capital trust securities is determined by the bid-ask price. Refer to note 8 for financial instrument risk management disclosures.

Subject to regulatory approval, CLCT may redeem the CLiCS – Series B, in whole or in part, at any time.

18. Other Liabilities

	2017	2016
Pension and other post-employment benefits (note 24)	$ **1,416**	$ 1,436
Bank overdraft	**435**	447
Deferred income reserves	**303**	309
Other	**1,598**	1,644
Total	$ **3,752**	$ 3,836

Total other liabilities of $2,033 ($2,091 at December 31, 2016) are expected to be realized within 12 months from the reporting date. This amount excludes deferred income reserves, the changes in which are noted below.

Deferred income reserves	2017	2016
Balance, beginning of year	$ **309**	$ 437
Additions	**45**	29
Amortization	**(35)**	(39)
Changes in foreign exchange	**8**	(76)
Disposals	**(24)**	(42)
Balance, end of year	$ **303**	$ 309

19. Non-Controlling Interests

The Company had a controlling equity interest in Great-West Life, London Life, Canada Life, Great-West Financial, and Putnam at December 31, 2017 and December 31, 2016.

Non-controlling interests attributable to participating account surplus is the proportion of the equity attributable to the participating account of the Company's subsidiaries.

Non-controlling interests in subsidiaries includes Nippon Life's interest in PanAgora, a subsidiary of Putnam, and non-controlling interests for the issued and outstanding shares of Putnam and PanAgora held by employees of the respective companies. Subsequent to year-end, the Company acquired Nippon Life's interest in PanAgora, this transaction had no impact on net earnings.

(a) The non-controlling interests of Great-West Life, London Life, Canada Life, Great-West Financial and Putnam and their subsidiaries recorded in the Consolidated Statements of Earnings and other comprehensive income are as follows:

	2017	2016
Net earnings attributable to participating account before policyholder dividends		
Great-West Life	$ 180	$ 167
London Life	847	843
Canada Life	299	453
Great-West Financial	3	4
	1,329	1,467
Policyholder dividends		
Great-West Life	(159)	(156)
London Life	(814)	(803)
Canada Life	(312)	(314)
Great-West Financial	(4)	(4)
	(1,289)	(1,277)
Net earnings – participating account	40	190
Non-controlling interests in subsidiaries	(10)	2
Total	$ 30	$ 192

The non-controlling interests of Great-West Life, London Life, Canada Life, Great-West Financial and Putnam and their subsidiaries recorded in other comprehensive income (loss) for the year ended December 31, 2017 was $(63) ($(43) for the year ended December 31, 2016).

(b) The carrying value of non-controlling interests consists of the following:

	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
Total	$ 2,771	$ 2,782
Non-controlling interests in subsidiaries	$ 164	$ 224

20. Share Capital

Authorized

Unlimited First Preferred Shares, Class A Preferred Shares and Second Preferred Shares

Unlimited Common Shares

Issued and outstanding and fully paid

	2017		2016	
	Number	Carrying value	Number	Carrying value
First Preferred Shares				
Series F, 5.90% Non-Cumulative	**7,740,032**	**$ 194**	7,740,032	$ 194
Series G, 5.20% Non-Cumulative	**12,000,000**	**300**	12,000,000	300
Series H, 4.85% Non-Cumulative	**12,000,000**	**300**	12,000,000	300
Series I, 4.50% Non-Cumulative	**12,000,000**	**300**	12,000,000	300
Series L, 5.65% Non-Cumulative	**6,800,000**	**170**	6,800,000	170
Series M, 5.80% Non-Cumulative	**6,000,000**	**150**	6,000,000	150
Series N, Non-Cumulative 5-Year Rate Reset	**8,524,422**	**213**	8,524,422	213
Series O, Non-Cumulative Floating Rate	**1,475,578**	**37**	1,475,578	37
Series P, 5.40% Non-Cumulative	**10,000,000**	**250**	10,000,000	250
Series Q, 5.15% Non-Cumulative	**8,000,000**	**200**	8,000,000	200
Series R, 4.80% Non-Cumulative	**8,000,000**	**200**	8,000,000	200
Series S, 5.25% Non-Cumulative	**8,000,000**	**200**	8,000,000	200
Series T, 5.15% Non-Cumulative	**8,000,000**	**200**	–	–
Total	**108,540,032**	**$ 2,714**	100,540,032	$ 2,514
Common shares				
Balance, beginning of year	**986,398,335**	**$ 7,130**	993,350,331	$ 7,156
Purchased and cancelled under Normal Course Issuer Bid	**(1,800,000)**	**(63)**	(7,967,881)	(267)
Excess of redemption proceeds over stated capital per Normal Course Issuer Bid	**–**	**50**	–	210
Exercised and issued under stock option plan	**4,124,324**	**143**	1,015,885	31
Balance, end of year	**988,722,659**	**$ 7,260**	986,398,335	$ 7,130

Preferred Shares

On May 18, 2017 the Company issued 8,000,000 Series T, 5.15% Non-Cumulative First Preferred Shares at $25.00 per share for gross proceeds of $200. 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. Transaction costs incurred in connection with the preferred share issue of $5 ($3 after-tax) were charged to accumulated surplus.

The Series F, 5.90% Non-Cumulative First Preferred Shares are currently redeemable at the option of the Company for $25.00 per share, together with all declared and unpaid dividends up to but excluding the date of redemption.

The Series G, 5.20% Non-Cumulative First Preferred Shares are currently redeemable at the option of the Company for $25.00 per share, together with all declared and unpaid dividends up to but excluding the date of redemption.

The Series H, 4.85% Non-Cumulative First Preferred Shares are currently redeemable at the option of the Company for $25.00 per share, together with all declared and unpaid dividends up to but excluding the date of redemption.

The Series I, 4.50% Non-Cumulative First Preferred Shares are currently redeemable at the option of the Company for $25.00 per share, together with all declared and unpaid dividends up to but excluding the date of redemption.

The Series L, 5.65% Non-Cumulative First Preferred Shares are currently redeemable at the option of the Company for $25.00 per share plus a premium if the shares are redeemed before December 31, 2018, together with all declared and unpaid dividends up to but excluding the date of redemption.

The Series M, 5.80% Non-Cumulative First Preferred Shares are currently redeemable at the option of the Company for $25.00 per share plus a premium if redeemed prior to March 31, 2019, together with all declared and unpaid dividends up to but excluding the date of redemption.

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.

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 Series P, 5.40% Non-Cumulative First Preferred Shares are currently redeemable at the option of the Company for $25.00 per share plus a premium if redeemed prior to March 31, 2021, together with all declared and unpaid dividends up to but excluding the date of redemption.

The Series Q, 5.15% Non-Cumulative First Preferred Shares are currently redeemable at the option of the Company for $25.00 per share plus a premium if redeemed prior to September 30, 2021, together with all declared and unpaid dividends up to but excluding the date of redemption.

The Series R, 4.80% Non-Cumulative First Preferred Shares are currently redeemable at the option of the Company for $25.00 per share plus a premium if redeemed prior to December 31, 2021, together with all declared and unpaid dividends up to but excluding the date of redemption.

The Series S, 5.25% Non-Cumulative First Preferred Shares are redeemable at the option of the Company on or after June 30, 2019 for $25.00 per share plus a premium if redeemed prior to June 30, 2023, together with all declared and unpaid dividends up to but excluding the date of redemption.

Common Shares

Normal Course Issuer Bid

On January 5, 2017, the Company announced a normal course issuer bid commencing January 9, 2017 and terminating January 8, 2018 to purchase for cancellation up to but not more than 20,000,000 of its common shares at market prices.

On June 17, 2016, the Company announced its intention to purchase for cancellation, up to 5,809,000 of its common shares pursuant to private agreements between the Company and several arm's length third-party sellers. These purchases were to be made pursuant to issuer bid exemption orders issued by the Ontario Securities Commission. Any purchases of common shares made by way of private agreements under the orders were to have been at a discount to the prevailing market price of the common shares on the Toronto Stock Exchange at the time of purchase and all purchases must have occurred on or before January 7, 2017. As of December 31, 2017 the Company had not entered into any private agreement for the repurchase of its common shares in 2017.

During 2017, the Company repurchased and subsequently cancelled 1,800,000 common shares pursuant to its normal course issuer bid at a cost of $63 (7,967,881 during 2016 under the previous normal course issuer bid at a cost of $267, which includes shares repurchased under a private agreement). The Company's share capital was reduced by the average carrying value of the shares repurchased for cancellation. The excess paid over the average carrying value of stated capital was $50 and was recognized as a reduction to equity ($210 during 2016 under the previous normal course issuer bid).

Subsequent event

On January 10, 2018, 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.

21. Earnings Per Common Share

The following provides the reconciliation between basic and diluted earnings per common share:

	2017	2016
Earnings		
Net earnings	**$ 2,278**	$ 2,764
Preferred share dividends	**(129)**	(123)
Net earnings – common shareholders	**$ 2,149**	$ 2,641
Number of common shares		
Average number of common shares outstanding	**989,185,333**	989,986,009
Add: Potential exercise of outstanding stock options	**1,513,422**	1,681,577
Average number of common shares outstanding – diluted basis	**990,698,755**	991,667,586
Basic earnings per common share	**$ 2.173**	$ 2.668
Diluted earnings per common share	**$ 2.170**	$ 2.663
Dividends per common share	**$ 1.468**	$ 1.384

22. Capital Management

(a) Policies and Objectives

Managing capital is the continual process of establishing and maintaining the quantity and quality of capital appropriate for the Company and ensuring capital is deployed in a manner consistent with the expectations of the Company's stakeholders. For these purposes, the Board considers the key stakeholders to be the Company's shareholders, policyholders and holders of subordinated liabilities in addition to the relevant regulators in the various jurisdictions where the Company and its subsidiaries operate.

The Company manages its capital on both a consolidated basis as well as at the individual operating subsidiary level. The primary objectives of the Company's capital management strategy are:

- 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;
- to maintain strong credit and financial strength ratings of the Company ensuring stable access to capital markets; and
- to provide an efficient capital structure to maximize shareholders' value in the context of the Company's operational risks and strategic 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.

The capital planning process is the responsibility of the Company's Chief Financial Officer. The capital plan is reviewed by the Executive Committee of the Board of Directors and approved by the Company's Board of Directors on an annual basis. The Board of Directors reviews and approves all capital transactions undertaken by management.

The target level of capitalization for the Company and its subsidiaries is assessed by considering various factors such as the probability of falling below the minimum regulatory capital requirements in the relevant operating jurisdiction, the views expressed by various credit rating agencies that provide financial strength and other ratings to the Company, and the desire to hold sufficient capital to be able to honour all policyholder and other obligations of the Company with a high degree of confidence.

