# Delivering on our Commitments Today and Tomorrow



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, Europe and Asia through Great-West Life, London Life, Canada Life, Irish Life, Great-West Financial and Putnam Investments. Great-West Lifeco and its companies have over \$1.2 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.

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To view our annual report online or for more information on Great-West Lifeco, including current credit ratings, visit greatwestlifeco.com.

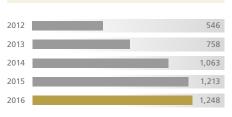
- The financial information in this report is presented in millions of Canadian dollars for the period ended December 31, 2016 unless otherwise indicated.
- Readers are referred to the Cautionary Notes regarding forward-looking information and non-IFRS financial measures on page 14 of this report.
- To view our Organization Chart, see the inside back cover of this report.

# 2016 Financial Highlights

#### Solid Performance in 2016

## Total Assets Under Administration

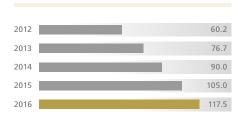
\$ billions



\$1.248 trillion

#### **Premiums and Deposits**

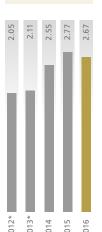
\$ billions



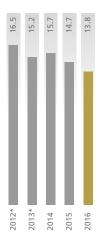
\$117.5 billion

### Committed to Shareholder Value

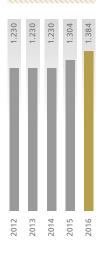




Return on Common Shareholders' Equity



Dividends Per Common Share \$



Book Value Per Common Share



\$2.6 billion

Operating Earnings
Attributable
to Common
Shareholders

13.8%

Return on Equity

<sup>\*</sup>Information is presented on an operating basis, a non-IFRS financial measure.

# Great-West Lifeco

Great-West Lifeco operates in Canada, the United States and Europe through Great-West Life, London Life, Canada Life, Irish Life, Great-West Financial and Putnam Investments.

# Our Company





ESTABLISHED 1891



ESTABLISHED 1874



ESTABLISHED 1847

#### CUSTOMER RELATIONSHIPS: 13 million+



ESTABLISHED 1907



ESTABLISHED 1937

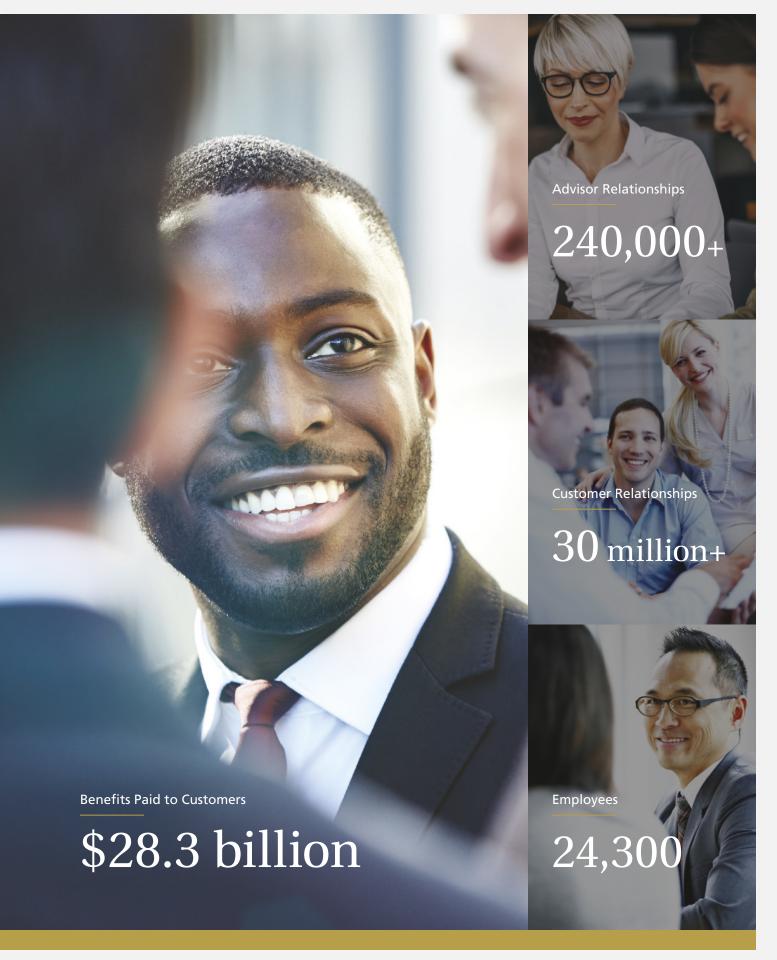


ESTABLISHED 1939

CUSTOMER RELATIONSHIPS: 12 million-

customer relationships:  $5\ million + 1$ 

\*Includes Canada Life in Europe.



# Delivering on our Commitments – Today and Tomorrow

Delivering on our commitments is at the core of Great-West Lifeco's purpose. We do so through an uncompromising focus on our customers, disciplined management of our resources and ongoing strategic investment in our people, capabilities and communities.

Financial strength and stability underpin the long-term commitments our companies have made to our customers for almost 170 years – and continue to make each and every day. This commitment to long-term performance for customers and shareholders, balanced with disciplined expense management and targeted investments in growth opportunities, were the factors that drove Great-West Lifeco's performance in 2016. Key areas of focus for our operating companies included investment in digital capabilities to ensure our products and services remain relevant and accessible; expense reduction initiatives, and disciplined evaluation and integration of acquisitions.

Market conditions in 2016 presented various challenges including sustained low interest rates, sluggish economic growth, a continuing focus on passive investing, increasing regulatory requirements and geopolitical uncertainty. In particular this led to a negative impact on British currency which constrained the earnings contribution from our U.K. operating company.

Notwithstanding these challenging conditions, Great-West Lifeco delivered 2016 revenue and earnings consistent with the prior year, sustained a strong and stable capital position, and maintained its industry-leading credit ratings. Our balanced approach to risk and growth – including discipline in underwriting, investment selection and product design – is fundamental to ensuring we deliver on our current and future commitments.

This year's report, *Delivering on our Commitments*, highlights our achievements as well as the many strategic initiatives underway to capitalize on opportunities in a fast changing world. As we evolve, the common denominator in all that we do will be striving to find new and better ways to respond to and anticipate the changing needs of our customers.

#### **Core Strengths**

In Canada, we're focused on improving the financial, physical and mental well-being of Canadians. Our products and services touch the lives of more than 13 million people – approximately one in three Canadians. In 2016, Great-West Life celebrated its 125<sup>th</sup> anniversary – recognition of our commitment to long-term growth and a testament to our people, our values and our sustainable approach to business. To remain engaged with generations of customers to come, we continually strive to meet their evolving needs and preferences.

In November, we announced the alignment of our Great-West Life, London Life and Canada Life operations around two core business units focused on individual and group customers, supported by a new strategic customer marketing function. The productivity gains and cost savings associated with these changes, balanced with reinvestment in customercentred innovations and service offerings, will support earnings growth and our goal of creating a more holistic customer experience.

In the United States, Empower, our retirement services provider, has transformed the way participants, plan sponsors and advisors approach retirement planning. Through a state-of-the-art web interface, Empower is encouraging more engagement, including increased contributions, designed to help people raise their retirement preparedness.

Building on the 2015 acquisition of J.P. Morgan Retirement Plan Services' large-market recordkeeping business, our U.S. subsidiary Great-West Financial solidified Empower's position as the second-largest retirement services provider in the U.S., with over 8 million participants.

"Delivering on our commitments to stakeholders is at our core, and with our values, guides both our short and long-term planning."



**Jeffrey Orr** Chair of the Board



**Paul Mahon**President and Chief Executive Officer

Putnam Investments, our U.S. based asset management affiliate, continues to deliver strong investment results for clients. The firm was recognized for its five-year investment performance across asset classes, ranking 5th out of 54 companies in the 2016 Barron's/Lipper Best Fund Families report.

In November, we announced Putnam's plans to reduce expenses and align its resources to best position itself for current and future opportunities. While these changes were driven in part by revenue pressure in a changing industry environment, our objective of building a profitable asset management franchise in the U.S. remains unchanged.

On the regulatory front, protecting customers' interests and harmonizing standards was an increasing focus around the globe. Our experience in global markets allows our companies to proactively engage with policymakers to help shape the emerging regulatory environment. We are equally engaged internally to evolve our products and services and the delivery of advice to ensure we meet the changing needs and expectations of consumers.

In Europe, we've responded to regulatory capital and legislative changes to create new growth opportunities. In the U.K., we are driving growth in response to legislative changes that introduced greater flexibility for individuals to access their pension savings. In Germany, our fastest growing business in Europe, the Solvency II capital regime has created a unique growth opportunity for our capital-efficient, unit-linked products. Solvency II is also creating new opportunities for our reinsurance business.

#### **Anticipating and Responding in a Changing World**

The intersection of changing demographics, technology and globalization presents challenges and opportunities for companies to remain competitive and build strong and lasting customer relationships.

Demographic shifts fundamentally impact the mix and type of products and services we provide. Older consumers are moving from asset accumulation to retirement products and are expected to participate in the largest intergenerational wealth transfer in history. Younger consumers are challenging financial services institutions to meet their unique needs and expectations. Immigration on a global scale is creating multi-cultural societies. Successful companies will adapt to meet the dynamic needs and preferences of their diverse customer segments.

New technology is affording customers of all ages and walks of life greater choice in how, when and where they interact with providers of goods and services. Our business is no different, with evolving financial technologies now a part of our competitive landscape.

Consumers have more options than ever to seek information and advice, make decisions and purchase products through their preferred channel. We recognize the opportunities and are investing in innovation to broaden our product shelf and ways of interacting with our customers.

One example is Irish Life's health insurance business – Irish Life Health – which enables customers to acquire products through digital or advisory channels. Irish Life Health was created in 2016 through transactions to acquire Aviva Health Insurance and assume control of GloHealth Financial Services. This new business leverages the creative digital platform of GloHealth with the traditional base of Aviva.

#### Directors' Report to Shareholders, continued



**Stefan Kristjanson**President and Chief Operating Officer
Canada



**Arshil Jamal**President and Chief Operating Officer
Europe



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

A new approach in the Irish market, Irish Life's OnePlan Protection provides a creative, affordable combination of life insurance protection, income replacement and specified illness coverage in a single policy. OnePlan combines this coverage, enabling young families to get financial security protection through one policy customized to their needs and budget.

Wayfinder – piloted in 2016 – is a powerful new app for Canadian group pension plan members. It gives them digital access to information and advice based on an aggregated view of their holdings across financial services institutions. Wayfinder is the first step in a multi-year incremental build as we apply technology to make it easier for customers to do business with us.

With a view to the future, we actively monitor emerging financial technologies and solutions. Our strategic investment in Portag3 Ventures – a financial technology fund – provides a window into promising technologies and how they can be used to strengthen future customer relationships.

#### **Board of Directors**

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

At Great-West Lifeco's 2016 annual meeting, it was announced that long-serving Director Michel Plessis-Bélair would retire. Mr. Plessis-Bélair's tenure with our organization began in 1990. Mr. Plessis-Bélair was a member of the Audit, Executive and Investment Committees and, with 26 years'

service, the longest-serving member of the Great-West Life Audit Committee. We would like to thank him for his valuable contribution to the affairs of our Companies; and in particular, for his instrumental support over decades of regulatory and accounting changes.

At the 2016 Annual Meeting, Gary Doer and Rima Qureshi were elected to the Board of Directors. Mr. Doer most recently served as Canada's Ambassador to the United States, and prior to that as the Premier of Manitoba for more than a decade. Ms. Qureshi is President, North America at Ericsson, an international technology software and services company.

#### **Thank You**

Delivering on our commitments to stakeholders is at our core, and with our values, guides both our short and long-term planning.

We thank our customers, employees and advisors for helping Great-West Lifeco achieve solid performance in 2016. We remain well positioned to create long-term value for all our stakeholders in 2017 and beyond.

**Jeffrey Orr** Chair of the Board Paul Mahon
President and
Chief Executive Officer



Focusing on our Customers

8

Investing for Growth

10

People and Communities

12



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

Helping our Canadian customers transition seamlessly into retirement prompted creation of the HelloLife retirement income program. The customer and the advisor work together, allowing the customer to be involved every step of the way. This unique approach brings together the customer's aspirations and lifestyle with the advisor's financial planning advice to help generate a realistic plan that can provide predictable income for life along with opportunities for growth. In 2016, the HelloLife retirement income program earned recognition for its ability to simplify complex financial planning ideas. It translates them into terms that assist the customer in answering four common questions: What might my retirement look like? Will I have enough money to do what I want? How can I make my money last? And am I going to be okay?

Our SmartPATH education program allows our Canadian group retirement plan members to access information that resonates with the retirement planning stage they're in. The SmartPATH education program caters to unique learning styles through videos, interactive tools, games and articles that help individuals take action so they can achieve their savings goals. These materials are also publicly available at www.smartpathnow.com.

It's never been easier for our plan members to access their Great-West group benefits information. Through our *GroupNet for Plan Members* website, or on the go with the *GroupNet Mobile* or *GroupNet* for Apple Watch apps, more than one million of our plan members connect with us online. They have secure, userfriendly access to submit their claims, get information about benefits, coverage balances and claims payments, search drugs to find out if they're covered and at what percentage (for pay-direct plan designs) and even locate the nearest health care provider through a built-in GPS mapping tool.

In Ireland in 2016, Irish Life introduced OnePlan Protection. Focus groups confirmed that OnePlan Protection's innovative approach and product features are particularly attractive to young families. By combining benefits traditionally sold separately, young families connect with one product, one provider and one payment to cover a range of contingencies. OnePlan Protection represents innovation and affordability, and differentiates Irish Life in the market.

Our new Irish Life Health business is leveraging the creative digital technology of GloHealth and the traditional advisor relationship business of Aviva to give customers flexibility in meeting their health insurance needs. In addition to the convenience of online self-service for their health insurance claims, customers can access a Digital Doctor service including face-to-face video consultations, and telephone and messaging services with Irish-registered physicians.





The award-winning HelloLife retirement planner supports the customer and advisor working together to build a secure, flexible retirement income program.