(b) Regulatory Capital

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 Minimum Continuing Capital and Surplus Requirements (MCCSR). For this purpose, various additions or deductions from capital are mandated by the guidelines issued by OSFI. The following provides a summary of the MCCSR information and ratios for Great-West Life:

	2017	2016
Adjusted Net Tier 1 Capital	**$ 14,115**	$ 13,071
Net Tier 2 Capital	**2,858**	2,798
Total Capital Available	**$ 16,973**	$ 15,869
Total Capital Required	**$ 7,042**	$ 6,618
Tier 1 Ratio	**200%**	198%
Total Ratio	**241%**	240%

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 business acquisition.

The Company has been preparing for the implementation of the new regulatory capital framework for the Canadian insurance industry. OSFI will replace the current MCCSR guideline with the Life Insurance Capital Adequacy Test (LICAT) guideline, effective January 1, 2018. The first reporting period will be the first quarter of 2018.

At December 31, 2017, the Risk-Based Capital ratio of Great-West Life & Annuity Insurance Company, Lifeco's regulated U.S. operating company was 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 Risk-Based Capital ratio annually to U.S. insurance regulators.

For entities based in Europe, the local solvency capital regime is the Solvency II basis. At December 31, 2017 and December 31, 2016, all European regulated entities met the capital and solvency requirements as prescribed under Solvency II.

Other foreign operations and foreign subsidiaries of the Company are required to comply with local capital or solvency requirements in their respective jurisdictions. At December 31, 2017 and December 31, 2016, the Company maintained capital levels above the minimum local regulatory requirements in each of its other foreign operations.

23. Share-Based Payments

(a) The Company has a stock option plan (the Plan) pursuant to which options to subscribe for common shares of Lifeco may be granted to certain officers and employees of Lifeco and its affiliates. The Company's Human Resources Committee (the Committee) administers the Plan and, subject to the specific provisions of the Plan, fixes the terms and conditions upon which options are granted. The exercise price of each option granted under the Plan is fixed by the Committee, but cannot under any circumstances be less than the weighted average trading price per Lifeco common share on the Toronto Stock Exchange for the five trading days preceding the date of the grant. Options generally vest over a period of five years, and have a maximum exercise period of ten years. Termination of employment may, in certain circumstances, result in forfeiture of the options, unless otherwise determined by the Committee. The maximum number of Lifeco common shares that may be issued under the Plan is currently 65,000,000.

During 2017, 1,817,900 common share options were granted (3,146,800 during 2016). The weighted average fair value of common share options granted during 2017 was $2.78 per option ($3.87 in 2016). The fair value of each common share option was estimated using the Black-Scholes option-pricing model with the following weighted average assumptions used for those options granted in 2017: dividend yield 3.98% (3.99% in 2016), expected volatility 14.06% (19.31% in 2016), risk-free interest rate 1.41% (0.94% in 2016), and expected life of eight years (seven in 2016).

The following summarizes the changes in options outstanding and the weighted average exercise price:

	2017		2016	
	Options	**Weighted average exercise price**	Options	Weighted average exercise price
Outstanding, beginning of year	**16,527,750**	**$ 31.42**	14,623,832	$ 30.50
Granted	**1,817,900**	**36.87**	3,146,800	34.68
Exercised	**(4,124,324)**	**30.61**	(1,015,885)	27.41
Forfeited/expired	**(821,262)**	**36.51**	(226,997)	35.12
Outstanding, end of year	**13,400,064**	**$ 32.10**	16,527,750	$ 31.42
Options exercisable at end of year	**7,737,717**	**$ 29.98**	10,259,325	$ 30.13

The weighted average share price at the date of exercise of stock options for the year ended December 31, 2017 was $37.13 ($35.05 in 2016).

Compensation expense due to the Plan transactions accounted for as equity-settled share-based payments of $8 after-tax in 2017 ($11 after-tax in 2016) has been recognized in the Consolidated Statements of Earnings.

The following summarizes information on the ranges of exercise prices including weighted average remaining contractual life at December 31, 2017:

	Outstanding			Exercisable		
Exercise price ranges	**Options**	**Weighted average remaining contractual life**	**Weighted average exercise price**	**Options**	**Weighted average exercise price**	**Expiry**
$31.27 – $36.87	1,024,240	0.36	31.40	1,024,240	31.40	2018
$23.16 – $35.62	270,900	1.51	28.98	261,460	28.78	2019
$23.16 – $35.62	565,186	2.37	28.68	556,466	28.60	2020
$23.16 – $35.62	1,014,740	3.24	28.63	1,014,740	28.63	2021
$23.16 – $36.87	1,662,115	4.23	26.19	1,662,115	26.19	2022
$27.13 – $28.36	1,030,979	5.17	27.15	826,501	27.15	2023
$30.33 – $33.02	1,176,663	6.20	31.10	736,351	31.10	2024
$35.62 – $36.63	2,262,739	7.17	35.66	1,009,328	35.66	2025
$34.68 – $35.52	2,706,502	8.16	34.68	637,116	34.68	2026
$36.87	1,686,000	9.16	36.87	9,400	36.87	2027

23. Share-Based Payments (cont'd)

(b) In order to promote a greater alignment of interests between Directors and the shareholders of the Company, the Company and certain of its affiliates have established mandatory Deferred Share Unit Plans and/or voluntary Deferred Share Unit Plans (the "Mandatory DSU Plans" and the "Voluntary DSU Plans" respectively) in which the Directors of the Company participate. Under the Mandatory DSU Plans, each Director who is a resident of Canada or the United States is required to receive 50% of his or her annual Board retainer in the form of Deferred Share Units (DSUs). Under the Voluntary DSU Plans, each Director may elect to receive the balance of his or her annual Board retainer (including Board Committee fees) and his or her attendance fees entirely in the form of DSUs, entirely in cash, or equally in cash and DSUs. In both cases the number of DSUs granted is determined by dividing the amount of remuneration payable to the Director by the weighted average trading price per Common Share on the Toronto Stock Exchange for the last five trading days of the preceding fiscal quarter (such weighted average trading price being the "value of a Deferred Share Unit"). Directors receive additional DSUs in respect of dividends payable on the Common Shares based on the value of a Deferred Share Unit at that time. DSUs are generally redeemable at the time that an individual ceases to be a Director by a lump sum cash payment, based on the value of the DSUs on the date of redemption. In 2017, $3 in directors fees were used to acquire DSUs ($3 in 2016).

(c) Certain employees of the Company are entitled to receive Performance Share Units (PSUs). Under these PSU plans, these employees are granted PSUs equivalent to the Company's common shares vesting over a three-year period. Employees receive additional PSUs in respect of dividends payable on the common shares based on the value of a PSU at that time. At the maturity date, employees receive cash representing the value of the PSU at this date. The Company uses the fair-value based method to account for the PSUs granted to employees under the plan. For the year ended December 31, 2017, the Company recognized compensation expense of $23 ($14 in 2016) for the PSU plans recorded in operating and administrative expenses in the Consolidated Statements of Earnings. At December 31, 2017, the carrying value of the PSU liability is $41 ($27 in 2016) recorded within other liabilities.

(d) The Company's Employee Share Ownership Plan (ESOP) is a voluntary plan where eligible employees can contribute up to 5% of their previous year's eligible earnings to purchase common shares of Great-West Lifeco Inc. The Company matches 50% of the total employee contributions. The contributions from the Company vest immediately and are expensed. For the year ended December 31, 2017, the Company recognized compensation expense of $12 ($11 in 2016) for the ESOP recorded in operating and administrative expenses in the Consolidated Statements of Earnings.

(e) Putnam sponsors the Putnam Investments, LLC Equity Incentive Plan. Under the terms of the Equity Incentive Plan, Putnam is authorized to grant or sell Class B Shares of Putnam (the Putnam Class B Shares), subject to certain restrictions, and to grant options to purchase Putnam Class B Shares (collectively, the Awards) to certain senior management and key employees of Putnam at fair value at the time of the award. Fair value is determined under the valuation methodology outlined in the Equity Incentive Plan. Awards vest over a period of up to five years and are specified in the individual's award letter. Holders of Putnam Class B Shares are not entitled to vote other than in respect of certain matters in regards to the Equity Incentive Plan and have no rights to convert their shares into any other securities. The number of Putnam Class B Shares that may be subject to Awards under the Equity Incentive Plan is limited to 10,555,555.

During 2017, Putnam granted 1,138,580 (990,000 in 2016) restricted Class B common shares and no options in 2017 or 2016 to certain members of senior management and key employees.

Compensation expense recorded for the year ended December 31, 2017 related to restricted Class B common shares and Class B stock options earned was $27 ($37 in 2016) and is recorded in operating and administrative expenses in the Consolidated Statements of Earnings.

(f) Certain employees of PanAgora, a subsidiary of Putnam, are eligible to participate in the PanAgora Management Equity Plan under which Class C Shares of PanAgora and options and stock appreciation rights on Class C Shares of PanAgora may be issued. Holders of PanAgora Class C Shares are not entitled to vote and have no rights to convert their shares into any other securities. The number of PanAgora Class C Shares may not exceed 20% of the equity of PanAgora on a fully exercised and converted basis.

Compensation expense recorded for the year ended December 31, 2017 related to restricted Class C Shares and stock appreciation rights was $13 in 2017 ($17 in 2016) and is included as a component of operating and administrative expenses in the Consolidated Statements of Earnings.

24. Pension Plans and Other Post-Employment Benefits

Characteristics, Funding and Risk

The Company's subsidiaries maintain contributory and non-contributory defined benefit pension plans for certain employees and advisors. The Company's subsidiaries also maintain 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 by making contributions in respect of current service. Certain pension payments are indexed either on 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. 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. Subsidiary company contributions to these plans are a set percentage of employees' annual income and may be subject to certain vesting requirements.

The Company's subsidiaries also provide post-employment health, dental and life insurance benefits to eligible employees, advisors and their dependents. Retirees share in the cost of benefits through deductibles, co-insurance and caps on benefits. These plans are closed to new hires and were previously amended to limit which employees could become eligible to receive benefits. The amount of some of the post-employment benefits other than pensions depends on future cost escalation. These post-employment benefits are not pre-funded and the amount of the obligation for these benefits is included in other liabilities and is supported by general assets.

The Company's subsidiaries have pension and benefit committees or a trusteed arrangement that provides oversight for the benefit plans of the Company's subsidiaries. The benefit plans are monitored on an ongoing basis to assess the benefit, funding and investment policies, financial status, and funding requirements of the Company's subsidiaries. Significant changes to the subsidiary company's benefit plans require approval from that Company's Board of Directors.