#### ONEPLAN PROTECTION



The unique combination of coverage and affordability makes Irish Life's new OnePlan Protection appealing to young families.



Our customer focus is evident as we continue to build innovative technology solutions to better anticipate and serve their needs. We are harnessing the power of analytics to expand our customer base, increase the efficiency of our business, and elevate the customer experience by providing choice in how they access our products and services.

Empower Retirement is the second-largest record keeper of defined contribution pension plans in the U.S., with over eight million plan participants. Empower applies cutting-edge technology to help employers and employees get the most out of their retirement savings programs.

One of the first steps toward saving for tomorrow is effectively managing finances today. That's why Empower offers plan participants an easy way to pay household bills, save for emergencies, reduce debt and contribute toward retirement through one seamless account. The service is designed to automatically track bills and due dates and schedule payments around payroll cycles, leaving employees with a predictable amount of discretionary spending. As plan participants gain better insight into their finances today, they are better positioned to save more for retirement.

In 2016 Empower enhanced its participant experience, offering innovative online tools that help employees model different retirement contribution scenarios, estimate future potential health costs, set retirement goals, change contribution levels and speak with a service representative online. Employees can see how they compare to others with the same demographic profile, gaining motivation to step up their retirement savings contributions.

In Canada, we piloted Wayfinder – an online tool aimed at improving financial outcomes for retirement plan participants. Wayfinder enables participants to gain a holistic perspective of their retirement savings by creating an aggregated view of their financial assets across all of the financial institutions they deal with.

In 2016, Putnam Investments was recognized for its industry-leading digital engagement initiatives. The firm was ranked No. 1 for digital communications with financial advisors, brokers and other intermediaries by DST kasina, a leading industry consultant. Earlier in the year, Putnam was named the inaugural recipient of the Social Media Leader of the Year Award at the 23<sup>rd</sup> Annual Mutual Fund Industry Awards ceremony. The award honours a firm that demonstrates leadership in social media through insights and engagement with clients and the general public.

As the pace of change in the financial services industry accelerates, staying current with evolving technologies helps us to keep delivering on our commitments. To enhance the customer and advisor experience, and our resiliency in meeting evolving needs and preferences, we are keeping an eye on the future through our investment in Portag3 Ventures – a corporate partnership between Great-West Lifeco, parent company Power Financial Corporation and affiliate IGM Financial. One of Portag3's promising investments is Wealthsimple. This self-directed investment management platform offers customers automated portfolio advice and low-fee ETF investment options through a simple online interface. Our approach is to be long-term partners in the businesses in which we invest, providing mentorship and expertise, with the view to commercializing technologies that give us a competitive advantage.



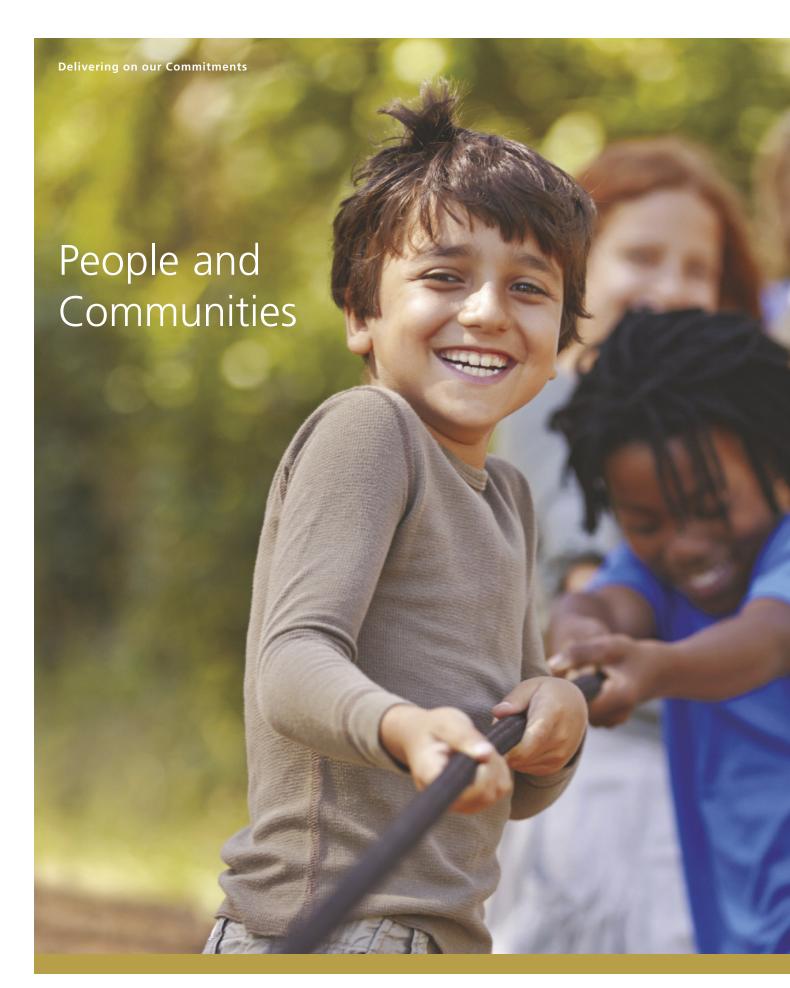


Empower Retirement is transforming the way individuals, plan sponsors and financial professionals in the U.S. approach retirement planning.





Putnam Investments continues to be recognized for its industry-leading digital engagement initiatives.



Corporate social responsibility continues to be a cornerstone of our companies worldwide. We have long held responsible and ethical management as an intrinsic value, essential to long-term profitability and value creation for our stakeholders. Our actions focus on making a positive contribution in our communities and building a more sustainable future for generations to come.

Stronger Communities Together is our approach to corporate citizenship in Canada. It's our lens for addressing issues at a national level, while responding to many regional and local concerns. In 2016, we supported over 900 initiatives representing \$12.4 million in contributions. We support innovative models for efficient delivery of services, along with creative, coordinated and compassionate efforts aimed at making lasting change in communities nationwide. Our contributions to projects in arts and culture, community development, education, social services, and health and wellness help enhance overall well-being.

Many of these efforts begin with our people, who share their time, resources and expertise to improve the lives of those around them, and we support and encourage those efforts. In 2016, for example, we granted 125 donations of \$1,000 each to registered charities that our employees volunteered with across Canada, in celebration of Great-West Life's 125<sup>th</sup> anniversary.

In Ireland, Irish Life's partnership with Healthy Ireland, the Health Services Executive and the National Office for Suicide Prevention supports the Healthy Club Project sponsored by the Gaelic Athletic Association, Ireland's leading amateur sporting and cultural organization. Irish Life's three-year €1 million investment in this flagship community initiative will help enhance the health and well-being of participants and their communities.

In the U.K., Canada Life has a strong partnership with Mount Grace, a school nearby its head office in Potters Bar. Employees dedicate many hours a year to helping students of Mount Grace with learning at school and preparing for the challenges of university and work life.

In the U.S., Great-West Financial kicked off a new community involvement program called ACT (Associates. Community. Together.), which is aimed at encouraging employees to support important causes of their choosing. The firm amplifies employees' community impact with corporate support, including matching funds and paid volunteer hours. Activities range from local events to large-scale efforts such as the Giving Together Campaign for communities across the U.S.

On the environmental front, Great-West Lifeco earned a position on the CDP's Climate A List. This is the CDP's highest ranking, indicating a global leadership position in greenhouse gas emissions disclosure and management.

In 2016, our real estate subsidiary, GWL Realty Advisors, achieved a Green Star ranking for the second year in a row based on its submission to the Global Real Estate Sustainability Benchmark (GRESB) survey. It placed second in Canada among private real estate management firms and scored well above the global average and that of its regional peer group, in each assessed category.

In February, our Canadian investment management subsidiary GLC Asset Management Group Ltd. became a signatory to the United Nations-supported Principles for Responsible Investment (UN PRI). GLC formally includes environmental, social and governance (ESG) factors into the disciplined investment processes in place across its investment divisions. Putnam Investments and Irish Life Investment Managers are also signatories to the UN PRI, which aims to contribute to the development of a more sustainable global financial system.





We marked Great-West Life's 125th anniversary with 125 donations of \$1,000 each for registered charities that our employees volunteer with across Canada.

# Irish Life



Irish Life is helping build healthier communities in Ireland with a three-year commitment to the Gaelic Athletic Association's Healthy Club Project.

#### 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, 2016 and includes a comparison to the corresponding periods in 2015, to the three months ended September 30, 2016, and to the Company's financial condition as at December 31, 2015. 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.

#### **B**USINESSES OF LIFECO

Lifeco has operations in Canada, the United States, Europe and Asia 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 a network of Freedom 55 Financial  $^{\rm IM}$  and Great-West Life financial security advisors, and through a multi-channel network of brokers, advisors, managing general agencies and financial institutions.

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, 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.

In Asia, Putnam has a 10% interest in Nissay Asset Management (NAM), a partnership with Nippon Life Insurance Company. Putnam predominantly acts as a sub-advisor for certain retail mutual funds distributed by NAM and also manages pension fund assets for NAM clients.

Lifeco currently has no other 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, 2016.

#### 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 fillings with securities regulators, including factors set out in the Company's 2016 Annual MD&A under "Risk Management and Control Practices" and "Summary of Critical Accounting Estimates", which, along with other fillings, 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", "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. Please refer to the appropriate reconciliations of these non-IFRS financial measures to measures prescribed by IFRS.

#### CONSOLIDATED OPERATING RESULTS

	As at	or for th	e three mont	hs end	led	F	month	ns ended	
the Constitute of williams and form and form and the constitution of the constitution	Dec. 31		Sept. 30		Dec. 31	Dec. 31			Dec. 31
(in Canadian \$ millions, except for per share amounts)	2016		2016		2015		2016		2015
Premiums and deposits:									
Amounts reported in the financial statements									
Net premium income (Life insurance, guaranteed annuities and	\$ 8.905	\$	8,334	\$	6.162	\$	24 425	\$	24 501
insured health products) Policyholder deposits (segregated funds):	\$ 6,900	) )	8,334	Þ	0,102	Þ	31,125	Þ	24,501
Individual products	3,399		3,211		3,814		13,512		12,983
Group products	1,875		1,875		2,001		7,846		8,609
Premiums and deposits reported in the financial statements	14,179		13,420		11,977	_	52,483		46,093
Self-funded premium equivalents (Administrative services only contracts) (1)	691		655		665	_	2,751		2,625
Proprietary mutual funds and institutional deposits (1)	15,169		15,187		15,480		62,232		56,257
Total premiums and deposits (1)	30,039	)	29,262		28,122		117,466		104,975
Fee and other income	1,345		1,271		1,333		5,101		5,058
Paid or credited to policyholders <sup>(2)</sup>	4,373		10,589		5,532		34,675		22,842
Earnings									
Net earnings – common shareholders	\$ 676	\$	674	\$	683	\$	2,641	\$	2,762
Per common share									
Basic earnings	0.686		0.682		0.688		2.668		2.774
Dividends paid	0.346		0.346		0.326		1.384		1.304
Book value (3)	19.76		19.18		20.06				
Return on common shareholders' equity (4)									
Net earnings	13.8%		13.8%		14.7%				
Total assets per financial statements	\$ 399,912	\$	401,489	\$	399,935				
Proprietary mutual funds and institutional net assets (5)	259,215		256,544		252,480				
Total assets under management (5)	659,127		658,033		652,415				
Other assets under administration (6)	589,291		570,475		560,102				
Total assets under administration	\$1,248,418	3 \$	1,228,508	\$	1,212,517				
Total equity	\$ 25,008	\$	24,256	\$	25,260				

<sup>(1)</sup> 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.

<sup>(2)</sup> Paid or credited to policyholders includes the impact of changes in fair values of assets supporting insurance contract liabilities.

<sup>(3)</sup> Certain comparative figures have been adjusted as described in note 33 to the Company's December 31, 2016 consolidated financial statements.

<sup>(4)</sup> Return on common shareholders' equity is detailed within the "Capital Allocation Methodology" section.

<sup>(5)</sup> 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.

<sup>(6)</sup> 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.

#### LIFECO 2016 HIGHLIGHTS

#### Maintained strong capital position and solid financial performance

- The Company's strong capital position is evidenced by a Minimum Continuing Capital and Surplus Requirements (MCCSR) ratio at December 31, 2016 of 240% for The Great-West Life Assurance Company, Lifeco's major Canadian operating subsidiary.
- For the twelve months ended December 31, 2016, net earnings attributable to common shareholders were \$2,641 million, a decrease of 4% from the previous year. While net earnings in the Canada and Europe segments finished the year up from 2015, earnings were negatively impacted by currency movement, particularly the weakening of the British pound, and lower earnings in the U.S. segment, which included \$20 million of restructuring costs related to a realignment of Putnam.
- In 2016, Lifeco's quarterly common share dividend increased 6% to \$0.3460 per share.
- The Company returned to the European capital markets in December 2016 with the issuance of 500 million euro-denominated 10-year bonds, with proceeds used to further support foreign operations and for general corporate purposes. The bonds pay an annual coupon of 1.75%, are rated A+ by Standard & Poor's Rating Services and are listed on the Irish Stock Exchange.
- The Company's financial leverage ratio at December 31, 2016 was 28%, including the issuance of the 500 million euro-denominated bonds. This was 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.

#### Stability during challenging global economic and regulatory conditions

- On June 23, 2016, the U.K. voted to leave the European Union (EU). The Company's operations in Europe have strong, stable businesses and a diversified investment portfolio. The Company's U.K. operations are primarily domestic businesses and have continued to perform well during this period of uncertainty. Operations in Ireland and Germany are domestic and have experienced minimal impact. These businesses are appropriately capitalized and the Company remains committed to these markets. The most notable impact on the Company's financial results in 2016 has been the weakening of the British pound. The decline in the second half of 2016 reduced the average currency translation rate for the Company's British pound net earnings by 12% compared to the first half of 2016. 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 enter a period of negotiation and agree on their new relationship.
- On September 12, 2016, the Office of the Superintendent of Financial Institutions (OSFI) issued the Life Insurance Capital Adequacy Test (LICAT) guideline. Effective January 1, 2018, OSFI plans for the LICAT guideline to replace the MCCSR guideline. OSFI has stated that the LICAT guideline is not expected to increase the amount of capital in the industry compared to the current MCCSR guideline and is continuing to conduct assessments of the new guideline. The Company will continue its ongoing dialogue with OSFI and industry participants during 2017.

- In Europe, Solvency II regulations were effective in 2016 and have been a focus of the Company's regulated European businesses. All of the Company's regulated European-based subsidiaries have met the new requirements. During the year, the Company effectively managed capital volatility under the new regulations. In 2017, work will continue on refining the Company's internal risk models and management of potential capital volatility under the new regulations.
- The recent elections in the U.S. have brought into focus the prospects for significant policy changes, including corporate federal tax reform. Both Congress and the President share the same goal of reducing corporate income tax rates for businesses. A reduction in the corporate tax rate would likely have a favourable impact on the Company's effective tax rate in the years subsequent to the year of enactment. Any change in tax laws and rates may affect recorded deferred tax assets and deferred tax liabilities and the effective tax rate in the future. A reduction in the statutory corporate tax rate would result in a reduction in the deferred tax asset or deferred tax liability, which may give rise to a one-time negative impact on the financial results of operations in the year of enactment. Any one-time adjustment to the deferred tax accounts would not affect cash taxes paid.

#### **Outlook for 2017**

- · Lifeco is focused on investing strategically to drive growth and productivity while maintaining a strong risk and expense discipline to deliver long-term value to its customers and shareholders.
- In Canada, the core business units will be realigned to focus on individual and group customers supported by a new strategic customer marketing function. With the goal of creating a more holistic customer experience, these changes will support earnings growth balanced with reinvestment in customer-centered innovations and service offerings, generated through productivity gains and cost savings.
- In the U.S., work continues on streamlining back office processes to support Empower Retirement growth, cost savings and improving customer experience and engagement. At Putnam, expense reductions resulting from the realignment of resources were announced to support the objective of building a scalable, profitable asset management franchise with continued focus on strong investment performance. Following the U.S. election, the U.S. markets and interest rates have increased which is expected to have a positive impact on the results of the business; although volatility is expected to continue into 2017 as the new Presidential Administration unveils its initiatives.
- In Europe, development of the Company's U.K. bulk annuity capabilities will continue to complement the Company's strong position in the U.K. retail payout annuity market. Investment in digital opportunities will remain a focal point 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, the Company will strengthen its presence in the growing market for pension unit-linked products by maintaining innovative products and a strong service offering. Investments will continue in technology to drive processing efficiencies and lay the foundation for enhanced future capabilities for the German business. 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, 2016 were \$676 million compared to \$683 million a year ago and \$674 million in the previous quarter. On a per share basis, this represents \$0.686 per common share (\$0.685 diluted) for the fourth guarter of 2016 compared to \$0.688 per common share (\$0.686 diluted) a year ago and \$0.682 per common share (\$0.681 diluted) in the previous quarter. Included in Lifeco's net earnings for the fourth quarter of 2016 were restructuring costs related to a realignment of the Asset Management business unit (Putnam) of \$20 million.

For the twelve months ended December 31, 2016, Lifeco's net earnings were \$2,641 million compared to \$2,762 million a year ago. On a per share basis, this represents \$2.668 per common share (\$2.663 diluted) for 2016 compared to \$2.774 per common share (\$2.768 diluted) a year ago.

#### Net earnings - common shareholders

	For the three months ended							For the twelve months ended			
		ec. 31 2016		ept. 30 2016		ec. 31 2015		Dec. 31 2016		Dec. 31 2015	
Canada											
Individual Insurance	\$	103	\$	70	\$	51	\$	345	\$	307	
Wealth Management		132		99		119		436		479	
Group Insurance		98		110		74		400		432	
Canada Corporate		(7)		10		18		37		(23)	
		326		289		262		1,218		1,195	
United States											
Financial Services		80		89		86		333		384	
Asset Management		(3)		(6)		41		(52)		32	
U.S. Corporate		(22)		(5)		(2)		(32)		(7)	
		55		78		125		249		409	
Europe											
Insurance & Annuities		225		251		234		927		886	
Reinsurance		86		54		73		277		313	
Europe Corporate		(4)		8		(4)		(4)		(25)	
		307		313		303		1,200		1,174	
Lifeco Corporate		(12)		(6)		(7)		(26)		(16)	
Net earnings – common shareholders	\$	676	\$	674	\$	683	\$	2,641	\$	2,762	

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 2016, except in the U.K., where rates 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 2016 and year-to-date were mostly up compared to the same periods in 2015 and ended the quarter at higher market levels compared to September 30, 2016. Relative to the Company's expectation, the change in average market levels and market volatility had a negligible impact on net earnings during the fourth quarter of 2016 and a negative impact of \$10 million year-to-date in 2016 (\$9 million positive impact in the fourth quarter of 2015 and \$12 million negative impact year-to-date in 2015), 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 negligible in the fourth quarter of 2016 and positive \$4 million year-to-date in 2016 (\$6 million positive impact in the fourth quarter of 2015 and \$5 million positive impact year-to-date in 2015), related to seed money investments held in the Asset Management and Canada Corporate business units.

Comparing the fourth quarter of 2016 to the fourth quarter of 2015, average equity market levels were up by 11% in Canada (as measured by S&P TSX), 7% in the U.S. (as measured by S&P 500),

10% in the U.K. (as measured by FTSE 100); however, were down by 7% in broader Europe (as measured by Eurostoxx 50). The major equity indices finished the fourth quarter up 4% in Canada, 3% in the U.S., 4% in the U.K. and 10% in broader Europe, compared to September 30, 2016.

#### **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 2016

decreased for the U.S. dollar, the British pound and the euro compared to the fourth quarter of 2015. The overall impact of currency movement on the Company's net earnings for the three month period ended December 31, 2016 was a decrease of \$33 million (\$50 million year-to-date) compared to translation rates a year ago.

From September 30, 2016 to December 31, 2016, the market rate at the end of the reporting period used to translate U.S. dollar assets and liabilities to the Canadian dollar increased, while the end-of-period market rates for euro and British pound assets and liabilities decreased. The movements in end-of-period market rates resulted in unrealized foreign exchange losses from the translation of foreign operations, including related hedging activities, of \$50 million in-quarter (\$1,449 million net unrealized losses 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	For the three months ended December 31, 2016					For the twelve months ended December 31, 2016						
	Impair (charg recov	jes) /	prov for f credit in ins con	ges in isions uture losses urance tract lities	Tc	otal	(cha	airment arges) / overies	prov for t credit in ins con	ges in isions iuture losses urance tract ilities	To	otal	
Canada	\$	-	\$	(2)	\$	(2)	\$	-	\$	1	\$	1	
United States		(1)		1		-		1		(1)		-	
Europe		5		3		8		(18)		12		(6)	
Total	\$	4	\$	2	\$	6	\$	(17)	\$	12	\$	(5)	

In the fourth quarter of 2016, the Company experienced net recoveries on impaired investments, including dispositions, which positively impacted net earnings by \$4 million (\$1 million net charge in the fourth quarter of 2015). Changes in credit ratings in the Company's bond portfolio resulted in a net decrease to provisions for future credit losses in insurance contract liabilities, which positively impacted net earnings by \$2 million in the quarter (\$25 million net charge in the fourth quarter of 2015).

For the twelve months ended December 31, 2016, the Company experienced net charges on impaired investments, including dispositions, which negatively impacted net earnings by \$17 million (\$7 million net recovery in 2015), primarily driven by impairment charges on mortgage loans as a result of the insolvency of British Homes Stores (BHS), a U.K. retailer. Changes in credit ratings in the Company's bond portfolio resulted in a net decrease to provisions for future credit losses in insurance contract liabilities, which positively impacted net earnings by \$12 million year-to-date (\$55 million net charge in 2015).

#### **ACTUARIAL ASSUMPTION CHANGES**

During the fourth quarter of 2016, the Company updated a number of actuarial assumptions resulting in a positive net earnings impact of \$115 million, compared to \$97 million for the same quarter last year and \$171 million for the previous quarter. In Europe, net earnings were positively impacted by \$75 million, primarily due to the impact of updated economic, annuitant mortality and morbidity assumptions, partially offset by the impact of updated expense assumptions. In the U.S., net earnings were positively impacted by \$20 million, primarily due to the impact of updated economic assumptions. In Canada, net earnings were positively

impacted by \$20 million due to the impact of a number of small assumption changes, including updated economic assumptions, modeling refinements and updated expense assumptions.

For the twelve months ended December 31, 2016, actuarial assumption changes resulted in a positive net earnings impact of \$446 million, compared to \$376 million for the same period in 2015.

#### 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

	Fo	For the twelve months ended			
	Dec. 31 2016	Sept. 30 2016	Dec. 31 2015	Dec. 31 2016	Dec. 31 2015
Canada					
Individual Insurance	\$ 1,543	\$ 1,298	\$ 1,304	\$ 5,371	\$ 4,894
Wealth Management	3,041	2,716	2,804	10,979	10,832
Group Insurance	2,097	2,040	2,002	8,311	7,838
	6,681	6,054	6,110	24,661	23,564
United States					
Financial Services	3,525	3,575	5,087	14,156	13,798
Asset Management	11,119	11,341	10,869	45,471	39,850
	14,644	14,916	15,956	59,627	53,648
Europe					
Insurance & Annuities	4,984	5,325	4,497	22,276	22,127
Reinsurance	3,730	2,967	1,559	10,902	5,636
	8,714	8,292	6,056	33,178	27,763
Total premiums and deposits	\$ 30,039	\$ 29,262	\$ 28,122	\$ 117,466	\$ 104,975

#### Sales

		For the t	hree months e	nded		F	or the twelve	month	ıs ended
	Dec. 201		Sept. 30 2016		Dec. 31 2015		Dec. 31 2016		Dec. 31 2015
Canada	\$ 3	871 \$	3,117	\$	3,492	\$	12,933	\$	12,635
United States	18	384	23,011		31,630		98,218		95,715
Europe – Insurance & Annuities	4	410	4,645		3,917		19,179		19,485
Total sales	\$ 26	665 \$	30,773	\$	39,039	\$	130,330	\$	127,835

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.

#### **N**ET INVESTMENT INCOME

#### Net investment income

		For	the thr	ee months e	nded		For the twelve months ended				
	_	Dec. 31 2016	9	Sept. 30 2016		Dec. 31 2015		Dec. 31 2016	[	Dec. 31 2015	
Investment income earned (net of investment properties expenses) Allowances for credit losses on loans and receivables	\$	1,522 (13)	\$	1,480 1	\$	1,623 (1)	\$	6,229 (35)	\$	6,168	
Net realized gains		25		41		78		165		213	
Regular investment income		1,534		1,522		1,700		6,359		6,381	
Investment expenses		(27)		(26)		(30)		(107)		(110)	
Regular net investment income		1,507		1,496		1,670		6,252		6,271	
Changes in fair value through profit or loss		(3,943)		2,307		(844)		3,903		(2,010)	
Net investment income	\$	(2,436)	\$	3,803	\$	826	\$	10,155	\$	4,261	

Net investment income in the fourth quarter of 2016, which includes changes in fair value through profit or loss, decreased by \$3,262 million compared to the same quarter last year. The changes in fair value in the fourth quarter of 2016 were a decrease of \$3,943 million compared to a decrease of \$844 million for the fourth quarter of 2015. In the fourth quarter of 2016, the decrease was primarily due to an increase in bond yields across all geographies. In the fourth quarter of 2015, the decrease was primarily due to an increase in U.K. and U.S. bond yields.

Regular net investment income in the fourth quarter of 2016, which excludes changes in fair value through profit or loss, decreased by \$163 million compared to the fourth quarter of 2015. The decrease was primarily due to the impact of currency movement as the

Canadian dollar strengthened against the British pound, as well as lower net realized gains. Net realized gains include gains on available-for-sale securities of \$14 million for the fourth quarter of 2016 compared to \$4 million for the same quarter last year.

For the twelve months ended December 31, 2016, net investment income increased by \$5,894 million compared to the same period last year. The changes in fair value for the twelve month period in 2016 were an increase of \$3,903 million compared to a decrease of \$2,010 million during the same period in 2015. The changes in fair value were primarily due to a decline in U.K. bond yields and an increase in Canadian equity markets during 2016, compared to an increase in U.K. and U.S. bond yields and a decline in Canadian equity markets during 2015.

Regular net investment income for the twelve months ended December 31, 2016 decreased by \$19 million compared to the same period last year. The decrease was primarily due to the impact of currency movement as the Canadian dollar strengthened against the British pound, as well as lower net realized gains, partially offset by the impact of the U.S. dollar strengthening against the Canadian dollar. Net realized gains include gains on availablefor-sale securities of \$84 million for the twelve months ended December 31, 2016, compared to \$106 million for the same period last year.

Net investment income in the fourth quarter of 2016 decreased by \$6,239 million compared to the previous quarter, primarily due to net decreases in fair values of \$3,943 million in the fourth quarter of 2016 compared to net increases in fair values of \$2,307 million in the previous quarter. The net decrease in fair values during the fourth quarter was primarily due to an increase in bond yields, while the net increase in fair values during the previous quarter was primarily due to a decrease in bond yields.

#### 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

				the three ths ende				e twelve 1s ended
		ec. 31 2016	Sept. 30 2016		Dec. 31 2015		Dec. 31 2016	Dec. 31 2015
Canada								
Segregated funds, mutual funds								
and other	\$	345	\$	338	\$	328	\$ 1,329	\$ 1,302
ASO contracts		41		39		41	165	157
		386		377		369	1,494	1,459
United States Segregated funds, mutual funds and other		619		566		637	2,311	2,378
Europe								
Segregated funds, mutual funds and other		340		328		327	1,296	1,221
	_	340		320		327	1,290	1,221
Total fee and								
other income	<u>\$</u>	1,345	\$	1,271	\$	1,333	\$ 5,101	\$ 5,058

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.