The Company's subsidiaries' funding policy for the funded pension plans is to make contributions equal to or greater than those required by the applicable regulations and plan provisions that govern the funding of the plans. Where funded plans have a net defined benefit pension plan asset, the Company determines if an economic benefit exists in the form of potential reductions in future contributions by the Company, from the payment of expenses from the plan and in the form of surplus refunds, where permitted by applicable regulation and plan provisions.

By their design, the defined benefit plans expose the Company to the typical risks faced by defined benefit plans such as investment performance, changes to the discount rates used to value the obligations, longevity of plan members, and future inflation. Pension and benefit risk is managed by regular monitoring of the plans, applicable regulations and other factors that could impact the expenses and cash flows of the Company.

24. Pension Plans and Other Post-Employment Benefits (cont'd)

The following reflects the financial position of the Company's subsidiaries contributory and non-contributory defined benefit plans:

(a) Plan Assets, Benefit Obligation and Funded Status

	Defined benefit pension plans		Other post-employment benefits	
	2017	2016	**2017**	2016
Change in fair value of plan assets				
Fair value of plan assets, beginning of year	**$ 6,207**	$ 6,093	**$ –**	$ –
Interest income	**205**	222	**–**	–
Actual return over interest income	**298**	231	**–**	–
Employer contributions	**178**	125	**19**	19
Employee contributions	**17**	20	**–**	–
Benefits paid	**(314)**	(232)	**(19)**	(19)
Surplus paid out to employer	**–**	(8)	**–**	–
Settlements	**–**	(19)	**–**	–
Administrative expenses	**(8)**	(13)	**–**	–
Net transfer out	**(7)**	(3)	**–**	–
Foreign exchange rate changes	**94**	(209)	**–**	–
Fair value of plan assets, end of year	**$ 6,670**	$ 6,207	**$ –**	$ –
Change in defined benefit obligation				
Defined benefit obligation, beginning of year	**$ 6,942**	$ 6,627	**$ 396**	$ 394
Current service cost	**139**	131	**2**	2
Interest cost	**227**	241	**15**	16
Employee contributions	**17**	20	**–**	–
Benefits paid	**(314)**	(232)	**(19)**	(19)
Plan amendments	**(1)**	(1)	**–**	2
Curtailments and termination benefits [(1)]	**(37)**	(14)	**1**	(7)
Settlements	**–**	(19)	**–**	–
Actuarial loss (gain) on financial assumption changes	**334**	495	**15**	11
Actuarial gain (loss) on demographic assumption changes	**6**	(13)	**(9)**	(3)
Actuarial loss (gain) arising from member experience	**10**	(34)	**1**	1
Net transfer out	**(7)**	(3)	**–**	–
Foreign exchange rate changes	**85**	(256)	**(2)**	(1)
Defined benefit obligation, end of year	**$ 7,401**	$ 6,942	**$ 400**	$ 396
Asset (liability) recognized on the Consolidated Balance Sheets				
Funded status of plans – surplus (deficit)	**$ (731)**	$ (735)	**$ (400)**	$ (396)
Unrecognized amount due to asset ceiling	**(92)**	(91)	**–**	–
Asset (liability) recognized on the Consolidated Balance Sheets	**$ (823)**	$ (826)	**$ (400)**	$ (396)
Recorded in:				
Other assets (note 12)	**$ 193**	$ 214	**$ –**	$ –
Other liabilities (note 18)	**(1,016)**	(1,040)	**(400)**	(396)
Asset (liability) recognized on the Consolidated Balance Sheets	**$ (823)**	$ (826)	**$ (400)**	$ (396)
Analysis of defined benefit obligation				
Wholly or partly funded plans	**$ 7,092**	$ 6,636	**$ –**	$ –
Wholly unfunded plans	**$ 309**	$ 306	**$ 400**	$ 396

(1) The impact of curtailments and termination benefits resulting from the Canadian transformation were recognized as part of restructuring expenses and are not included in Pension and Other Post-Employment Benefits Expense (note 29).

Under International Financial Reporting Interpretations Committee (IFRIC) 14, *The Limit on a Defined Benefit Asset, Minimum Funding Requirements and their Interaction*, the Company must assess whether each pension plan's asset has economic benefit to the Company through future contribution reductions, from the payment of expenses from the plan, or surplus refunds; in the event the Company is not entitled to a benefit, a limit or 'asset ceiling' is required on the balance. The following provides a breakdown of the changes in the asset ceiling:

	Defined benefit pension plans	
	2017	2016
Change in asset ceiling		
Asset ceiling, beginning of year	**$ 91**	$ 83
Interest on beginning of period asset ceiling	**4**	3
Change in asset ceiling	**(3)**	5
Asset ceiling, end of year	**$ 92**	$ 91

(b) Pension and Other Post-Employment Benefits Expense

The total pension and other post-employment benefit expense included in operating expenses and other comprehensive income are as follows:

	All pension plans		Other post-employment benefits	
	2017	2016	**2017**	2016
Defined benefit current service cost	**$ 156**	$ 151	**$ 2**	$ 2
Defined contribution current service cost	**72**	65	**–**	–
Employee contributions	**(17)**	(20)	**–**	–
Employer current service cost	**211**	196	**2**	2
Administrative expense	**8**	13	**–**	–
Plan amendments	**(1)**	(1)	**–**	2
Curtailments	**(22)**	(14)	**–**	(7)
Net interest cost	**26**	22	**15**	16
Expense – profit or loss	**222**	216	**17**	13
Actuarial (gain) loss recognized	**350**	448	**7**	9
Return on assets greater than assumed	**(298)**	(231)	**–**	–
Change in the asset ceiling	**(3)**	5	**–**	–
Actuarial loss – investment in associate (1)	**1**	–	**–**	–
Re-measurements – other comprehensive (income) loss	**50**	222	**7**	9
Total expense including re-measurements	**$ 272**	$ 438	**$ 24**	$ 22

(1) During 2017, the Company transferred actuarial losses of $13 from accumulated other comprehensive income to accumulated surplus. These losses were for accumulated pension plan re-measurements for an investment in an associate that was disposed of (note 5).

(c) Asset Allocation by Major Category Weighted by Plan Assets

	Defined benefit pension plans	
	2017	2016
Equity securities	**44%**	47%
Debt securities	**43%**	41%
Real estate	**8%**	7%
Cash and cash equivalents	**5%**	5%
Total	**100%**	100%

No plan assets are directly invested in the Company's or related parties' securities. Plan assets include investments in segregated funds and other funds managed by subsidiaries of the Company of $5,694 at December 31, 2017 and $5,241 at December 31, 2016, of which $5,616 ($5,176 at December 31, 2016) are included on the Consolidated Balance Sheets. Plan assets do not include any property occupied or other assets used by the Company.

24. Pension Plans and Other Post-Employment Benefits (cont'd)

(d) Details of Defined Benefit Obligation

(i) Portion of Defined Benefit Obligation Subject to Future Salary Increases

	Defined benefit pension plans		Other post-employment benefits	
	2017	2016	**2017**	2016
Benefit obligation without future salary increases	**$ 6,710**	$ 6,306	**$ 400**	$ 396
Effect of assumed future salary increases	**691**	636	**–**	–
Defined benefit obligation	**$ 7,401**	$ 6,942	**$ 400**	$ 396

The other post-employment benefits are not subject to future salary increases.

(ii) Portion of Defined Benefit Obligation Without Future Pension Increases

	Defined benefit pension plans		Other post-employment benefits	
	2017	2016	**2017**	2016
Benefit obligation without future pension increases	**$ 6,834**	$ 6,515	**$ 400**	$ 396
Effect of assumed future pension increases	**567**	427	**–**	–
Defined benefit obligation	**$ 7,401**	$ 6,942	**$ 400**	$ 396

The other post-employment benefits are not subject to future pension increases.

(iii) Maturity Profile of Plan Membership

	Defined benefit pension plans		Other post-employment benefits	
	2017	2016	**2017**	2016
Actives	**37%**	43%	**21%**	21%
Deferred vesteds	**26%**	20%	**n/a**	n/a
Retirees	**37%**	37%	**79%**	79%
Total	**100%**	100%	**100%**	100%
Weighted average duration of defined benefit obligation	**18.7 years**	19.1 years	**12.2 years**	13.0 years

(e) Cash Flow Information

	Pension plans	Other post-employment benefits	Total
Expected employer contributions for 2018:			
Funded (wholly or partly) defined benefit plans	$ 181	$ –	$ 181
Unfunded plans	15	20	35
Defined contribution plans	84	–	84
Total	**$ 280**	**$ 20**	**$ 300**

(f) Actuarial Assumptions and Sensitivities

(i) Actuarial Assumptions

	Defined benefit pension plans		Other post-employment benefits	
	2017	2016	**2017**	2016
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%	**–**	–
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.

(ii) Sample Life Expectancies Based on Mortality Assumptions

	Defined benefit pension plans		Other post-employment benefits	
	2017	2016	**2017**	2016
Sample life expectancies based on mortality assumption:				
Male				
Age 65 in fiscal year	**22.9**	22.8	**22.3**	22.3
Age 65 for those age 35 in the fiscal year	**25.1**	25.1	**23.9**	23.9
Female				
Age 65 in fiscal year	**24.8**	24.7	**24.7**	24.6
Age 65 for those age 35 in the fiscal year	**26.9**	26.7	**26.2**	26.1

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 practice. Emerging plan experience is reviewed and considered in establishing the best estimate for future mortality.

The calculation of the defined benefit obligation is sensitive to the mortality assumptions. The effect of a one-year increase in life expectancy would be an increase in the defined benefit obligation of $211 for the defined benefit pension plans and $16 for other post-employment benefits.

(iii) Impact of Changes to 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.

25. Accumulated Other Comprehensive Income

	2017							
	Unrealized foreign exchange gains on translation of foreign operations	**Unrealized foreign exchange gains (losses) on euro debt designated as hedge of the net investment in foreign operations**	**Unrealized gains (losses) on available-for-sale assets**	**Unrealized gains (losses) on cash flow hedges**	**Re-measurements on defined benefit pension and other post-employment benefit plans**	**Total**	**Non-controlling interest**	**Shareholders**
Balance, beginning of year	**$ 1,526**	**$ (22)**	**$ 160**	**$ (209)**	**$ (647)**	**$ 808**	**$ (62)**	**$ 746**
Other comprehensive income (loss)	**(495)**	**(90)**	**(65)**	**417**	**(57)**	**(290)**	**80**	**(210)**
Income tax	**–**	**12**	**14**	**(164)**	**(8)**	**(146)**	**(17)**	**(163)**
	(495)	**(78)**	**(51)**	**253**	**(65)**	**(436)**	**63**	**(373)**
Disposal of investment in associate (1)	**–**	**–**	**–**	**–**	**13**	**13**	**–**	**13**
	(495)	**(78)**	**(51)**	**253**	**(52)**	**(423)**	**63**	**(360)**
Balance, end of year	**$ 1,031**	**$ (100)**	**$ 109**	**$ 44**	**$ (699)**	**$ 385**	**$ 1**	**$ 386**

(1) During 2017, the Company transferred actuarial losses of $13 from accumulated other comprehensive income to accumulated surplus. These losses were for accumulated pension plan re-measurements for an investment in an associate that was disposed of (note 5).