#### PAID OR CREDITED TO POLICYHOLDERS

#### Paid or credited to policyholders

		For the three months ende		twelve s ended	
	Dec. 31 2016	Sept. 30 2016	Dec. 31 2015	Dec. 31 2016	Dec. 31 2015
Canada	\$ 1,444	\$ 3,485	\$ 2,799	\$11,862	\$ 9,991
United States	387	1,776	1,084	6,271	4,138
Europe	2,542	5,328	1,649	16,542	8,713
Total	\$ 4,373	\$ 10,589	\$ 5,532	\$34,675	\$ 22,842

Amounts paid or credited to policyholders include life and health claims, policy surrenders, maturities, annuity payments, segregated fund guarantee payments, policyholder dividends, experience refund payments and changes in insurance and investment contract liabilities. The changes in contract liabilities include the impact of changes in the fair value of certain invested assets supporting those liabilities as well as changes in the provision for future credit losses. The amounts do not include benefit payments for ASO contracts, segregated funds or mutual funds.

For the three months ended December 31, 2016, consolidated amounts paid or credited to policyholders were \$4.4 billion, including \$7.9 billion of policyholder benefit payments and a \$3.5 billion decrease in contract liabilities. The decrease of \$1.2 billion from the same period in 2015 consisted of a \$3.2 billion decrease in changes in contract liabilities and a \$2.0 billion increase in benefit payments. The decrease in changes in contract liabilities was primarily due to fair value adjustments to insurance contract liabilities as a result of changes in interest rates in Canada, the U.S. and Europe. The increase in benefit payments was primarily due to new and restructured reinsurance treaties, partially offset by the impact of currency movement.

For the twelve months ended December 31, 2016, consolidated amounts paid or credited to policyholders were \$34.7 billion, including \$27.7 billion of policyholder benefit payments and a \$7.0 billion increase in contract liabilities. The increase of \$11.8 billion from the same period in 2015 consisted of a \$6.1 billion increase in changes in contract liabilities and a \$5.7 billion increase in benefit payments. The increase in changes in contract liabilities was primarily due to fair value adjustments to insurance contract liabilities as a result of changes in interest rates in Canada, the U.S. and Europe, partially offset by the impact of the acquisition of The Equitable Life Assurance Society's (Equitable Life) annuity business, which increased contract liabilities in the first quarter of 2015. The increase in benefit payments was primarily due to new and restructured reinsurance treaties.

Compared to the previous quarter, consolidated amounts paid or credited to policyholders decreased by \$6.2 billion. The decrease consisted of a \$6.7 billion decrease in changes in contract liabilities, primarily due to fair value adjustments to insurance contract liabilities as a result of changes in interest rates in Canada, the U.S. and Europe. The decrease was partially offset by a \$0.5 billion increase in benefit payments, primarily due to new reinsurance treaties, moderated by the impact of lower business volumes.

#### OTHER BENEFITS AND EXPENSES

#### Other benefits and expenses

	For the three months ended						For the twelve months ended						
	Dec. 31 2016		Sept. 30 2016		Dec. 31 2015		ī	Dec. 31 2016	[	Dec. 31 2015			
Commissions	\$	853	\$	584	\$	584	\$	2,602	\$	2,218			
Operating and													
administrative expense	es.	1,250		1,180		1,175		4,799		4,466			
Premium taxes		112		109		92		411		339			
Financing charges		75		74		73		302		303			
Amortization of finite													
life intangible assets		44		43		37		177		146			
Restructuring and													
acquisition expenses		35		19		7		63		35			
Total	\$	2,369	\$	2,009	\$	1,968	\$	8,354	\$	7,507			

Other benefits and expenses for the fourth quarter of 2016 of \$2,369 million increased by \$401 million compared to the fourth quarter of 2015, primarily due to higher commissions, driven by higher sales in Canada, as well as an increase in operating and administrative expenses related to increased business volumes and strategic initiatives.

For the twelve months ended December 31, 2016, other benefits and expenses increased by \$847 million to \$8,354 million compared to the same period last year, primarily due to the same reasons discussed for the in-quarter results as well as higher premium taxes.

Other benefits and expenses for the fourth quarter of 2016 increased by \$360 million compared to the previous quarter, primarily due to higher commissions, driven by higher sales in Canada, and higher operating and administrative expenses related to increased business volumes and strategic initiatives.

#### **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 2016, the Company had an effective income tax rate of 18%, up from 8% in the fourth quarter of 2015. The increase in the effective income tax rate for the fourth quarter of 2016 was primarily due to changes in certain tax estimates, which included the positive impact of a true-up of US\$27 million in the Asset Management business unit of the U.S. segment in 2015 that did not recur in 2016.

The Company had an effective income tax rate of 12% for the twelve months ended December 31, 2016 compared to 13% for the same period last year. The decrease in the Company's effective income tax rate was primarily due to one-time items that arose in the first quarter of 2016 due to elections and settlements with tax authorities.

The fourth quarter effective income tax rate of 18% was higher than the third quarter rate of 13%. The increase in the effective income tax rate was primarily due to changes in certain tax estimates.

#### CONSOLIDATED FINANCIAL POSITION

#### ASSETS

#### Assets under administration

		Decemb	er 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	3,171	4,537	18,697	26,405
Segregated funds net assets	74,909	35,414	90,080	200,403
Total assets	153,524	87,243	159,145	399,912
Proprietary mutual funds and institutional net assets	5,852	219,699	33,664	259,215
Total assets under management	159,376	306,942	192,809	659,127
Other assets under administration	15,911	534,428	38,952	589,291
Total assets under administration	\$ 175,287	\$ 841,370	\$ 231,761	\$1,248,418

_	Canada	Un	ited States		Europe		Total
\$	67,701	\$	43,809	\$	50,071	\$	161,581
	5,132		2,465		2,352		9,949
	2,793		4,535		22,883		30,211
	70,269		35,966		91,959		198,194
	145,895		86,775		167,265		399,935
	5,039		218,231		29,210		252,480
	150,934		305,006		196,475		652,415
	15,390		503,125		41,587		560,102
\$	166,324	\$	808,131	\$	238,062	\$	1,212,517
	\$ 	5,132 2,793 70,269 145,895 5,039 150,934 15,390	5,132 2,793 70,269 145,895 5,039 150,934 15,390	5,132     2,465       2,793     4,535       70,269     35,966       145,895     86,775       5,039     218,231       150,934     305,006       15,390     503,125	5,132 2,465 2,793 4,535 70,269 35,966 145,895 86,775 5,039 218,231 150,934 305,006 15,390 503,125	5,132     2,465     2,352       2,793     4,535     22,883       70,269     35,966     91,959       145,895     86,775     167,265       5,039     218,231     29,210       150,934     305,006     196,475       15,390     503,125     41,587	5,132     2,465     2,352       2,793     4,535     22,883       70,269     35,966     91,959       145,895     86,775     167,265       5,039     218,231     29,210       150,934     305,006     196,475       15,390     503,125     41,587

Total assets under administration at December 31, 2016 increased by \$35.9 billion to \$1.2 trillion compared to December 31, 2015, primarily due to the impact of positive market movement and new business growth, mostly offset by the impact of currency movement.

#### 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

					Decer	nber 31, 2016	i		
	_	Canada	Uni	ited 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%
					Decei	mber 31, 2015			
	_	Canada	Un	ited States		Europe		Total	
Bonds									
Government & related (1)	\$	21,732	\$	9,413	\$	19,304	\$	50,449	31%
C 0 - + l (1)		24 200		22.620		20.400		C 1 10 1	40

		Canada		United States		Europe		Total	
Bonds									
Government & related (1)	\$	21,732	\$	9,413	\$	19,304	\$	50,449	31%
Corporate & other (1)		21,388		22,638		20,468		64,494	40
Sub-total bonds		43,120		32,051		39,772		114,943	71
Mortgages		12,691		4,932		4,398		22,021	14
Stocks		6,971		168		734		7,873	5
Investment properties		1,788		5		3,444		5,237	3
Sub-total portfolio investments	_	64,570		37,156		48,348		150,074	93
Cash and cash equivalents		578		627		1,608		2,813	2
Loans to policyholders		2,553		6,026		115		8,694	5
Total invested assets	\$	67,701	\$	43,809	\$	50,071	\$	161,581	100%

<sup>(1)</sup> Comparative figures have been reclassified for presentation purposes.

At December 31, 2016, total invested assets were \$163.2 billion, an increase of \$1.6 billion from December 31, 2015. The increase in invested assets was primarily due to regular business activity, including transferring portfolio investments previously reported as funds held by ceding insurers, as described in note 6 to the Company's December 31, 2016 annual consolidated financial statements. The increase was mostly offset by the impact of currency movement, as the Canadian dollar strengthened against the British pound, U.S. dollar and euro. 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 shortterm investments, was \$116.8 billion or 72% of invested assets at December 31, 2016 and \$114.9 billion or 71% at December 31, 2015. During the second quarter of 2016, the rating of U.K. government and government related bonds changed from AAA to AA as a direct result of rating agency activity in response to the U.K. vote to leave the EU, resulting in a shift between rating categories. The overall quality of the bond portfolio remained high, with 99% of the portfolio rated investment grade and 82% rated A or higher.

#### Bond portfolio quality

	December 31	, 2016		, 2015	
AAA	\$ 27,762	24%	\$	36,434	32%
AA	29,816	26		20,364	18
A	37,787	32		35,623	31
BBB	20,116	17		20,984	18
BB or lower	1,292	1		1,538	1
Total	\$ 116,773	100%	\$ 1	114,943	100%

At December 31, 2016, non-investment grade bonds were \$1.3 billion or 1.1% of the bond portfolio, which was comparable to \$1.5 billion or 1.3% of the bond portfolio at December 31, 2015.

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, 2016								December 31, 2015				
Mortgage loans by type	Insured		Non-insured		Total			Total					
Single family residential	\$	706	\$	1,369	\$	2,075	9%	\$	1,962	9%			
Multi-family residential		2,946		3,041		5,987	28		5,821	26			
Commercial		260		13,329		13,589	63		14,238	65			
Total	\$	3,912	\$	17,739	\$	21,651	100%	\$	22,021	100%			

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The total mortgage portfolio was \$21.7 billion or 13% of invested assets at December 31, 2016, compared to \$22.0 billion or 14% of invested assets at December 31, 2015. Total insured loans were \$3.9 billion or 18% of the mortgage portfolio.

#### Commercial mortgages

		December 31, 2016						December 31, 2015								
	-	Canada		U.S.	I	Europe		Total		Canada		U.S.		Europe		Total
Retail & shopping centres	\$	3,353	\$	633	\$	1,263	\$	5,249	\$	3,367	\$	731	\$	1,692	\$	5,790
Office buildings		1,845		657		729		3,231		1,703		621		946		3,270
Industrial		1,570		1,534		842		3,946		1,595		1,375		977		3,947
Other		340		450		373		1,163		390		435		406		1,231
Total	\$	7,108	\$	3,274	\$	3,207	\$	13,589	\$	7,055	\$	3,162	\$	4,021	\$	14,238

#### Single family residential mortgages

	December 31, 2016		December 31	, 2015
Region				
Ontario	\$ 1,005	49%	\$ 946	49%
Quebec	436	21	405	21
Alberta	140	7	136	7
British Columbia	127	6	123	6
Newfoundland	113	5	105	5
Saskatchewan	86	4	84	4
Nova Scotia	65	3	62	3
Manitoba	53	3	55	3
New Brunswick	46	2	42	2
Other	4	-	4	_
Total	\$ 2,075	100%	\$ 1,962	100%

During the twelve months ended December 31, 2016, single family mortgage originations, including renewals, were \$763 million, of which 26% 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 fulfil 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 22 years as at December 31, 2016.

#### **Equity portfolio**

		December 3	1, 2016	December 31	, 2015
Equity portfolio by type					
Publicly traded stocks	\$	7,988	62%	\$ 7,054	54%
Privately held equities		677	5	819	6
Sub-total Sub-total	_	8,665	67	 7,873	60
Investment properties		4,340	33	5,237	40
Total	\$	13,005	100%	\$ 13,110	100%

#### Investment properties

	December 31, 2016							December 31, 2015							
	 Canada		U.S.		Europe		Total	(	Canada		U.S.		Europe		Total
Office buildings	\$ 702	\$	_	\$	625	\$	1,327	\$	955	\$	_	\$	730	\$	1,685
Industrial	293		-		596		889		288		-		762		1,050
Retail	207		-		1,114		1,321		204		_		1,417		1,621
Other	372		5		426		803		341		5		535		881
Total	\$ 1,574	\$	5	\$	2,761	\$	4,340	\$	1,788	\$	5	\$	3,444	\$	5,237

Equity portfolio – The total equity portfolio was \$13.0 billion or 8% of invested assets at December 31, 2016 compared to \$13.1 billion or 8% of invested assets at December 31, 2015. The equity portfolio consists of publicly traded stocks, privately held equities and investment properties. The increase in stocks of \$0.8 billion was primarily due to an increase in Canadian equity markets. The decrease in investment properties of \$0.9 billion was mainly a result

of the strengthening of the Canadian dollar against the British pound and net dispositions of properties, primarily in Canada.

*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, 2016								Decembe	r 31, 2015		
	Gross mount		irment overy		nirment vision		rrying mount		Gross mount	irment overy		airment vision	arrying mount
Fair value through profit or loss	\$ 231	\$	53	\$	(1)	\$	283	\$	287	\$ 69	\$	(1)	\$ 355
Available-for-sale	8		3		(1)		10		12	2		(3)	11
Loans and receivables	122		-		(43)		79		50	-		(20)	30
Total	\$ 361	\$	56	\$	(45)	\$	372	\$	349	\$ 71	\$	(24)	\$ 396

The gross amount of impaired investments totaled \$361 million or 0.2% of portfolio investments, including funds held by ceding insurers, at December 31, 2016 compared with \$349 million or 0.2% at December 31, 2015, a net increase of \$12 million. The increase in impaired investments was primarily due to new impairments, partially offset by dispositions and repayments, as well as the strengthening of the Canadian dollar against the British pound and U.S. dollar.

The impairment recovery at December 31, 2016 was \$56 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, 2016 was \$45 million, compared to \$24 million at December 31, 2015. The increase was primarily due to the impairment of BHS 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, 2016 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, 2016, the total actuarial provision for future credit losses in insurance contract liabilities was \$2,946 million compared to \$3,558 million at December 31, 2015, a decrease of \$612 million, primarily due to the impact of assumption changes and currency movement, partially offset by normal business activity.