	2016							
	Unrealized foreign exchange gains on translation of foreign operations	Unrealized foreign exchange gains (losses) on euro debt designated as hedge of the net investment in foreign operations	Unrealized gains (losses) on available-for-sale assets	Unrealized gains (losses) on cash flow hedges	Re-measurements on defined benefit pension and other post-employment benefit plans	Total	Non-controlling interest	Shareholders
Balance, beginning of year	$ 3,011	$ (58)	$ 123	$ (277)	$ (476)	$ 2,323	$ (105)	$ 2,218
Other comprehensive income (loss)	(1,485)	42	35	109	(231)	(1,530)	54	(1,476)
Income tax	–	(6)	2	(41)	60	15	(11)	4
	(1,485)	36	37	68	(171)	(1,515)	43	(1,472)
Balance, end of year	$ 1,526	$ (22)	$ 160	$ (209)	$ (647)	$ 808	$ (62)	$ 746

26. Related Party Transactions

Power Financial, which is incorporated and domiciled in Canada, is the Company's parent and has voting control of the Company. The Company is related to other members of the Power Financial group including IGM Financial Inc., a company in the financial services sector along with its subsidiaries Investors Group, Mackenzie Financial and Investment Planning Council and Pargesa, a holding company with substantial holdings in a diversified industrial group based in Europe.

(a) Principal subsidiaries

The consolidated financial statements of the Company include the operations of the following subsidiaries and their subsidiaries:

Company	**Incorporated in**	**Primary business operation**	**% Held**
The Great-West Life Assurance Company	Canada	Insurance and wealth management	100.00%
London Life Insurance Company	Canada	Insurance and wealth management	100.00%
The Canada Life Assurance Company	Canada	Insurance and wealth management	100.00%
Great-West Life & Annuity Insurance Company	United States	Insurance and wealth management	100.00%
Putnam Investments, LLC	United States	Financial services	100.00%(1)

(1) Lifeco holds 100% of the voting shares and 95.9% of the total outstanding shares.

(b) Transactions with related parties included in the consolidated financial statements

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 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 and its subsidiaries, a member of the Power Financial 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 (note 14).

The Company held debentures issued by IGM; the interest rates and maturity dates are as follows:

	2017	2016
3.44%, matures January 26, 2027	**$ 10**	$ –
6.65%, matures December 13, 2027	**16**	16
7.45%, matures May 9, 2031	**14**	13
7.00%, matures December 31, 2032	**13**	13
4.56%, matures January 25, 2047	**21**	–
Total	**$ 74**	$ 42

During 2017, the Company purchased debentures from IGM with a total market value at December 31, 2017 of $31.

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

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

The Company provides asset management, employee benefits 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.

There were no significant outstanding loans or guarantees and no loans or guarantees issued during 2017 or 2016. There were no provisions for uncollectible amounts from related parties during 2017 and 2016.

(c) Key management compensation

Key management personnel constitute those individuals that have the authority and responsibility for planning, directing and controlling the activities of Lifeco, directly or indirectly, including any Director. The individuals that comprise the key management personnel are the Board of Directors as well as certain key management and officers.

The following describes all compensation paid to, awarded to, or earned by each of the key management personnel for services rendered in all capacities to the Company and its subsidiaries:

	2017	2016
Salary	**$ 14**	$ 15
Share-based awards	**9**	7
Option-based awards	**2**	3
Annual non-equity incentive plan compensation	**21**	21
Pension value	**5**	8
Other	**2**	–
Total	**$ 53**	$ 54

27. Income Taxes

(a) Components of the income tax expense

(i) Income tax recognized in Consolidated Statements of Earnings

Current income tax

	2017	2016
Current year	$ 259	$ 321
Previously unrecognized tax loss, tax credit or temporary difference of prior year	–	(32)
Total current income tax	**$ 259**	**$ 289**

Deferred income tax

	2017	2016
Origination and reversal of temporary differences	$ (8)	$ 129
Effect of changes in tax rates or imposition of new taxes	142	(16)
Tax expense (benefit) arising from unrecognized tax losses and tax credits	29	(6)
Total deferred income tax	**$ 163**	**$ 107**
Total income tax expense	**$ 422**	**$ 396**

(ii) Income tax recognized in other comprehensive income (note 25)

	2017	2016
Current income tax recovery	$ (13)	$ (9)
Deferred income tax recovery	159	(6)
Total	**$ 146**	**$ (15)**

(iii) Income tax recognized in Consolidated Statements of Changes in Equity

	2017	2016
Current income tax expense	$ –	$ –
Deferred income tax recovery	(10)	(1)
Total	**$ (10)**	**$ (1)**

(b) The effective income tax rate reported in the Consolidated Statements of Earnings varies from the combined Canadian federal and provincial income tax rate of 26.75% for the following items:

	2017		2016	
Earnings before income taxes	$ 2,730		$ 3,352	
Combined basic Canadian federal and provincial tax rate	730	26.75%	897	26.75%
Increase (decrease) in the income tax rate resulting from:				
Non-taxable investment income	(205)	(7.51)	(198)	(5.90)
Lower effective income tax rates on income not subject to tax in Canada	(207)	(7.58)	(218)	(6.50)
U.S. tax reform impact of rate change on deferred income taxes	135	4.94	n/a	n/a
Impact of other rate changes on deferred income taxes	7	0.25	(16)	(0.48)
Other	(38)	(1.39)	(69)	(2.06)
Total income tax expense and effective income tax rate	**$ 422**	**15.46%**	$ 396	11.81%

On December 22, 2017, H.R. 1, the *Tax Reconciliation Act*, was substantively enacted. 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.

The net impact of the revaluation of deferred tax balances due to the lowering of the corporate federal income tax rate from 35% to 21% was $135 and the write-down of losses carried forward was $19 for a total income tax expense of $154.

In addition, the Company recorded expenses of $119 associated with U.S. tax reform primarily related to the impact on actuarial liabilities. The income tax recovery associated with these expenses was $38.

The impact of these U.S. tax reform items was a net decrease of $216 to net earnings and is summarized below:

Expenses	$ (119)
Income taxes	116
Net earnings before non-controlling interests	(235)
Attributable to non-controlling interests	(19)
Net earnings	**$ (216)**

The revaluation of deferred tax balances, which are based on management's best estimates and are included in the "U.S. tax reform impact of rate changes on deferred income taxes", increases the 2017 effective income tax rate by 4.94%. These 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 consolidated financial statements.

(c) Composition and changes in net deferred income tax assets are as follows:

2017	Insurance and investment contract liabilities	Portfolio investments	Losses carried forward	Intangible assets	Tax credits	Other	Total
Balance, beginning of year	**$ (1,429)**	**$ (654)**	**$ 1,775**	**$ (458)**	**$ 375**	**$ 463**	**$ 72**
Recognized in Statements of Earnings	**391**	**28**	**(596)**	**88**	**30**	**(104)**	**(163)**
Recognized in Statements of Comprehensive Income	**–**	**8**	**–**	**–**	**–**	**(167)**	**(159)**
Recognized in Statements of Changes in Equity	**–**	**–**	**–**	**–**	**–**	**10**	**10**
Acquired in business combinations	**–**	**–**	**2**	**(42)**	**–**	**1**	**(39)**
Foreign exchange rate changes and other	**62**	**16**	**(49)**	**11**	**(14)**	**(11)**	**15**
Balance, end of year	**$ (976)**	**$ (602)**	**$ 1,132**	**$ (401)**	**$ 391**	**$ 192**	**$ (264)**

2016 [(1)]	Insurance and investment contract liabilities	Portfolio investments	Losses carried forward	Intangible assets	Tax credits	Other	Total
Balance, beginning of year	$ (1,279)	$ (686)	$ 1,785	$ (320)	$ 352	$ 453	$ 305
Recognized in Statements of Earnings	(180)	47	133	(127)	27	(7)	(107)
Recognized in Statements of Comprehensive Income	–	(19)	–	–	–	25	6
Recognized in Statements of Changes in Equity	–	–	–	–	–	1	1
Acquired in business combinations	–	–	5	(9)	–	2	(2)
Foreign exchange rate changes and other	30	4	(148)	(2)	(4)	(11)	(131)
Balance, end of year	$ (1,429)	$ (654)	$ 1,775	$ (458)	$ 375	$ 463	$ 72

	2017	2016 [(1)]
Recorded on Consolidated Balance Sheets:		
Deferred tax assets	**$ 930**	$ 1,593
Deferred tax liabilities	**(1,194)**	(1,521)
Total	**$ (264)**	$ 72

(1) As a result of an accounting policy change (note 2), the Company retroactively restated the classification of current taxes to deferred taxes on the Consolidated Balance Sheets. This reclassification resulted in a decrease to deferred tax assets of $252 and a decrease to deferred tax liabilities of $124. These reclassifications had no impact on the total equity or net earnings of the Company.

A deferred income tax asset is recognized for deductible temporary differences and unused losses and carryforwards only to the extent that realization of the related income tax benefit through future taxable profits is probable.

Recognition is based on the fact that it is probable that the entity will have taxable profits and/or tax planning opportunities available to allow the deferred income tax asset to be utilized. Changes in circumstances in future periods may adversely impact the assessment of the recoverability. The uncertainty of the recoverability is taken into account in establishing the deferred income tax assets. The Company's annual financial planning process provides a significant basis for the measurement of deferred income tax assets.

27. Income Taxes (cont'd)

Management assesses the recoverability of the deferred income tax assets carrying values based on future years' taxable income projections and believes the carrying values of the deferred income tax assets as of December 31, 2017 are recoverable.

At December 31, 2017, the Company has recognized a deferred tax asset of $1,132 ($1,775 at December 31, 2016) on tax loss carryforwards totaling $7,670 ($7,285 in 2016). Of this amount, $7,572 expire between 2018 and 2037, while $98 have no expiry date. The Company will realize this benefit in future years through a reduction in current income taxes payable.