The aggregate of impairment provisions of \$45 million (\$24 million at December 31, 2015) and actuarial provisions for future credit losses in insurance contract liabilities of \$2,946 million (\$3,558 million at December 31, 2015) represents 2.0% of bond and mortgage assets, including funds held by ceding insurers, at December 31, 2016 (2.4% at December 31, 2015).

#### **Energy Sector**

#### Holdings of Energy Sector<sup>(1)</sup> related Bonds, Mortgages and Investment Properties

		December 31, 2016									
2 1 (2)(2)	Cana		U.S.		Europe		Total			Total	
Bonds (2) (3)	\$	1,618	\$	2,102	\$	1,336	\$	5,056	\$	5,216	
Mortgages (4)		2,093		392		44		2,529		2,560	
Investment properties		288		_		_		288		300	
Total	\$	3,999	\$	2,494	\$	1,380	\$	7,873	\$	8,076	

- (1) Energy sector bond holdings are a sub-category of certain industry sectors presented in note 7(a)(ii) in the Company's December 31, 2016 annual consolidated financial statements.
- (2) Amortized cost of these bonds is \$4,823 million at December 31, 2016 and \$5,177 million at December 31, 2015.
- (3) Includes certain funds held by ceding insurers with a carrying value of \$279 million and an amortized cost of \$259 million at December 31, 2016.
- (4) Includes \$625 million of insured mortgages at December 31, 2016 and \$613 million at December 31, 2015.

At December 31, 2016, the Company's holdings of energy sector related investments, including funds held by ceding insurers, were \$7.9 billion (\$8.1 billion at December 31, 2015). This included direct exposure of bond holdings of \$5.1 billion (\$5.2 billion at December 31, 2015), or 2.9% of invested assets including funds held by ceding insurers, and indirect exposure of commercial mortgages and investment properties of \$2.8 billion (\$2.9 billion at December 31, 2015), or 1.7% of invested assets including funds held by ceding insurers.

At December 31, 2016, the Company's energy sector related bond holdings were well diversified across multiple sub-sectors and were high quality with approximately 97% rated investment grade. Approximately half of the portfolio was invested in Midstream and Refining entities and half in Integrated, Independent and Oil Field Services entities.

In addition, the Company's indirect exposure of energy sector related commercial mortgages and investment properties were concentrated in certain geographic regions where the economy is more dependent upon the energy sector and were well diversified across property type – Multi-family (31%), Industrial/Other (28%), Office (23%) and Retail (18%). Approximately 80% of the portfolio was concentrated in the province of Alberta, with the remainder primarily in the state of Texas. The weighted average loan-to-value ratio of the commercial mortgages was 59% at December 31, 2016.

In December 2016, Moody's Investors Service (Moody's) and Standard & Poor's Ratings Services revised their forecasts for crude oil upward. Hydrocarbon price assumptions are a key input into cash flow forecasts and the resulting issuer and sector credit risk profile, particularly for the Integrated, Independent and Oil Field Services sub-sectors. Moody's has changed its outlook to Stable for Integrated and Positive for Independent while the outlook for Oilfield Services remains Negative. Moody's has also maintained its Stable outlook for Midstream and Master Limited Partnerships but has lowered its Refining sub-sector outlook to Negative. Increases to provisions for future credit losses as a result of ratings downgrades specific to the energy sector were modest and impairments were minimal in 2016. Recovering crude oil prices through most of the year has resulted in the general tightening of spreads on bonds held by the Company.

United Kingdom Property Related Exposures
Holdings of United Kingdom Mortgages and Investment Properties

g	December 31, 2016										Dec	ember 31, 2015	
		ti-Family idential		Retail & ping centres		Office uildings	In	dustrial	C	)ther	Total		Total
Mortgages Investment properties	\$	343	\$	1,434 1,094	\$	700 623	\$	923 596	\$	372 416	\$ 3,772 2,729	\$	4,520 3,411
Total	\$	343	\$	2,528	\$	1,323	\$	1,519	\$	788	\$ 6,501	\$	7,931

At December 31, 2016, the Company's holdings of property related investments in the U.K. were \$6.5 billion (\$7.9 billion at December 31, 2015) or 3.8% of invested assets including funds held by ceding insurers. The \$1.4 billion decrease from December 31, 2015 was primarily due to the impact of currency movement, as the Canadian dollar strengthened against the British pound. Holdings in Central London were \$1.9 billion (\$2.1 billion at December 31, 2015) or 1.1% of invested assets including funds held by ceding insurers, while holdings in other regions of the U.K. were \$4.6 billion (\$5.8 billion at December 31, 2015) or 2.7% of invested assets including funds held by ceding insurers. These holdings were well diversified across property type – Retail (39%), Industrial/Other (36%), Office (20%) and Multi-family (5%). The weighted average loan-to-value ratio of the mortgages was 54% and the weighted average debt-service coverage ratio was 2.1 at December 31, 2016. At December 31, 2016, the weighted average mortgage and property lease term was 14 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 2016. 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, 2016, total financial collateral, including initial margin and overcollateralization, received on derivative assets was \$159 million (\$107 million at December 31, 2015) and pledged on derivative liabilities was \$475 million (\$671 million at December 31, 2015). Collateral received on derivative assets increased and collateral pledged on derivative liabilities decreased in 2016, primarily driven by the impact of the strengthening Canadian dollar against the U.S. dollar, British pound and euro on cross-currency swap fair values.

During the twelve month period ended December 31, 2016, the outstanding notional amount of derivative contracts increased by \$0.5 billion to \$17.2 billion, primarily as a result of regular hedging activities, partially offset by the impact of currency movement for foreign denominated derivatives as the Canadian dollar strengthened against the British pound, euro and U.S. dollar.

The Company's exposure to derivative counterparty credit risk, which reflects the current fair value of those instruments in a gain position, increased to \$528 million at December 31, 2016 from \$461 million at December 31, 2015. Market values increased on cross-currency swaps as the end-of-period rates for the Canadian dollar strengthened against the U.S. dollar, British pound and euro.

#### GOODWILL AND INTANGIBLE ASSETS

#### Goodwill and intangible assets

	2016	2015			
Goodwill	\$ 5,977	\$ 5,913			
Indefinite life intangible assets	3,030	3,115			
Finite life intangible assets	942	921			
Total	\$ 9,949	\$ 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 \$9,949 million at December 31, 2016 were comparable to December 31, 2015. Goodwill increased by \$64 million to \$5,977 million driven by the acquisitions of Aviva Health Insurance Limited (Aviva Health) and GloHealth Financial Services Limited (GloHealth) by Irish Life, partially offset by the impact of currency movement. Indefinite and finite life intangible assets decreased by \$64 million during 2016, driven by the impact of currency movement, partially offset by \$35 million of additions to customer contract related finite life intangible assets relating to the acquisitions of Aviva Health and GloHealth, and net additions to computer software.

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 2016, the Company conducted its annual impairment testing of goodwill and intangible assets based on September 30, 2016 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 valuein-use. In addition, there were no impairment charges in 2016 to finite life intangible assets.

Refer to note 9 in the Company's December 31, 2016 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

	Decen	nber 31
	2016	2015
Funds held by ceding insurers	\$10,781	\$ 15,512
Reinsurance assets	5,627	5,131
Premiums in course of collection,		
accounts and interest receivable	4,311	3,553
Other assets	2,263	2,643
Deferred tax assets	1,845	1,891
Owner occupied properties	649	653
Derivative financial instruments	528	461
Fixed assets	304	298
Current income taxes	97	69
Total	\$26,405	\$ 30,211

Total other general fund assets at December 31, 2016 were \$26.4 billion, a decrease of \$3.8 billion from December 31, 2015. The decrease was primarily due to a \$4.7 billion decrease in funds held by ceding insurers, partially offset by an increase of \$0.8 billion in premiums in course of collection, accounts and interest receivable and an increase of \$0.5 billion in reinsurance assets. The decrease in funds held by ceding insurers was primarily due to two transactions that occurred during 2016, which resulted in the related assets now being recorded in Portfolio Investments, as described in note 6 to the Company's December 31, 2016 annual consolidated financial statements, as well as the impact of currency movement as the Canadian dollar strengthened against the British pound.

Other assets comprise several items including prepaid expenses and accounts receivable. Refer to note 11 in the Company's December 31, 2016 annual consolidated financial statements for a breakdown of other assets.

#### INVESTMENTS ON ACCOUNT OF SEGREGATED FUND POLICYHOLDERS

#### Segregated funds

	December 31							
	2016	2015	2014					
Stock and units in unit trusts	\$ 81,033	\$ 80,829	\$ 68,911					
Mutual funds	51,726	50,101	46,707					
Bonds	41,619	42,160	37,912					
Investment properties	11,019	10,839	9,533					
Cash and other	10,837	10,279	8,383					
Mortgage loans	2,622	2,596	2,508					
Sub-total	\$198,856	\$196,804	\$173,954					
Non-controlling mutual funds interest	1,547	1,390	1,012					
Total	\$200,403	\$198,194	\$174,966					
Year-over-year growth	1%	13%	9%					

Investments on account of segregated fund policyholders, which are measured at fair value, increased by \$2.2 billion to \$200.4 billion at December 31, 2016 compared to December 31, 2015, primarily due to the combined impact of market value gains and investment income of \$13.0 billion, mostly offset by the impact of currency movement of \$10.6 billion and net withdrawals of \$0.5 billion.

#### PROPRIETARY MUTUAL FUNDS

#### Proprietary mutual funds and institutional net assets

	December 31		
	2016	2015	
Mutual funds			
Blend equity	\$ 31,328	\$ 40,070	
Growth equity	13,252	14,468	
Equity value	23,163	22,798	
Fixed-income	33,999	34,384	
Money market	164	123	
Great-West Financial Funds (1)	15,856	13,480	
Sub-total	117,762	125,323	
Institutional accounts			
Equity	84,257	77,236	
Fixed-income	48,700	44,458	
Other	8,496	5,463	
Sub-total	141,453	127,157	
Total proprietary mutual funds			
and institutional accounts	\$259,215	\$252,480	

<sup>(1)</sup> At December 31, 2016, mutual funds exclude \$10.9 billion of Putnam managed funds (\$9.1 billion at December 31, 2015), which are included in the categories above.

At December 31, 2016, total proprietary mutual funds and institutional accounts include \$219.7 billion at Putnam and Great-West Financial, \$5.8 billion at Quadrus and \$32.9 billion at Irish Life. Proprietary mutual funds and institutional accounts under management increased by \$6.7 billion, primarily as a result of the positive impact of currency and market movements.

#### Assets supporting insurance and investment contract liabilities

	Participating									
			Account Canada		Canada	Un	ited States	Europe		Total
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	
December 31, 2015										
Bonds	\$	22,306	\$	18,848	\$	23,023	\$	31,982	\$ 96,159	
Mortgage loans		8,341		3,839		3,813		4,358	20,351	
Stocks		4,266		1,732		-		226	6,224	
Investment properties		1,412		7		-		3,342	4,761	
Other assets (1)		9,544		3,736		789		19,181	33,250	
Total assets (2)	\$	45,869	\$	28,162	\$	27,625	\$	59,089	\$ 160,745	
Total insurance and investment contract liabilities (2)	\$	45,869	\$	28,162	\$	27,625	\$	59,089	\$ 160,745	

<sup>(1)</sup> 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.

#### **LIABILITIES**

#### Total liabilities

	December 31			
	2016	2015(1)		
Insurance and investment contract liabilities	\$157,949	\$ 160,745		
Other general fund liabilities	16,552	15,736		
Investment and insurance contracts on account				
of segregated fund policyholders	200,403	198,194		
Total	\$374,904	\$374,675		
	· · · · · · · · · · · · · · · · · · ·			

<sup>(1)</sup> Comparative figures have been reclassified as described in note 33 to the Company's December 31, 2016 consolidated financial statements.

Total liabilities increased by \$0.2 billion to \$374.9 billion at December 31, 2016 from December 31, 2015.

Insurance and investment contract liabilities decreased by \$2.8 billion. The decrease was primarily due to the strengthening of the Canadian dollar against the British pound, euro and U.S. dollar, partially offset by the impact of new business and fair value adjustments. Investment and insurance contracts on account of segregated fund policyholders increased by \$2.2 billion, primarily due to the combined impact of market value gains and investment income of \$13.0 billion, mostly offset by the impact of currency movement of \$10.6 billion and net withdrawals of \$0.5 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.

<sup>(2)</sup> Comparative figures have been reclassified as described in Note 33 to the Company's December 31, 2016 consolidated financial statements.

#### OTHER GENERAL FUND LIABILITIES

#### Other general fund liabilities

	Decem	nber 31
	2016	2015(1)
Debentures and other debt instruments	\$ 5,980	\$ 5,395
Other liabilities	3,836	3,367
Accounts payable	2,049	1,755
Derivative financial instruments	2,012	2,624
Deferred tax liabilities	1,645	1,586
Current income taxes	549	492
Funds held under reinsurance contracts	320	356
Capital trust securities	161	161
Total	\$16,552	\$ 15,736

(1) Comparative figures have been reclassified as described in note 33 to the Company's December 31 2016 consolidated financial statements.

Total other general fund liabilities at December 31, 2016 were \$16.6 billion, an increase of \$0.8 billion from December 31, 2015, primarily due to an increase in accounts payable and other liabilities of \$0.8 billion and increased debentures and other debt instruments of \$0.6 billion, partially offset by a decrease in derivative financial instruments of \$0.6 billion.

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 17 in the Company's December 31, 2016 annual consolidated financial statements for a breakdown of the other liabilities balance and note 15 in the Company's December 31, 2016 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. 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.

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, 2016, the amount of GMWB product in-force in Canada, the U.S., Ireland and Germany was \$3,917 million (\$3,488 million at December 31, 2015).

#### Segregated fund and variable annuity guarantee exposure

				Investm	ent deficie	ncy by b	enefit type		
	Market Value		Income		turity	Death		To	tal (1)
Canada	\$ 31,494	\$	_	\$	16	\$	50	\$	50
United States	12,412		9		-		43		52
Europe									
Insurance & Annuities	8,745		7		-		377		377
Reinsurance (2)	1,169		391		_		20		411
Total Europe	9,914		398		-		397		788
Total	\$ 53,820	\$	407	\$	16	\$	490	\$	890

- (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, 2016.
- (2) Reinsurance exposure is to markets in Canada and the United States.

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, 2016. 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 \$4 million in-quarter (\$4 million for the fourth quarter of 2015) and \$21 million year-to-date (\$15 million year-to-date for 2015), 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, 2016, debentures and other debt instruments increased by \$585 million to \$5,980 million compared to December 31, 2015, primarily due to the issuance of a  ${\in}\,500$  million 10-year senior bond. The bond pays an annual coupon of 1.75% and was priced at 99.718% of par for a yield to maturity of 1.781%. The bond is rated A+ by Standard & Poor's Rating Services and is listed on the Irish Stock Exchange. This was Lifeco's second debt issuance in the euro market. On February 8, 2017, Irish Life Assurance Plc, a subsidiary of the Company, redeemed its 5.25%  ${\in}\,200$  million subordinated debenture notes at their principal amount together with accrued interest.

During the second quarter of 2016, Great-West Life & Annuity Insurance Capital, LP II, a subsidiary, elected to not call its US\$300 million 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 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.

December 31, 2016

Refer to note 15 in the Company's December 31, 2016 annual consolidated financial statements for further details of the Company's debentures and other debt instruments.

#### CAPITAL TRUST SECURITIES

At December 31, 2016, 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, 2016 were CLiCS – Series B with a fair value of \$50 million and principal value of \$37 million (fair value of \$50 million at December 31, 2015).

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.

#### **E**OUITY

Share capital outstanding at December 31, 2016 was \$9,644 million, which comprises \$7,130 million of common shares, \$2,264 million of non-cumulative 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, 2016, the Company had 986,398,335 common shares outstanding with a stated value of \$7,130 million compared to 993,350,331 common shares with a stated value of \$7,156 million at December 31, 2015.

The Company commenced a normal course issuer bid (NCIB) on January 8, 2016 for one year to purchase and cancel up to 8,000,000 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. The NCIB was amended effective February 23, 2016 to purchase up to 20,000,000 common shares.

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. As of December 31, 2016, the Company had entered into private agreements for the repurchase of 1,600,000 of its common shares. Subsequent to December 31, 2016, the Company did not purchase any additional common shares prior to the expiration of this arrangement on January 7, 2017.

During the twelve months ended December 31, 2016, the Company repurchased and subsequently cancelled 7,967,881 common shares (2015 - 6,279,856) at an average cost per share of \$33.54 (2015 - \$35.17) under its NCIB, which included shares repurchased under private agreements.

Subsequent to December 31, 2016, 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 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.

#### **Preferred shares**

Great-West Lifeco Inc

At December 31, 2016, the Company had 10 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 \$2,264 million, \$213 million and \$37 million, respectively.

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

			Great-wes	t Lifeto Ilit.		
	Series F	Series G	Series H	Series I	Series L	Series M
General Type	Fixed Rate					
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
Shares Outstanding	7,740,032	12,000,000	12,000,000	12,000,000	6,800,000	6,000,000
Amount Outstanding (Par)	\$193,500,800	\$300,000,000	\$300,000,000	\$300,000,000	\$170,000,000	\$150,000,000
Yield	5.90%	5.20%	4.85%	4.50%	5.65%	5.80%
Earliest Issuer Redemption Date	Sep 30, 2008	Dec 31, 2009	Sep 30, 2010	Jun 30, 2011	Dec 31, 2014	Mar 31, 2015
Earliest Issuer Redemption Date	Sep 30, 2008	Dec 31, 2009	Sep 30, 2010	Jun 30, 2011	Dec 31, 2014	Mar 31,

			Great-Wes	t Lifeco Inc.		
	Series N (1)	Series O (2)	Series P	Series Q	Series R	Series S
General Type	5-Year Rate Reset	Floating 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	Nov 23, 2010	Dec 31, 2015	Feb 22, 2012	Jul 6, 2012	Oct 11, 2012	May 22, 2014
Shares Outstanding	8,524,422	1,475,578	10,000,000	8,000,000	8,000,000	8,000,000
Amount Outstanding (Par)	\$213,110,550	\$36,889,450	\$250,000,000	\$200,000,000	\$200,000,000	\$200,000,000
Yield	2.176%	Floating	5.40%	5.15%	4.80%	5.25%
Earliest Issuer Redemption Date	Dec 31, 2015	Dec 31, 2015	March 31, 2017	Sep 30, 2017	Dec 31, 2017	Jun 30, 2019

<sup>(1)</sup> The Series N, Non-Cumulative 5-Year Rate Reset First Preferred Shares carry an annual fixed dividend rate of 2.176% 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 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 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.

<sup>(2)</sup> The Series O, Non-Cumulative Floating Rate First Preferred Shares carry a floating 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 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.

#### Non-Controlling Interests

The Company's non-controlling interests include participating account surplus in subsidiaries and non-controlling interests in subsidiaries. Refer to note 18 in the Company's December 31, 2016 annual consolidated financial statements for further details of the Company's non-controlling interests.

#### Non-controlling interests

_	Dece	mber 31
	2016	2015(1)
Participating account surplus in subsidiaries:		
Great-West Life	\$ 610	\$ 607
London Life	1,798	1,780
Canada Life	357	222
Great-West Financial	17	17
	\$ 2,782	\$ 2,626
Non-controlling interests in subsidiaries	\$ 224	\$ 195

<sup>(1)</sup> Comparative figures have been reclassified as described in note 33 to the Company's December 31, 2016 consolidated financial statements.

#### 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, 2016, the Company and its operating subsidiaries held cash, cash equivalents and short-term bonds of \$7.9 billion (\$7.1 billion at December 31, 2015) and other liquid assets and marketable securities of \$91.6 billion (\$90.5 billion at December 31, 2015). Included in the cash, cash equivalents and short-term bonds at December 31, 2016 was \$1.1 billion (\$0.9 billion at December 31, 2015) 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. For regulated entities based in Europe, the local solvency capital regime has changed to the Solvency II basis, effective January 1, 2016. In 2016, the Company effectively managed capital volatility under the new regulations. Transitional measures and other measures approved by the regulators for long-term guaranteed business act to reduce the impact of current market volatility on Solvency II regulatory capital.

#### Cash Flows

#### Cash flows

	F	Fo	s ended						
	2016		2015		2016			2015	
Cash flows relating to the following activities:									
Operations	\$	1,389	\$	1,063	\$	6,254	\$	5,123	
Financing		510		(194)		(1,045)		(1,683)	
Investment		(1,689)		(1,802)		(4,565)		(3,424)	
		210		(933)		644		16	
Effects of changes in exchange rates on cash and cash equivalents		(11)		33		(198)		299	
Increase (decrease) in cash and cash equivalents in the period		199		(900)		446		315	
Cash and cash equivalents, beginning of period		3,060		3,713		2,813		2,498	
Cash and cash equivalents, end of period	\$	3,259	\$	2,813	\$	3,259	\$	2,813	

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 2016, cash and cash equivalents increased by \$199 million from September 30, 2016. Cash flows provided by operations during the fourth quarter of 2016 were \$1,389 million, an increase of \$326 million compared to the fourth quarter of 2015. Cash flows provided by financing were \$510 million, primarily due to the issuance of euro-denominated debt as well as an increase to a line of credit of a subsidiary of \$166 million, partially offset by payments of dividends to the preferred and common shareholders of \$371 million. For the three months ended December 31, 2016, cash flows were used by the Company to acquire an additional \$1,689 million of investment assets.

For the twelve months ended December 31, 2016, cash and cash equivalents increased by \$446 million from December 31, 2015. Cash flows provided by operations were \$6,254 million, an increase of \$1,131 million compared to the same period in 2015. Cash flows used in financing were \$1,045 million, primarily used for payments of dividends to the preferred and common shareholders of \$1,492 million, the purchase and cancellation of \$267 million in common shares and a \$31 million decrease in a line of credit of a subsidiary, partially offset by the issuance of euro-denominated debt. In the first quarter of 2016, the Company increased the quarterly dividend to common shareholders from \$0.326 per common share to \$0.346 per common share. For the twelve months ended December 31, 2016, cash flows were used by the Company to acquire an additional \$4,565 million of investment assets.

#### COMMITMENTS/CONTRACTUAL OBLIGATIONS

#### Commitments/contractual obligations

		Payments due by period													
At December 31, 2016	Total			1 year		2 years		3 years		4 years		5 years		Over 5 years	
Debentures and other debt instruments	\$	5,585	\$	284	\$	200	\$	_	\$	500	\$	_	\$	4,601	
2) Operating leases															
– office		664		109		99		74		59		49		274	
– equipment		17		6		6		3		1		1		-	
3) Purchase obligations		283		108		53		62		42		15		3	
4) Credit-related arrangements															
(a) Contractual commitments		1,172		1,084		88		_		_		-		-	
(b) Letters of credit	see	note 4(b)	below												
5) Pension contributions		273		273		_		_		_		_		_	
Total contractual obligations	\$	7,994	\$	1,864	\$	446	\$	139	\$	602	\$	65	\$	4,878	

- 1) Refer to note 15 in the Company's December 31, 2016 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\$2.9 billion of which US\$2.7 billion were issued as of December 31, 2016.

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, 2016, Great-West Life subsidiaries have issued US\$96 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\$66 million to external parties.

As well, certain London Reinsurance Group subsidiaries and London Life have provided LOCs totaling US\$6 million to external parties.

#### To internal parties

GWL&A Financial Inc. has a US\$1.2 billion LOC facility. As of December 31, 2016, US\$1,167 million has 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.

Great-West Life & Annuity Insurance Company also has a US\$70 million LOC facility in place. As of December 31, 2016, 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 The Canada Life Group (U.K.) Limited.

Canada Life Reinsurance has a US\$500 million LOC facility. As of December 31, 2016, 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\$627 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, the Office of the Superintendent of Financial Institutions (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, 2016 was 240% (238% at December 31, 2015). London Life's MCCSR ratio at December 31, 2016 was 217% (226% at December 31, 2015). Canada Life's MCCSR ratio at December 31, 2016 was 275% (260%) at December 31, 2015). The MCCSR ratio does not take into account any impact from \$1.1 billion of liquidity at the Lifeco holding company level at December 31, 2016 (\$0.9 billion at December 31, 2015).

The MCCSR ratio of 240% for Great-West Life includes 4 points for the impact of a new €200 million subordinated loan, relating to a portion of the proceeds from the €500 million bonds issued by Lifeco, which was downstreamed, during the fourth quarter of 2016. The related impact for Canada Life was 7 points and nil for London Life. This new debenture will replace an existing perpetual capital note at Irish Life Assurance Plc (ILA) that ILA announced it is redeeming on February 8, 2017. As a result of the redemption of these notes, the MCCSR ratio for Great-West Life and Canada Life will decrease in the first quarter of 2017. The net MCCSR impact of the new intercompany debenture in the fourth quarter of 2016, combined with the redemption in the first quarter of 2017 is nil.

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, 2016, the Risk Based Capital (RBC) ratio of Great-West Life & Annuity Insurance Company, Lifeco's regulated U.S. operating company, is estimated to be 455% 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**

On September 12, 2016, OSFI issued the Life Insurance Capital Adequacy Test (LICAT) guideline. Effective January 1, 2018, OSFI plans for the LICAT guideline to replace the MCCSR guideline. OSFI has stated that the LICAT guideline is not expected to increase the amount of capital in the industry compared to the current MCCSR guideline. Since OSFI developed the LICAT guideline to better align risk measures with the economic realities of the life insurance business, capital distribution and impact by risk and by company may change. OSFI continues to conduct assessments of the new guideline, which will help to inform the final calibration of the LICAT guideline.

The Company will continue ongoing dialogue with OSFI, the Canadian Institute of Actuaries, The Canadian Life and Health Insurance Association and other industry participants during the assessment period and subsequent implementation phase.

Due to the evolving nature of IFRS and proposed future changes to IFRS for the measurement of insurance contract liabilities, there will likely be further regulatory capital and accounting changes, some of which may be significant.

## 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)

	2016	2016	2015
Canada	19.9%	19.0%	20.2%
U.S. Financial Services (2)	10.6%	11.0%	13.0%
U.S. Asset Management (Putnam) (2)	(2.9)%	(0.3)%	1.4%
Europe	17.1%	16.9%	16.8%
Lifeco Corporate	(5.2)%	(3.6)%	(2.7)%
Total Lifeco Net Earnings Basis	13.8%	13.8%	14.7%

- (1) Return on Equity is the calculation of net earnings divided by the average common shareholders' equity over the trailing four quarters.
- (2) U.S. Financial Services includes U.S. Corporate, excluding restructuring costs relating to Putnam of \$20 million, which are included in U.S. Asset Management (Putnam).

The Company reported ROE of 13.8% at December 31, 2016 compared to 14.7% at December 31, 2015.

#### **R**ATINGS

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 2016, 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. During the fourth quarter of 2016, Standard & Poor's Rating Services incorporated Irish Life as part of its group ratings. ILA is not part of the group ratings for Fitch Ratings.

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 2016.

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	Α					
	Subordinated Debt					Α	
Moody's Investors Service	Insurance Financial Strength		Aa3	Aa3	Aa3		Aa3
Standard & Poor's Ratings Services	Insurer Financial Strength		AA	AA	AA		AA
	Issuer Rating					A+	
	Senior Debt	A+					
	Subordinated Debt				AA-	A-	

## 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 three primary business units included in this segment. Through the Individual Insurance business unit, the Company provides life, disability and critical illness insurance products to individual clients. Through the Wealth Management business unit, the Company provides accumulation products and annuity products for both group and individual clients in Canada. Through the Group Insurance business unit, the Company provides life, accidental death and dismemberment, critical illness, health and dental protection, creditor and direct marketing insurance as well as specialty products to group clients in Canada.

## **B**USINESS **P**ROFILE

#### INDIVIDUAL INSURANCE

In Canada, Individual Insurance consists of Individual Life Insurance and Living Benefits. Products and services are distributed through diverse, complementary channels: financial security advisors and brokers associated with Great-West Life; financial security advisors associated with London Life's Freedom 55 Financial™ division and the Wealth & Estate Planning Group; and the distribution channels Canada Life supports, including independent advisors associated with managing general agencies (MGAs), as well as national accounts, including Investors Group, a member of the Power Financial Corporation group of companies.