One of the Company's subsidiaries has had a history of recent losses. The subsidiary has a net deferred income tax asset balance of $691 (U.S. $549) as at December 31, 2017 comprised principally of net operating losses and future deductions related to goodwill which has been, in prior years, impaired for accounting purposes. Management has concluded that it is probable that the subsidiary and other historically profitable subsidiaries with which it files or intends to file a consolidated U.S. income tax return will generate sufficient taxable income against which the unused U.S. losses and deductions will be utilized.

The Company has not recognized a deferred tax asset of $41 ($24 in 2016) on tax loss carryforwards totaling $186 ($105 in 2016). Of this amount, $117 expire between 2018 and 2037 while $69 have no expiry date.

A deferred income tax liability has not been recognized in respect of the temporary differences associated with investments in subsidiaries, branches and associates as the Company is able to control the timing of the reversal of the temporary differences, and it is probable that the temporary differences will not reverse in the foreseeable future.

28. Operating and Administrative Expenses

	2017	2016
Salaries and other employee benefits	$ **3,157**	$ 3,122
General and administrative	**1,590**	1,594
Amortization of fixed assets	**86**	83
Total	$ **4,833**	$ 4,799

29. Restructuring

Canadian Business Transformation

In 2017, the Company recorded a restructuring provision for the Canadian operations transformation plan of $215 pre-tax ($172 pre-tax in the shareholder account and $43 pre-tax in the participating accounts) with the charge recorded in restructuring expenses in the Consolidated Statements of Earnings. This restructuring is in respect of activities aimed at achieving planned expense reductions and an organizational realignment to respond to changing customer needs and expectations in Canada. The expense reductions address costs across the Canadian operations and corporate functions primarily through a reduction in staff, exiting of certain lease agreements and information system impairments. The restructuring expense in the participating accounts is comprised of $29 in London Life, $7 in Great-West Life and $7 in Canada Life.

At December 31, 2017, the Company has a restructuring provision of $120 remaining in other liabilities. The change in the restructuring provision for the Canadian Business Transformation is set out below:

Balance, beginning of year	$ –
Restructuring expense recorded	**215**
Amounts used	**(95)**
Balance, end of year	**$ 120**

Putnam Restructuring

In 2016, Putnam recorded a restructuring expense of $33, which is recorded in restructuring expenses in the Consolidated Statements of Earnings. All amounts have been paid at December 31, 2017. This restructuring is in respect of activities aimed at achieving planned expense reductions and a realignment of its resources to best position itself for current and future opportunities.

The expense reductions addressed costs across the Putnam enterprise through a reduction in staff, elimination of certain non-core business programs and vendor consolidation. As part of this effort, Putnam reduced its staff by nearly eight percent, primarily operations and technology professionals, but also a small number of investment management professionals.

During 2017, the United States operating segment recorded restructuring expenses of $17 ($13 during 2016 in addition to the Putnam restructuring expenses above) and the Europe operating segment recorded restructuring expenses of $27 ($17 during 2016) respectively.

30. Derivative Financial Instruments

In the normal course of managing exposure to fluctuations in interest and foreign exchange rates, and to market risks, the Company is an end-user of various derivative financial instruments. It is the Company's policy to transact in derivatives only with the most creditworthy financial intermediaries. Note 8 illustrates the credit quality of the Company's exposure to counterparties. Credit risk equivalent amounts are presented net of collateral received, including initial margin on exchange-traded derivatives, of $77 as at December 31, 2017 ($159 at December 31, 2016).

(a) The following summarizes the Company's derivative portfolio and related credit exposure using the following definitions of risk as prescribed by OSFI:

Maximum Credit Risk	The total replacement cost of all derivative contracts with positive values.
Future Credit Exposure	The potential future credit exposure is calculated based on a formula prescribed by OSFI. The factors prescribed by OSFI for this calculation are based on derivative type and duration.
Credit Risk Equivalent	The sum of maximum credit risk and the potential future credit exposure less any collateral held.
Risk Weighted Equivalent	Represents the credit risk equivalent, weighted according to the creditworthiness of the counterparty, as prescribed by OSFI.

	2017				
	Notional amount	**Maximum credit risk**	**Future credit exposure**	**Credit risk equivalent**	**Risk weighted equivalent**
Interest rate contracts					
Futures – long	$ 25	$ –	$ –	$ –	$ –
Futures – short	52	–	–	–	–
Swaps	2,845	125	35	158	11
Options purchased	307	50	2	52	4
	3,229	175	37	210	15
Foreign exchange contracts					
Forward contracts	1,430	10	33	38	3
Cross-currency swaps	11,128	198	728	858	56
	12,558	208	761	896	59
Other derivative contracts					
Equity contracts	70	–	4	4	1
Futures – long	13	–	–	–	–
Futures – short	626	1	–	–	–
Other forward contracts	93	–	–	–	–
	802	1	4	4	1
Total	$ 16,589	$ 384	$ 802	$ 1,110	$ 75

	2016				
	Notional amount	Maximum credit risk	Future credit exposure	Credit risk equivalent	Risk weighted equivalent
Interest rate contracts					
Futures – long	$ 11	$ –	$ –	$ –	$ –
Futures – short	98	–	–	–	–
Swaps	3,315	213	35	218	19
Options purchased	318	49	2	50	4
	3,742	262	37	268	23
Foreign exchange contracts					
Forward contracts	1,588	35	18	52	4
Cross-currency swaps	11,114	228	677	777	58
	12,702	263	695	829	62
Other derivative contracts					
Equity contracts	62	1	4	4	1
Futures – long	11	–	–	–	–
Futures – short	609	2	–	–	–
Other forward contracts	103	–	–	–	–
	785	3	4	4	1
Total	$ 17,229	$ 528	$ 736	$ 1,101	$ 86

30. Derivative Financial Instruments (cont'd)

(b) The following provides the notional amount, term to maturity and estimated fair value of the Company's derivative portfolio by category:

	2017				
	Notional Amount				Total estimated fair value
	1 year or less	Over 1–5 years	Over 5 years	Total	
Derivatives not designated as accounting hedges					
Interest rate contracts					
Futures – long	$ 17	$ 8	$ –	$ 25	$ –
Futures – short	43	9	–	52	–
Swaps	312	343	1,783	2,438	78
Options purchased	46	202	59	307	50
	418	562	1,842	2,822	128
Foreign exchange contracts					
Forward contracts	955	–	–	955	7
Cross-currency swaps	338	2,004	8,286	10,628	(930)
	1,293	2,004	8,286	11,583	(923)
Other derivative contracts					
Equity contracts	70	–	–	70	(1)
Futures – long	13	–	–	13	–
Futures – short	626	–	–	626	(1)
Other forward contracts	93	–	–	93	–
	802	–	–	802	(2)
Cash flow hedges					
Interest rate contracts					
Swaps	–	–	407	407	10
Foreign exchange contracts					
Cross-currency swaps	500	–	–	500	(123)
Net investment hedges					
Foreign exchange forward contracts	–	475	–	475	(42)
Total	$ 3,013	$ 3,041	$ 10,535	$ 16,589	$ (952)

	2016				
	Notional Amount				Total estimated fair value
	1 year or less	Over 1–5 years	Over 5 years	Total	
Derivatives not designated as accounting hedges					
Interest rate contracts					
Futures – long	$ 2	$ 9	$ –	$ 11	$ –
Futures – short	70	28	–	98	–
Swaps	693	469	1,721	2,883	125
Options purchased	39	194	85	318	49
	804	700	1,806	3,310	174
Foreign exchange contracts					
Forward contracts	1,089	–	–	1,089	(7)
Cross-currency swaps	428	1,987	7,199	9,614	(1,265)
	1,517	1,987	7,199	10,703	(1,272)
Other derivative contracts					
Equity contracts	62	–	–	62	1
Futures – long	11	–	–	11	–
Futures – short	609	–	–	609	1
Other forward contracts	103	–	–	103	–
	785	–	–	785	2
Cash flow hedges					
Interest rate contracts					
Swaps	–	–	432	432	42
Foreign exchange contracts					
Cross-currency swaps	1,000	500	–	1,500	(436)
Net investment hedges					
Foreign exchange forward contracts	450	49	–	499	6
Total	$ 4,556	$ 3,236	$ 9,437	$ 17,229	$ (1,484)

Futures contracts included in the above are exchange traded contracts; all other contracts are over-the-counter.

(c) ***Interest Rate Contracts***

Interest rate swaps, futures and options are used as part of a portfolio of assets to manage interest rate risk associated with investment activities and insurance and investment contract liabilities. Interest-rate swap agreements require the periodic exchange of payments without the exchange of the notional principal amount on which payments are based. Call options grant the Company the right to enter into a swap with predetermined fixed-rate payments over a predetermined time period on the exercise date. Call options are used to manage the variability in future interest payments due to a change in credited interest rates and the related potential change in cash flows due to surrenders. Call options are also used to hedge minimum rate guarantees.

Foreign Exchange Contracts

Cross-currency swaps are used in combination with other investments to manage foreign currency risk associated with investment activities, and insurance and investment contract liabilities. Under these swaps principal amounts and fixed or floating interest payments may be exchanged in different currencies. The Company also enters into certain foreign exchange forward contracts to hedge certain product liabilities.

There was no ineffective portion of cash flow hedges during 2017. The maximum time frame for which variable cash flows are hedged is 50 years.

Other Derivative Contracts

Equity index swaps, futures and options are used to hedge certain product liabilities. Equity index swaps are also used as substitutes for cash instruments and are used to periodically hedge the market risk associated with certain fee income. Equity put options are used to manage potential credit risk impact of significant declines in certain equity markets.

31. Legal Provisions and Contingent Liabilities

The Company and its subsidiaries are from time-to-time subject to legal actions, including arbitrations and class actions, arising in the normal course of business. It is inherently difficult to predict the outcome of any of these proceedings with certainty, and it is possible that an adverse resolution could have a material adverse effect on the consolidated financial position of the Company. However, based on information presently known, it is not expected that any of the existing legal actions, either individually or in the aggregate, will have a material adverse effect on the consolidated financial position of the Company. Actual results could differ from management's best estimates.

A subsidiary of the Company in the United States is a defendant in an action in relation to its role as collateral manager of a collateralized debt obligation brought by an institution involved in the collateralized debt obligation. On April 28, 2014, the matter was dismissed. On July 2, 2014, the complainant filed an appeal of the dismissal and on April 15, 2015 the United States Court of Appeals for the Second Circuit issued its decision overturning the dismissal of the action and remanding the matter for further proceedings, which are ongoing. The resolution of this matter will not have a material adverse effect on the consolidated financial position of the Company.

Subsidiaries of the Company in the United States are defendants in proposed class actions relating to the administration of their staff retirement plans, or to the costs and features of certain of their retirement or fund products. Management believes the claims are without merit and will be aggressively defending these actions. Based on the information presently known these actions will not have a material adverse effect on the consolidated financial position of the Company.

32. Commitments

(a) Letters of Credit

Letters of credit are written commitments provided by a bank. The total amount of letter of credit facilities is U.S. $1,726 of which U.S. $1,629 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.

(b) Investment Commitments

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 were $939 as at December 31, 2017, with $938 maturing within one year and $1 maturing within two years.

(c) Lease Obligations

The Company enters into operating leases for office space and certain equipment used in the normal course of operations. Lease payments are charged to operations over the period of use. The future minimum lease payments in aggregate and by year are as follows:

	2018	2019	2020	2021	2022	2023 and thereafter	Total
Future lease payments	$ 119	$ 94	$ 79	$ 69	$ 52	$ 358	$ 771

(d) Pledged Assets

In addition to the assets pledged by the Company disclosed elsewhere in the consolidated financial statements:

(i) The amount of assets included in the Company's balance sheet which have a security interest by way of pledging is $1,562 ($1,709 at December 31, 2016) in respect of reinsurance agreements.

In addition, under certain reinsurance contracts, bonds presented in portfolio investments are held in trust and escrow accounts. Assets are placed in these accounts pursuant to the requirements of certain legal and contractual obligations to support contract liabilities assumed.

(ii) The Company has pledged, in the normal course of business, $66 ($62 at December 31, 2016) of assets of the Company for the purpose of providing collateral for the counterparty.

33. Segmented Information

The operating segments of the Company are Canada, United States, Europe and Lifeco Corporate. These segments reflect the Company's management structure and internal financial reporting and are aligned to its geographic operations. Each of these segments operates in the financial services industry and the revenues from these segments are derived principally from interests in life insurance, health insurance, retirement and investment services, asset management and reinsurance businesses. Business activities that are not associated with the specific geographic operations are attributed to the Lifeco Corporate segment.

Transactions between operating segments occur at market terms and conditions and have been eliminated upon consolidation.

The Company has a capital allocation model to measure the performance of the operating segments. The impact of the capital allocation model is included in the segmented information presented below.

(a) Consolidated Net Earnings

	2017				
	Canada	United States	Europe	Lifeco Corporate	Total
Income					
Total net premiums	$ 13,191	$ 4,471	$ 16,285	$ –	$ 33,947
Net investment income					
Regular net investment income	2,534	1,816	1,787	4	6,141
Changes in fair value through profit or loss	806	339	321	–	1,466
Total net investment income	3,340	2,155	2,108	4	7,607
Fee and other income	1,616	2,452	1,386	–	5,454
	18,147	9,078	19,779	4	47,008
Benefits and expenses					
Paid or credited to policyholders	12,977	5,814	16,852	–	35,643
Other (1)	3,410	2,651	1,623	22	7,706
Financing charges	123	128	48	1	300
Amortization of finite life intangible assets and impairment reversal	72	65	31	–	168
Restructuring expenses	215	17	27	–	259
Loss on assets held for sale	–	202	–	–	202
Earnings (loss) before income taxes	1,350	201	1,198	(19)	2,730
Income taxes (recovery)	231	243	(47)	(5)	422
Net earnings (loss) before non-controlling interests	1,119	(42)	1,245	(14)	2,308
Non-controlling interests	42	(10)	(2)	–	30
Net earnings (loss)	1,077	(32)	1,247	(14)	2,278
Preferred share dividends	104	–	19	6	129
Net earnings (loss) before capital allocation	973	(32)	1,228	(20)	2,149
Impact of capital allocation	101	(18)	(76)	(7)	–
Net earnings (loss) – common shareholders	$ 1,074	$ (50)	$ 1,152	$ (27)	$ 2,149

(1) Includes commissions, operating and administrative expenses and premium taxes.

33. Segmented Information (cont'd)

	2016				
	Canada	United States	Europe	Lifeco Corporate	Total
Income					
Total net premiums	$ 12,471	$ 5,304	$ 13,350	$ –	$ 31,125
Net investment income					
Regular net investment income	2,668	1,741	1,841	2	6,252
Changes in fair value through profit or loss	692	92	3,119	–	3,903
Total net investment income	3,360	1,833	4,960	2	10,155
Fee and other income	1,494	2,311	1,296	–	5,101
	17,325	9,448	19,606	2	46,381
Benefits and expenses					
Paid or credited to policyholders	11,862	6,271	16,542	–	34,675
Other (1)	3,599	2,678	1,511	24	7,812
Financing charges	115	140	45	2	302
Amortization of finite life intangible assets and impairment reversal	66	82	29	–	177
Restructuring expenses	–	46	17	–	63
Earnings (loss) before income taxes	1,683	231	1,462	(24)	3,352
Income taxes (recovery)	268	(27)	161	(6)	396
Net earnings (loss) before non-controlling interests	1,415	258	1,301	(18)	2,956
Non-controlling interests	191	2	(1)	–	192
Net earnings (loss)	1,224	256	1,302	(18)	2,764
Preferred share dividends	104	–	19	–	123
Net earnings (loss) before capital allocation	1,120	256	1,283	(18)	2,641
Impact of capital allocation	98	(7)	(83)	(8)	–
Net earnings (loss) – common shareholders	$ 1,218	$ 249	$ 1,200	$ (26)	$ 2,641

(1) Includes commissions, operating and administrative expenses and premium taxes.

(b) Consolidated Total Assets and Liabilities

	2017			
	Canada	**United States**	**Europe**	**Total**
Assets				
Invested assets	**$ 73,110**	**$ 44,263**	**$ 50,562**	**$ 167,935**
Assets held for sale	**–**	**169**	**–**	**169**
Goodwill and intangible assets	**5,447**	**1,975**	**2,489**	**9,911**
Other assets	**2,804**	**3,618**	**18,044**	**24,466**
Investments on account of segregated fund policyholders	**80,399**	**34,038**	**102,920**	**217,357**
Total	**$ 161,760**	**$ 84,063**	**$ 174,015**	**$ 419,838**

	2017			
	Canada	**United States**	**Europe**	**Total**
Liabilities				
Insurance and investment contract liabilities	**$ 66,460**	**$ 39,970**	**$ 54,935**	**$ 161,365**
Other liabilities	**7,254**	**4,505**	**3,821**	**15,580**
Investment and insurance contracts on account of segregated fund policyholders	**80,399**	**34,038**	**102,920**	**217,357**
Total	**$ 154,113**	**$ 78,513**	**$ 161,676**	**$ 394,302**

	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
Investments on account of segregated fund policyholders	74,909	35,414	90,080	200,403
Total	$ 153,531	$ 87,057	$ 159,145	$ 399,733

	2016			
	Canada	United States	Europe	Total
Liabilities				
Insurance and investment contract liabilities	$ 63,144	$ 40,871	$ 53,934	$ 157,949
Other liabilities (1)	7,033	4,976	4,364	16,373
Investment and insurance contracts on account of segregated fund policyholders	74,909	35,414	90,080	200,403
Total	$ 145,086	$ 81,261	$ 148,378	$ 374,725

(1) The Company reclassified current taxes to deferred taxes resulting in a decrease to other assets of $179 and a decrease to other liabilities of $179 on the Consolidated Balance Sheets at December 31, 2016 (note 34).

34. Comparative Figures

During the year, the Company reclassified certain comparative figures for the change in accounting policy (note 2) for presentation of certain income tax balances (notes 8, 13, 27, and 33).

These reclassifications had no impact on the total equity or net earnings of the Company.

Independent Auditor's Report

To the Shareholders of Great-West Lifeco Inc.

We have audited the accompanying consolidated financial statements of Great-West Lifeco Inc., which comprise the consolidated balance sheets as at December 31, 2017 and December 31, 2016, and the consolidated statements of earnings, consolidated statements of comprehensive income, consolidated statements of changes in equity and consolidated statements of cash flows for the years then ended, and a summary of significant accounting policies and other explanatory information.

Management's Responsibility for the Consolidated Financial Statements

Management is responsible for the preparation and fair presentation of these consolidated financial statements in accordance with International Financial Reporting Standards, and for such internal control as management determines is necessary to enable the preparation of consolidated financial statements that are free from material misstatement, whether due to fraud or error.

Auditor's Responsibility

Our responsibility is to express an opinion on these consolidated financial statements based on our audits. We conducted our audits in accordance with Canadian generally accepted auditing standards. Those standards require that we comply with ethical requirements and plan and perform the audit to obtain reasonable assurance about whether the consolidated financial statements are free from material misstatement.

An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the consolidated financial statements. The procedures selected depend on the auditor's judgment, including the assessment of the risks of material misstatement of the consolidated financial statements, whether due to fraud or error. In making those risk assessments, the auditor considers internal control relevant to the entity's preparation and fair presentation of the consolidated financial statements in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the entity's internal control. An audit also includes evaluating the appropriateness of accounting policies used and the reasonableness of accounting estimates made by management, as well as evaluating the overall presentation of the consolidated financial statements.

We believe that the audit evidence we have obtained in our audits is sufficient and appropriate to provide a basis for our audit opinion.

Opinion

In our opinion, the consolidated financial statements present fairly, in all material respects, the financial position of Great-West Lifeco Inc. as at December 31, 2017 and December 31, 2016, and its financial performance and its cash flows for the years then ended in accordance with International Financial Reporting Standards.

/s/ **Deloitte LLP**

Chartered Professional Accountants

Winnipeg, Manitoba
February 8, 2018

Sources of Earnings

The following is provided in accordance with the OSFI guideline requiring Sources of Earnings (SOE) disclosure. SOE is not an International Financial Reporting Standards (IFRS) measure. There is no standard SOE methodology. The calculation of SOE is dependent on and sensitive to the methodology, estimates and assumptions used.

SOE identifies various sources of IFRS net earnings. It provides an analysis of the difference between actual net income and expected net income based on assumptions made at the beginning of the reporting period. The terminology used in the discussion of sources of earnings is described below:

Expected Profit on In-Force Business

This component represents the portion of the consolidated net income on business in-force at the start of the reporting period that was expected to be realized based on the achievement of the best-estimate assumptions. It includes releases of provisions for adverse deviations, expected net earnings on deposits, and expected net management fees.

Impact of New Business

This component represents the point-of-sale impact on net income of writing new business during the reporting period. This is the difference between the premium received and the sum of the expenses incurred as a result of the sale and the new liabilities established at the point of sale.