The various distribution channels are accessed through distinct product labels offered by Great-West Life, London Life and Canada Life. Unique products and services are offered to meet the needs of each distribution channel to allow the Company to maximize opportunities while minimizing channel conflict.

# WEALTH MANAGEMENT

The Wealth Management business unit consists of Individual Retirement & Investment Services (IRIS) and Group Retirement Services (GRS) product lines. The Company utilizes diverse, complementary distribution channels and is a leader in Canada for all Wealth Management product lines. Products are distributed through the same channels as described above for Individual Insurance as well as independent brokers, consultants and direct business for the Company's GRS business.

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 Investment Services Ltd. (Quadrus). Unique products and services are offered to meet the needs of each distribution channel and customer to allow the Company to maximize opportunities while minimizing channel conflict.

### **G**ROUP INSURANCE

In Canada, the Company offers effective benefit solutions for small, medium and large plan sponsors. Through the Company's extensive network of Group sales offices and Sales and Marketing Centres located across the country, it distributes its products through brokers, consultants and financial security advisors. The Company offers a wide range of Group products and services including life, accidental death and dismemberment, critical illness, disability, health and dental protection as well as specialty products.

The Company's creditor and direct marketing business, conducted through its Canada Life subsidiary, offers effective benefit solutions for large financial institutions, credit card companies, alumni and association groups. Canada Life is a leader in the creditor insurance business in Canada.

#### MARKET OVERVIEW

#### PRODUCTS AND SERVICES

### INDIVIDUAL INSURANCE

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

#### MARKET POSITION

- Manages largest portfolio of life insurance in Canada as measured by
- Pre-eminent provider of individual disability and critical illness insurance with 27% market share of in-force premium(1)

#### PRODUCTS AND SERVICES

#### Individual Life Insurance

- Term Life
- Universal Life
- · Participating Life

## Living Benefits

- Disability
- · Critical Illness

#### DISTRIBUTION

#### Associated with:

## **Great-West Life Distribution**

- · 2,868 Great-West Life financial security advisors
- 2,068 advisors associated with a number of intercorporate arrangements
- · 5,698 independent brokers

#### London Life Distribution

• 3,760 Freedom 55 Financial and Wealth & Estate Planning Group financial security advisors

### Canada Life Distribution

- 7,737 independent brokers associated with 36 MGAs
- 1,897 advisors associated with 14 national accounts
- 3,509 Investors Group consultants who actively sell Canada Life products
- 141 direct brokers and producer groups

(1) As at September 30, 2016

#### WEALTH MANAGEMENT

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

The Company offers a wide range of segregated funds through its multiple distribution channels including 97 London Life segregated funds to individual Freedom 55 Financial™ clients, 90 Canada Life segregated funds to individual Canada Life clients, 93 Great-West Life segregated funds to individual Great-West Life clients and over 200 segregated funds to Envision Group Capital Accumulation Fund clients.

Quadrus offers 59 mutual funds under the Quadrus Group of Funds  $^{\text{TM}}$  brand and over 5,000 third-party mutual funds. Mackenzie Financial Corporation, a member of the Power Financial Corporation group of companies, administers the Quadrus Group of Funds.

#### MARKET POSITION

- 27% market share of individual segregated funds (1)
- 17% market share of group capital accumulation plans(2)
- 23% new sales market share of single premium group annuities(1)

#### PRODUCTS AND SERVICES

#### **Group Retirement Services**

- Group Capital Accumulation Plans
- · Non-registered savings programs
- · Deferred profit sharing plans
- · Defined contribution pension plans
- Group RRSPs & TFSAs

## 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

## Individual Retirement & Investment Services

- · 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

## Associated with:

#### Great-West Life Distribution

- 2,868 Great-West Life financial security advisors
- 2,068 advisors associated with a number of intercorporate arrangements
- 5,698 independent brokers

#### London Life Distribution

 3,760 Freedom 55 Financial and Wealth & Estate Planning Group financial security advisors

#### Canada Life Distribution

- 7,737 independent brokers associated with 36 MGAs
- 1,897 advisors associated with 14 national accounts
- 3,509 Investors Group consultants who actively sell Canada Life products
- 141 direct brokers and producer groups

**Quadrus Investment Services Ltd.** (also included in Great-West Life and London Life advisor counts):

• 4,133 investment representatives

#### **Group Retirement Services**

• Benefits Consultants, Brokers and Affiliated advisors (as above)

(1) As at September 30, 2016

(2) As at June 30, 2016

#### **GROUP INSURANCE**

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<sup>(1)</sup>
- 21% market share for employee/employer plans(2)
- Leading market share with 39% for creditor products<sup>(2)</sup> with coverage provided to over 7.4 million plan members<sup>(1)</sup>
- 5% market share for direct marketing products<sup>(2)</sup> with coverage provided to over 0.6 million plan members<sup>(1)</sup>

### PRODUCTS AND SERVICES

## Life and Health

- Life
- · Disability
- Critical Illness
- · Accidental death & dismemberment
- Dental
- · Expatriate coverage
- Extended health care

#### Creditor

- Creditor life
- · Creditor disability
- · Creditor job loss
- · Creditor critical illness
- · Creditor credit card outstanding balance

#### DISTRIBUTION

- 119 account managers and sales staff located in 18 Group Offices
- 81 Regional Employee Benefits Managers and Selectpac Sales Specialists located in 28 Sales and Marketing Centres
- (1) As at December 31, 2016
- (2) As at December 31, 2015

## COMPETITIVE CONDITIONS

#### INDIVIDUAL INSURANCE

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, provides important strategic advantages within the Canadian market.

### WEALTH MANAGEMENT

The wealth management marketplace is 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 competitors have entered the marketplace leading to increased competition.

#### Selected consolidated financial information - Canada

Competition focuses on service, variety of investment options, investment performance, product features, price and financial strength, as indicated by ratings issued by nationally recognized agencies. Wealth Management's broad spectrum of distribution associates, including exclusive and independent channels, provide important strategic advantages within the Canadian market.

#### **G**ROUP INSURANCE

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

	Fo	For the twelve months ended				
	Dec. 31 2016	Sept. 30 2016	Dec. 31 2015	Dec. 31 2016	Dec. 31 2015	
Premiums and deposits	\$ 6,681	\$ 6,054	\$ 6,110	\$ 24,661	\$ 23,564	
Sales	3,871	3,117	3,492	12,933	12,635	
Fee and other income	386	377	369	1,494	1,459	
Net earnings – common shareholders	326	289	262	1,218	1,195	
Total assets	\$ 153,524	\$ 152,484	\$ 145,895			
Proprietary mutual funds and institutional net assets	5,852	5,625	5,039			
Total assets under management	159,376	158,109	150,934			
Other assets under administration	15,911	15,815	15,390			
Total assets under administration	\$ 175,287	\$ 173,924	\$ 166,324			

# Net earnings - common shareholders

	For the three months ended						For the twelve months ended				
	Dec. 31 2016		Sept. 30 2016			Dec. 31 2015		Dec. 31 2016		ec. 31 2015	
Individual Insurance	\$	103	\$	70	\$	51	\$	345	\$	307	
Wealth Management		132		99		119		436		479	
Group Insurance		98		110		74		400		432	
Corporate		(7)		10		18		37		(23)	
Net earnings	\$	326	\$	289	\$	262	\$	1,218	\$	1,195	

## **2016 DEVELOPMENTS**

- · Premiums and deposits for the twelve months ended December 31, 2016 were \$24.7 billion compared to \$23.6 billion for the same period in 2015. Premiums and deposits in the fourth guarter of 2016 were \$6.7 billion, a 9% increase from the same quarter last year.
- Sales for the twelve months ended December 31, 2016 were \$12.9 billion compared to \$12.6 billion for the same period in 2015. Sales in the fourth guarter of 2016 were \$3.9 billion, an 11% increase from the same quarter in 2015, which reflects strong sales across all lines of business including a 161% increase in Individual Life sales and a 29% increase in Group Retirement Services sales. Group Insurance led the market in sales both in the quarter and for the full year of 2016.
- Fee and other income for the twelve months ended December 31, 2016 was \$1,494 million compared to \$1,459 million for the same period in 2015. Fee and other income was \$386 million for the fourth guarter of 2016, an increase of \$17 million compared to the same quarter in 2015.
- Net earnings for the twelve months ended December 31, 2016 were \$1,218 million compared to \$1,195 million for the same period in 2015. Net earnings for the fourth quarter of 2016 were \$326 million, an increase of \$64 million compared to the same quarter last year, primarily due to favourable mortality and morbidity experience as well as higher net fee income, partially offset by lower contributions from insurance contract liability basis changes.

- In 2017, Great-West Life, London Life and Canada Life will realign their operations into two new business units: one focused on individual customers and the other on group customers. As part of the realignment, a new strategic customer marketing function is being created to provide a more holistic customer experience through digital and innovative capabilities and services.
- The Company is an active participant in the pension plan de-risking market within Canada. During the fourth quarter of 2016, Lifeco's Canadian operations entered into its first longevity swap transaction. This transaction supplements the other products and strategies that the Company offers to assist companies in managing their pension plan risk.
- Group Insurance extended its market reach and self-service options, with several new initiatives and online offerings:
  - o Great-West Life announced that in early 2017 it will begin providing small group insurance product options to Collage Technologies Inc., which offers online automated HR services and tools to Canadian businesses.
  - o Great-West Life's e-Benefit portal is available to advisors in the individual health benefits market for a more efficient and convenient sales experience.
  - o Creditor Insurance launched a Customer Self-Service Portal, which allows claimants to securely view the status of their disability or job loss claim.
- Great-West Life and its subsidiaries, London Life and Canada Life, were honoured to again be selected as one of Canada's Top 100 Employers. They were also named as one of Canada's Top Employers for Young People.

## BUSINESS UNITS - CANADA

#### INDIVIDUAL INSURANCE

#### **OPERATING RESULTS**

	For the three months ended							For the twelve months en		
Premiums and deposits	Dec. 31 2016		Sept. 30 2016		Dec. 31 2015		Dec. 31 2016		Dec. 31 2015	
	\$ 1,543	\$	1,298	\$	1,304	\$	5,371	\$	4,894	
Sales	341		164		137		785		530	
Net earnings	103		70		51		345		307	

## **Premiums and deposits**

Individual Insurance premiums for the fourth quarter of 2016 increased by \$239 million to \$1,543 million compared to the same quarter last year. Individual Life premiums for the quarter increased by \$237 million to \$1,458 million compared to the same quarter last year, primarily due to a 24% increase in participating life premiums. Living Benefits premiums of \$85 million were comparable to same quarter last year.

For the twelve months ended December 31, 2016, Individual Insurance premiums increased by \$477 million to \$5,371 million compared to the same period last year. Individual Life premiums increased by \$472 million to \$5,035 million compared to the same period last year, primarily due to a 13% increase in participating life premiums. Living Benefits premiums of \$336 million were comparable to the same period last year.

Individual Insurance premiums for the fourth quarter of 2016 increased by \$245 million compared to the previous quarter, primarily due to a 26% increase in participating life premiums.

#### Sales

Individual Insurance sales for the fourth quarter of 2016 increased by \$204 million to \$341 million compared to the same quarter last year, reflecting an increase in participating life sales of \$185 million or 183%, and an increase in Universal Life and Term Life insurance product sales of \$19 million or 73%. The increase in Individual Life sales was primarily due to changes to tax exempt legislation effective in January 2017. Living Benefits product sales of \$10 million were comparable to the same quarter last year.

For the twelve months ended December 31, 2016, Individual Insurance sales increased by \$255 million to \$785 million compared to the same period last year. Participating life sales increased by \$225 million or 58%, while Universal Life and Term Life insurance product sales increased by \$27 million or 25%, primarily due to the same reasons discussed for the in-quarter results. Living Benefit product sales increased \$3 million or 9% compared to the same period last year.

Individual Insurance sales for the fourth quarter of 2016 increased by \$177 million compared to the previous quarter, primarily due to a 134% increase in participating life sales and a 41% increase in Universal Life and Term Life insurance product sales, driven by the same reasons discussed for the in-quarter results.

# **Net earnings**

Net earnings for the fourth quarter of 2016 increased by \$52 million to \$103 million compared to the same quarter last year. The increase was primarily due to higher contributions from investment experience and favourable mortality experience, partially offset by less favourable morbidity and policyholder behaviour experience.

For the twelve months ended December 31, 2016, net earnings increased by \$38 million to \$345 million compared to the same period last year. The increase was primarily due to higher contributions from investment experience and favourable mortality experience, partially offset by lower contributions from insurance contract liability basis changes, higher new business strain as well as less favourable morbidity and policyholder behaviour experience.

Net earnings for the fourth quarter of 2016 increased by \$33 million compared to the previous quarter. The increase was primarily due to higher contributions from investment experience and lower new business strain, partially offset by less favourable morbidity experience.

For the fourth quarter of 2016, net earnings attributable to the participating account increased by \$138 million to \$178 million compared to the same quarter last year, primarily due to higher contributions from insurance contract liability basis changes.

For the twelve months ended December 31, 2016, net earnings attributable to the participating account increased by \$80 million to \$191 million compared to the same period last year. The increase was primarily due to higher contributions from insurance contract liability basis changes, partially offset by lower contributions from investment experience on participating account surplus assets and higher new business strain.

Net earnings attributable to the participating account for the fourth quarter of 2016 increased by \$181 million compared to the previous quarter, primarily due to higher contributions from insurance contract liability basis changes and lower expenses, partially offset by higher new business strain.

#### OUTLOOK - INDIVIDUAL INSURANCE

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

The Individual Insurance division delivered strong results in 2016. 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 2017 and beyond. The Company has reviewed its strategies with the goal of achieving superior organic growth from profitable products.

In 2017, the Company will continue to provide advisors with strategies and tools for helping clients focus on achieving long-term financial security regardless of market fluctuations. This approach is beneficial to strong client retention as well as helping advisors attract new clients 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 products while maintaining its focus on sales and service support for large cases 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.

The Company's diversified offering of Individual Insurance products including participating whole life, term, universal life, disability, and critical illness insurance, combined with a commitment to new business service will position it to continue to achieve market leading sales in 2017. The Company will continue to enhance its suite of product solutions, including launching updated participating whole life, term and universal life insurance products that comply with new tax exempt legislation effective January 2017, and will continue to focus on growing its business organically by constantly improving service to clients.