Experience Gains and Losses

This component represents gains and losses that are due to differences between the actual experience during the reporting period and the best-estimate assumptions at the start of the reporting period.

Management Actions and Changes in Assumptions

This component represents the impact on net income resulting from management actions, changes in actuarial assumptions or methodology, changes in margins for adverse deviations, and correction of errors.

Other

This component represents the amounts not included in any other line of the sources of earnings. The impact of U.S.tax reform has been separated out in this presentation.

Earnings on Surplus

This component represents the earnings on the Company's surplus funds.

Great-West Lifeco's sources of earnings are shown below for 2017 and 2016.

Sources of Earnings

(in Canadian $ millions)

	Shareholders net earnings				
For year to date at December 31, 2017	Canada	United States	Europe	Lifeco Corporate	Total
Expected profit on in-force business	$ 1,141	$ 487	$ 1,059	$ (15)	$ 2,672
Impact of new business	56	(128)	(43)	–	(115)
Experience gains and losses	336	50	(38)	(7)	341
Management actions and changes in assumptions	57	54	248	–	359
Impact of U.S. tax reform on insurance contract liabilities and expenses	–	(72)	(47)	–	(119)
Other	(172)	(203)	(27)	–	(402)
Earnings on surplus	33	(5)	(28)	(4)	(4)
Net earnings before tax	1,451	183	1,124	(26)	2,732
Taxes (excl. impact of U.S. tax reform)	(254)	(45)	(54)	5	(348)
U.S. tax reform impact on deferred tax balances	(19)	(223)	88	–	(154)
Tax recovery on impact of U.S. tax reform on insurance contract liabilities and expenses	–	25	13	–	38
Net earnings before non-controlling interests	1,178	(60)	1,171	(21)	2,268
Non-controlling interests	–	(9)	–	–	(9)
Impact of U.S. tax reform on non-controlling interests	–	19	–	–	19
Net earnings – shareholders	1,178	(50)	1,171	(21)	2,278
Preferred share dividends	(104)	–	(19)	(6)	(129)
Net earnings – common shareholders	$ 1,074	$ (50)	$ 1,152	$ (27)	$ 2,149

Sources of Earnings
(in Canadian $ millions)

For year to date at December 31, 2016	Shareholders net earnings Canada	 United States	 Europe	 Lifeco Corporate	 Total
Expected profit on in-force business	$ 1,155	$ 458	$ 1,041	$ (12)	$ 2,642
Impact of new business	(22)	(131)	(79)	–	(232)
Experience gains and losses	279	(86)	5	(12)	186
Management actions and changes in assumptions	62	83	402	–	547
Other	–	(51)	(17)	–	(68)
Earnings on surplus	86	(48)	28	(8)	58
Net earnings before tax	1,560	225	1,380	(32)	3,133
Taxes	(238)	26	(161)	6	(367)
Net earnings before non-controlling interests	1,322	251	1,219	(26)	2,766
Non-controlling interests	–	(2)	–	–	(2)
Net earnings – shareholders	1,322	249	1,219	(26)	2,764
Preferred share dividends	(104)	–	(19)	–	(123)
Net earnings – common shareholders	$ 1,218	$ 249	$ 1,200	$ (26)	$ 2,641

Analysis of Results

Expected profit on in-force business is the major driver of earnings and accounted for 98% of pre-tax earnings in 2017. The expected profit on in-force business of $2,672 in 2017 was $30 higher than 2016. The slight increase year-over-year is primarily a result of higher net fee income across all segments, partially offset by the impact of currency and lower expected margins for group business in Canada.

The strain on new sales of $115 in 2017 was $117 lower than 2016 primarily due to lower strain in Canada and new longevity swaps and annuity business written in Europe.

Experience gains of $341 in 2017 were $155 higher than 2016. The gains in 2017 were primarily a result of investment experience (including yield enhancements) in all segments, higher fees and lower expenses in the U.S. and Canada, and mortality and longevity results in Europe. These gains were partially offset by property catastrophe reinsurance results in Europe and policyholder behaviour results in Canada. The gains in 2016 were primarily a result of investment experience (including yield enhancements) in all segments and longevity results in Europe. These gains were partially offset by lower fees and higher expenses in the U.S., expenses in Europe, morbidity and policyholder behaviour results in Canada.

Management actions and changes in assumptions (including the impact of U.S. tax reform) contributed $250 to pre-tax earnings in 2017 compared to $547 in 2016. The assumption changes and management actions were $57 in Canada, $(8) in U.S. and $201 in Europe.

The most significant contributors to the Canada amount of $57 were updated life mortality assumptions, updated morbidity assumptions and updated economic assumptions. These gains were partially offset by updated policyholder behaviour assumptions and updated longevity assumptions.

The most significant contributors to the U.S. amount of $(8) were updated expense and tax assumptions partially offset by updated life mortality assumptions, modelling refinements, and updated economic assumptions.

The most significant contributors to the Europe amount of $201 were updated longevity assumptions and updated economic assumptions, partially offset by updated life mortality assumptions, updated expense and tax assumptions, updated policyholder behaviour assumptions, and modelling refinements.

Other of $(402) in 2017 is primarily due to the loss on the sale of an equity investment in the U.S. and restructuring costs in Canada, Ireland, and the U.S.

Earnings on surplus of $(4) in 2017 was $(62) lower than 2016 primarily due to lower mark to market real estate gains in Canada, lower OCI gains, and lower investment income in Europe and Canada. These were partially offset by higher gains on seed capital in Canada and the U.S. and higher investment income in the U.S.

Five-Year Summary
(in Canadian $ millions except per share amounts)

At December 31	**2017**	2016	2015	2014	2013
Total assets under administration [1]	**$1,349,913**	$1,248,239	$1,212,517	$1,063,333	$ 758,258
For the Year Ended December 31					
Premiums and deposits:					
Net premium income					
(Life insurance, guaranteed annuities and insured health products)	**$ 33,947**	$ 31,125	$ 24,501	$ 21,222	$ 20,236
Self-funded premium equivalents (Administrative services only contracts)	**2,827**	2,751	2,625	2,603	2,567
Segregated funds deposits:					
Individual products	**17,037**	13,512	12,983	11,826	8,308
Group products	**7,848**	7,846	8,609	9,083	7,553
Proprietary mutual funds and institutional deposits	**61,490**	62,232	56,257	45,306	38,046
Total premiums and deposits	**$ 123,149**	$ 117,466	$ 104,975	$ 90,040	$ 76,710
Condensed Statements of Earnings					
Income					
Total net premiums	**$ 33,947**	$ 31,125	$ 24,501	$ 21,222	$ 20,236
Net investment income					
Regular net investment income	**6,141**	6,252	6,271	6,010	5,604
Changes in fair value through profit or loss	**1,466**	3,903	(2,010)	7,527	(2,979)
Total net investment income	**7,607**	10,155	4,261	13,537	2,625
Fee and other income	**5,454**	5,101	5,058	4,422	3,585
Total income	**47,008**	46,381	33,820	39,181	26,446
Benefits and expenses					
Paid or credited to policyholders	**35,643**	34,675	22,842	29,160	17,811
Other	**8,006**	8,114	7,326	6,468	5,633
Amortization of finite life intangible assets and impairment reversal	**168**	177	146	132	117
Restructuring expenses	**259**	63	35	32	104
Loss on assets held for sale	**202**	–	–	–	–
Earnings before income taxes	**2,730**	3,352	3,471	3,389	2,781
Income taxes	**422**	396	460	628	463
Net earnings before non-controlling interests	**2,308**	2,956	3,011	2,761	2,318
Non-controlling interests	**30**	192	123	93	(90)
Net earnings – shareholders	**2,278**	2,764	2,888	2,668	2,408
Preferred share dividends	**129**	123	126	122	130
Net earnings – common shareholders	**$ 2,149**	$ 2,641	$ 2,762	$ 2,546	$ 2,278
Earnings per common share	**$ 2.173**	$ 2.668	$ 2.774	$ 2.549	$ 2.340
Return on common shareholders' equity	**10.9%**	13.8%	14.7%	15.7%	16.8%
Book value per common share	**$ 20.11**	$ 19.76	$ 20.06	$ 16.80	$ 15.16
Dividends to common shareholders – per share	**$ 1.468**	$ 1.384	$ 1.304	$ 1.230	$ 1.230

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

Directors and Senior Officers

Board of Directors

R. Jeffrey Orr [3, 4, 5, 6, 7]
Chair of the Board of Lifeco
President and Chief Executive Officer,
Power Financial Corporation

Deborah J. Barrett, CPA, CA, ICD.D [1, 3, 7]
Corporate Director

Marcel R. Coutu [3, 4, 5, 6, 7]
Corporate Director

André Desmarais, O.C., O.Q. [3, 4, 5, 6, 7]
Deputy Chairman, President and
Co-Chief Executive Officer,
Power Corporation of Canada
Executive Co-Chairman,
Power Financial Corporation

Paul Desmarais, Jr., O.C., O.Q. [3, 4, 5, 6, 7]
Chairman and Co-Chief Executive Officer,
Power Corporation of Canada
Executive Co-Chairman,
Power Financial Corporation

Gary A. Doer, O.M. [3, 6, 7]
Senior Business Advisor,
Dentons Canada LLP

David G. Fuller [3, 6, 7]
Executive Vice-President, TELUS Corporation
and President, TELUS Consumer
and Small Business Solutions

Claude Généreux [3, 5, 6, 7]
Executive Vice-President,
Power Corporation of Canada
and Power Financial Corporation

Chaviva M. Hošek, O.C., Ph.D., LL.D. [1, 2]
Corporate Director

J. David A. Jackson, LL.B. [3, 4, 5, 6, 7]
Senior Counsel,
Blake, Cassels & Graydon LLP

Paul A. Mahon [3, 6]
President and Chief Executive Officer
of Lifeco,
The Great-West Life Assurance Company,
London Life Insurance Company,
Canada Life Financial Corporation,
The Canada Life Assurance Company

Susan J. McArthur [3, 5, 6, 7]
Managing Partner,
GreenSoil Investments

Rima Qureshi [3, 6, 7]
Executive Vice-President and Chief Strategy
Officer, Verizon Communications Inc.

Donald M. Raymond, Ph.D., CFA [3, 6, 7]
Managing Partner and Chief Investment Officer,
Alignvest Management Corporation and Alignvest
Investment Management Corporation

Henri-Paul Rousseau, Ph.D. [3, 6, 7]
Vice-Chairman,
Power Corporation of Canada and
Power Financial Corporation

T. Timothy Ryan [3, 4, 5, 6, 7]
Corporate Director

Jerome J. Selitto [2, 3, 6, 7]
President,
Avex Funding Corporation

James M. Singh, CPA, CMA, FCMA(UK) [1, 2, 3, 6, 7]
Executive Chairman,
CSM Bakery Solutions Limited

Gregory D. Tretiak, FCPA, FCA [3, 6, 7]
Executive Vice-President and
Chief Financial Officer,
Power Corporation of Canada and
Power Financial Corporation

Siim A. Vanaselja, FCPA, FCA [1, 3, 6, 7]
Corporate Director

Brian E. Walsh [3, 4, 5, 6, 7]
Principal and Chief Strategist,
Titan Advisors LLC

James W. Burns, O.C., O.M.
Director Emeritus

Committees

1. **Audit Committee**
   Chair: Siim A. Vanaselja
2. **Conduct Review Committee**
   Chair: Chaviva M. Hošek
3. **Executive Committee**
   Chair: R. Jeffrey Orr
4. **Governance and Nominating Committee**
   Chair: R. Jeffrey Orr
5. **Human Resources Committee**
   Chair: Claude Généreux
6. **Investment Committee**
   Chair: R. Jeffrey Orr
7. **Risk Committee**
   Chair: Gregory D. Tretiak

Senior Officers

Paul A. Mahon
President and Chief Executive Officer

Arshil Jamal
President and Chief Operating Officer,
Europe

Stefan K. Kristjanson
President and Chief Operating Officer,
Canada

Robert L. Reynolds
President and Chief Executive Officer,
Great-West Lifeco U.S. LLC

Philip Armstrong
Executive Vice-President and
Global Chief Information Officer

Graham R. Bird
Executive Vice-President and
Chief Risk Officer

Andrew D. Brands
Executive Vice-President and
General Counsel

Garry MacNicholas
Executive Vice-President and
Chief Financial Officer

Grace M. Palombo
Executive Vice-President and
Chief Human Resources Officer

Ross J. Petersmeyer
Senior Vice-President,
Regulatory Affairs

Nancy D. Russell
Senior Vice-President and
Chief Internal Auditor

Anne C. Sonnen
Senior Vice-President and
Chief Compliance Officer

Laurie A. Speers
Vice-President and
Corporate Secretary

Raman Srivastava
Executive Vice-President and
Global Chief Investment Officer

Dervla M. Tomlin
Executive Vice-President and
Chief Actuary

Shareholder Information

Registered Office of Great-West Lifeco Inc.

100 Osborne Street North, Winnipeg, Manitoba, Canada R3C 1V3

Stock Exchange Listings

Great-West Lifeco Inc. trades on the Toronto Stock Exchange (TSX) under the ticker symbol GWO.

The following shares are listed on the Toronto Stock Exchange: Common Shares (**GWO**); Non-Cumulative First Preferred Shares Series F (**GWO.PR.F**), Series G (**GWO.PR.G**), Series H (**GWO.PR.H**), Series I (**GWO.PR.I**), Series L (**GWO.PR.L**), Series M (**GWO.PR.M**), Series P (**GWO.PR.P**), Series Q (**GWO.PR.Q**), Series R (**GWO.PR.R**), Series S (**GWO.PR.S**), Series T (**GWO.PR.T**); and Non-Cumulative 5-Year Rate Reset First Preferred Shares Series N (**GWO.PR.N**); and Non-Cumulative Floating Rate First Preferred Shares O (**GWO.PR.O**).

Shareholder Services

For information or assistance regarding your registered share account, including dividends, changes of address or ownership, lost certificates, to eliminate duplicate mailings or to receive shareholder material electronically, please contact our Transfer Agents in Canada, the United States, United Kingdom or in Ireland directly. If you hold your shares through a broker, please contact your broker directly.

Transfer Agent and Registrar

The transfer agent and registrar of Great-West Lifeco Inc. is **Computershare Investor Services Inc.**

Shareholders wishing to contact the transfer agent by email can do so at GWO@computershare.com.

In Canada, the Common Shares and Non-Cumulative First Preferred Shares, Series F are transferable at the following locations:

Canadian Offices

Computershare Investor Services Inc.
Phone: 1-888-284-9137 (toll free in Canada and the United States), 514-982-9557 (direct dial)
8th Floor, 100 University Avenue, Toronto, Ontario M5J 2Y1
600, 530 8th Avenue S.W., Calgary, Alberta T2P 3S8
1500 Robert-Bourassa Boulevard, 7th Floor, Montréal, Québec H3A 3S8
2nd Floor, 510 Burrard Street, Vancouver, British Columbia V6C 3B9

The Non-Cumulative First Preferred Shares, Series G, H, I, L, M, N, O, P, Q, R, S and T are only transferable at the Toronto Office of Computershare Investor Services Inc.

Internationally, the Common Shares and Non-Cumulative First Preferred Shares, Series F are also transferable at the following locations:

United States Offices

Computershare Trust Company, N.A.
Phone: 1-888-284-9137 (toll free in Canada and the United States)
250 Royall Street, Canton MA 02021
480 Washington Boulevard, Jersey City NJ 07310
462 South 4th Street, Louisville KY 40202

United Kingdom Office

Computershare Investor Services PLC
Phone: 0370 702 0003
The Pavilions, Bridgwater Road, Bristol BS99 6ZZ, United Kingdom

Ireland Office

Computershare Investor Services (Ireland) Limited
Phone: 216 3100
Heron House, Corrig Road, Sandyford Industrial Estate, Dublin 18, Ireland

Dividends

Common Shares and First Preferred Shares Series F, G, H, I, L, M, N, O, P, Q, R, S and T – Dividend record dates are usually between the 1st and 4th of March, June, September and December. Dividends are usually paid the last day of each quarter.

Investor Information

Financial analysts, portfolio managers and other investors requiring information may contact Investor Relations by calling 416-552-3208 or emailing investorrelations@gwl.ca. Financial information may also be accessed on our web site at Greatwestlifeco.com.

For copies of our annual or quarterly reports, visit Greatwestlifeco.com or contact the Corporate Secretary's Office at 204-946-4388 or corporate.secretary@gwl.ca.

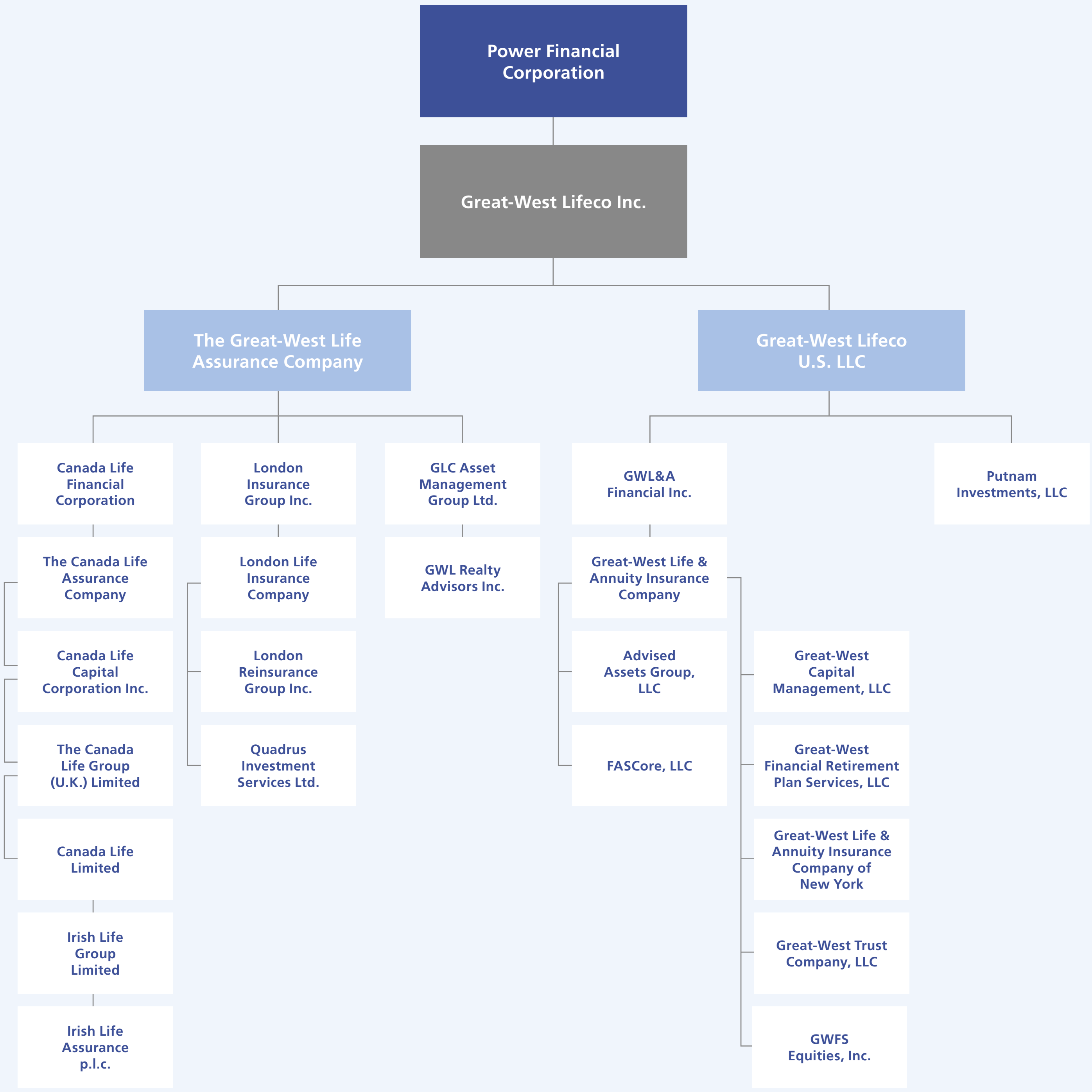
Common Share Investment Data

	Market price per common share ($)			Dividends paid ($)	Dividend payout ratio [1]	Dividend yield [2]
	High	Low	Close			
2017	**37.74**	**33.32**	**35.10**	**1.468**	**67.6%**	**4.1%**
2016	37.03	31.01	35.17	1.384	51.9%	4.1%
2015	37.52	31.31	34.53	1.304	47.0%	3.8%
2014	33.87	28.95	33.59	1.23	48.3%	3.9%
2013	33.34	24.20	32.75	1.23	58.3%	4.3%

1 Ratio based on operating earnings from 2013 to present.

2 Dividends as a percent of average high and low market price for the reporting period.

Organization chart



This chart depicts the corporate relationships among Great-West Lifeco and its material and certain other subsidiaries as of December 31, 2017. Great-West Lifeco beneficially owns, directly or indirectly, 100% of the voting securities of each such subsidiary.

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