## WEALTH MANAGEMENT

### **OPERATING RESULTS**

		For the three months ended							For the twelve months en		
		Dec. 31 2016		Sept. 30 2016		Dec. 31 2015	Dec. 31 2016		Dec. 31 2015		
Premiums and deposits		3,041	\$	2,716	\$	2,804	\$	10,979	\$	10,832	
Sales	3	3,350		2,863		3,220		11,476		11,472	
Fee and other income		331		326		316		1,279		1,247	
Net earnings		132		99		119		436		479	

# **Premiums and deposits**

Premiums and deposits for the fourth quarter of 2016 increased by \$237 million to \$3,041 million compared to the same quarter last year. The increase was primarily due to higher premiums and deposits related to single premium group annuities (SPGAs), partially offset by lower premiums and deposits related to group capital accumulation plans (GCAP).

For the twelve months ended December 31, 2016, premiums and deposits increased by \$147 million to \$10,979 million compared to the same period last year. The increase was primarily due to higher premiums and deposits related to SPGAs and GCAP products, partially offset by lower deposits related to individual investment funds, reflective of a decline in industry asset cash flows pertaining to segregated funds and mutual funds.

Premiums and deposits for the fourth quarter of 2016 increased by \$325 million compared to the previous quarter. The increase was primarily due to higher premiums and deposits related to SPGAs and individual investment funds.

## Sales

Sales for the fourth quarter of 2016 increased by \$130 million to \$3,350 million compared to the same quarter last year. The increase was primarily due to higher sales of SPGAs, partially offset by lower sales of individual investment funds.

For the twelve months ended December 31, 2016, sales of \$11,476 million were comparable to the same period last year as higher sales of SPGAs and GCAP products were offset by lower sales of individual investment funds.

Sales for the fourth quarter of 2016 increased by \$487 million compared to the previous quarter. The increase was primarily driven by higher sales related to SPGAs and individual investment funds, partially offset by lower sales of GCAP products.

For the GCAP and proprietary individual investment fund business, net cash inflows for the fourth quarter of 2016 were \$193 million compared to \$358 million in the same quarter last year and net cash outflows of \$784 million in the previous quarter, which included a \$910 million withdrawal of a lower margin GCAP plan. Excluding the GCAP plan withdrawal discussed for the in-quarter results, net cash inflows for the twelve months ended December 31, 2016 were \$725 million compared to \$788 million for the same period last year.

#### Assets under administration

	December 31					
		2016		2015		
Assets under management						
Individual Retirement & Investment Services						
Risk-based products	\$	5,527	\$	5,739		
Segregated funds	:	31,931		29,836		
Proprietary mutual funds		5,530		4,917		
Group Retirement Services						
Risk-based products		7,595		7,161		
Segregated funds		42,978		40,433		
Institutional assets		322		122		
Total assets under management	\$ 9	93,883	\$	88,208		
Other assets under administration (1)						
Individual Retirement & Investment Services		7,240		6,620		
Group Retirement Services		538		526		
Total other assets under administration	\$	7,778	\$	7,146		
Total assets under administration	\$1	01,661	\$	95,354		
Summary by business/product						
Individual Retirement & Investment Services	!	50,228		47,112		
Group Retirement Services	!	51,433		48,242		
Total assets under administration	\$1	01,661	\$	95,354		

<sup>(1)</sup> Includes mutual funds distributed by Quadrus Investment Services Ltd., 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 2016 increased by \$15 million to \$331 million compared to the same quarter last year, primarily due to higher average assets under administration driven by higher average equity market levels, partially offset by lower margins.

Fee and other income for the twelve months ended December 31, 2016 increased by \$32 million to \$1,279 million compared to the same period last year. The increase was primarily due to growth in other income related to distribution arrangements as well as higher fee income driven by higher average assets under administration, partially offset by lower margins.

Fee and other income for the fourth quarter of 2016 increased by \$5 million compared to the previous quarter, primarily due to higher average assets under administration driven by higher average equity market levels.

## **Net earnings**

Net earnings for the fourth quarter of 2016 increased by \$13 million to \$132 million compared to the same quarter last year. The increase was primarily due to higher net fee income, higher new business volumes and more favourable longevity experience, partially offset by lower contributions from insurance contract liability basis changes.

For the twelve months ended December 31, 2016, net earnings decreased by \$43 million to \$436 million compared to the same period last year. The decrease was primarily due to lower contributions from insurance contract liability basis changes. less favourable longevity experience, lower contributions from investment experience and higher operating expenses, partially offset by higher new business volumes.

Net earnings for the fourth quarter of 2016 increased by \$33 million compared to the previous quarter, primarily due to higher contributions from insurance contract liability basis changes, more favourable longevity experience, higher contributions from investment experience and higher new business volumes.

### OUTLOOK - WEALTH MANAGEMENT

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

In 2016, the Company's HelloLife™ Planner won the 2016 Internet Advertising Competition Award for "Best Insurance Interactive Application". The planner allows the Company's financial security advisors to help individuals create a retirement program tailored to their specific needs. The Company also launched a pilot for Wayfinder, a new online application that allows Group Retirement Services members to create customized financial plans. Wayfinder uses innovative tools to allow members to connect directly with online financial coaches, and to import data from external financial institutions to create a complete picture of their financial status. The Company will continue to focus on serving the needs of the aging demographic and enhancing the client's experience through various initiatives targeted at both individual and group customers.

In 2017, the Company will continue to provide advisors with strategies and tools for helping clients focus on achieving long-term investment success. This approach benefits the Company by improving existing asset retention and by helping advisors attract new client deposits to the Company. A key distribution strategy is to maximize use of common tools, processes and support, while tailoring support to specific segments of advisors where appropriate.

The Company's reputation for strength and stability, combined with prudent business practices as well as the depth and breadth of Wealth Management's distribution channels, positions the Company well for 2017 and beyond. Wealth Management's strategy and organization are focused on achieving growth from profitable products.

The Company will continue to develop, price and market its comprehensive and competitive range of wealth management products to both retail and group clients. The Company continues to observe fee income compression due to the competitive market; however, targets to offset these impacts by growing assets under management and continuing to improve the Company's operational efficiency.

The Company will focus on strategic investment in the business, operational efficiency improvements and disciplined expense management to deliver strong financial results.

#### **GROUP INSURANCE**

### **OPERATING RESULTS**

		For the twelve months en								
		Dec. 31 2016		Sept. 30 2016		Dec. 31 2015		Dec. 31 2016		Dec. 31 2015
Premiums and deposits		2,097	\$	2,040	\$	2,002	\$	8,311	\$	7,838
Sales		180		90		135		672		633
Fee and other income		41		39		41		165		157
Net earnings		98		110		74		400		432

# **Premiums and deposits**

Premiums and deposits for the fourth quarter of 2016 increased by \$95 million to \$2,097 million compared to the same quarter last year, due to an increase in premiums and deposits across most market segments.

For the twelve months ended December 31, 2016, premiums and deposits increased by \$473 million to \$8,311 million compared to the same period last year, for the same reasons discussed for the in-quarter results.

Premiums and deposits for the fourth quarter of 2016 increased by \$57 million compared to the previous quarter, primarily due to an increase in large case market premiums and deposits.

#### Sales

Sales for the fourth quarter of 2016 increased by \$45 million to \$180 million compared to the same quarter last year. The increase was primarily due to higher sales in the large case and creditor markets. Sales of creditor products and large cases can be highly variable from quarter to quarter.

For the twelve months ended December 31, 2016, sales increased by \$39 million to \$672 million compared to the same period last year. The increase was due to higher sales across most market segments. Sales for the fourth quarter of 2016 increased by \$90 million compared to the previous quarter, due to higher sales across all market segments.

## Fee and other income

Fee and other income of \$41 million for the fourth quarter of 2016 was comparable to both the same quarter last year and to the previous quarter.

Fee and other income of \$165 million for the twelve months ended December 31, 2016 was also comparable to the same period last year.

## **Net earnings**

Net earnings for the fourth quarter of 2016 increased by \$24 million to \$98 million compared to the same quarter last year. The increase was primarily due to more favourable non-refund long-term disability morbidity experience and more favourable mortality experience, partially offset by lower contributions from insurance contract liability basis changes.

For the twelve months ended December 31, 2016, net earnings decreased by \$32 million to \$400 million compared to the same period last year. The decrease was primarily due to less favourable long-term disability morbidity experience, mostly related to large non-refund cases, and higher income taxes, as net earnings in 2015 were more favourably impacted by changes to certain income tax estimates, partially offset by more favourable mortality experience and higher contributions from insurance contract liability basis changes. The Company continues to implement rate increases with respect to long-term disability contracts, where appropriate, when contracts are renewed.

Net earnings for the fourth quarter of 2016 decreased by \$12 million compared to the previous quarter, primarily due to lower contributions from insurance contract liability basis changes, partially offset by more favourable mortality experience and higher contributions from investment experience.

### OUTLOOK - GROUP INSURANCE

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

During 2016, the Company maintained its strong competitive position in the Canadian group insurance market with leading or strong market shares in all case size, regional and benefit market segments. The Company believes that this market share position, together with its expense management capabilities and 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.

### CANADA CORPORATE

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

For the fourth quarter of 2016, Canada Corporate had a net loss of \$7 million compared to net earnings of \$18 million for the same quarter last year. The change in net earnings was primarily due to lower net investment income and higher operating expenses. In addition, net earnings for the fourth quarter of 2015 were more favourably impacted by changes to certain tax estimates.

For the twelve months ended December 31, 2016, Canada Corporate had net earnings of \$37 million compared to a net loss of \$23 million for the same period last year. The change in net earnings was primarily due to the favourable impact of changes to certain income tax estimates and higher net investment income, which included a gain on sale of an investment property during the second quarter, partially offset by higher operating expenses.

For the fourth quarter of 2016, Canada Corporate had a net loss of \$7 million compared to net earnings of \$10 million in the previous quarter. The change in net earnings was primarily due to lower net investment income. In addition, net earnings for the third quarter of 2016 were more favourably impacted by changes to certain tax estimates.

## Outlook - Canada

In 2017, Great-West Life, London Life and Canada Life will realign their operations into two new business units: one focused on individual customers and the other on group customers, supported by a new strategic customer marketing function. With the goal of creating a more holistic customer experience, productivity gains and cost savings associated with these changes will support earnings growth balanced with reinvestment in customer-centered innovations and service offerings. As part of the realignment, Wealth Management's Individual Retirement & Investment Services product lines will combine with the Individual Insurance business unit to create a business unit that is focused on individual customers. Wealth Management's Group Retirement Services product lines will combine with the Group Insurance business unit to create a business unit that is focused on group customers.

# 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<sup>(4)</sup>, providing services for over 8 million participant accounts and 36,334 plans<sup>(1)</sup>
- 24% market share in state and local government deferred compensation plans, based on number of participant accounts<sup>(2)</sup>
- 32% market share of individual life insurance sold through the retail bank channel  $^{\scriptscriptstyle{(3)}}$
- 10% market share of executive benefits markets life insurance purchased by financial institutions<sup>(3)</sup>
- Great-West Lifetime Funds are the 13<sup>th</sup> largest target date fund offering in the United States<sup>(1)</sup>

#### 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, 2016
- (2) As at September 30, 2016
- (3) Market share based on annualized Q1 Q3 2016 sales data
- (4) As at December 31, 2015

#### ASSET MANAGEMENT

#### MARKET POSITION

- A global asset manager with assets under management of US\$152 billion<sup>(1)</sup>
- 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 strategic 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

#### **D**ISTRIBUTION

#### 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 157,500 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 retirement plan 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, 2016

### **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

	F	For the twelve	e months ended		
	Dec. 31 2016	Sept. 30 2016	Dec. 31 2015	Dec. 31 2016	Dec. 31 2015
Premiums and deposits	\$ 14,644	\$ 14,916	5 \$ 15,956	\$ 59,627	\$ 53,648
Sales	18,384	23,011	31,630	98,218	95,715
Fee and other income	619	566	637	2,311	2,378
Net earnings – common shareholders	55	78	125	249	409
Net earnings – common shareholders (US\$)	41	60	92	188	318
Total assets	\$ 87,243	\$ \$ 86,824	\$ 86,775		
Proprietary mutual funds and institutional net assets	219,699	216,458	218,231		
Total assets under management	306,942	303,282	305,006		
Other assets under administration	534,428	514,616	503,125		
Total assets under administration	\$ 841,370	\$ 817,898	\$ 808,131		

### Net earnings - common shareholders

	For the three months ended						For the twelve months end				
	ec. 31 016		ot. 30 016		ec. 31 2015		ec. 31 2016		ec. 31 1015		
Financial Services	\$ 80	\$	89	\$	86	\$	333	\$	384		
Asset Management (1)	(3)		(6)		41		(52)		32		
Corporate (1)	(22)		(5)		(2)		(32)		(7)		
	\$ 55	\$	78	\$	125	\$	249	\$	409		
Financial Services (US\$)	\$ 59	\$	68	\$	63	\$	250	\$	299		
Asset Management (US\$) (1)	(2)		(5)		31		(39)		25		
Corporate (US\$) (1)	(16)		(3)		(2)		(23)		(6)		
	\$ 41	\$	60	\$	92	\$	188	\$	318		

<sup>(1)</sup> For the three and twelve months ended December 31, 2016, Asset Management net earnings exclude restructuring expenses of \$20 million (US\$15 million), which are included in U.S. Corporate.

# **2016 DEVELOPMENTS**

- Net earnings for the twelve months ended December 31, 2016 were US\$188 million, a decrease of US\$130 million compared to the same period in 2015. Net earnings for the three months ended December 31, 2016 were US\$41 million, a decrease of US\$51 million compared to the same quarter last year. Included in net earnings for the three and twelve months ended December 31, 2016 were restructuring costs of US\$15 million relating to Putnam.
- On April 6, 2016, the U.S. Department of Labor 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. Compliance with the rule will generally be required by April 10, 2017 (certain parts by January 1, 2018). 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 U.S. Presidential Administration has directed the Department of Labor to review the impact of the rule, but it is uncertain at this time whether there will be a delay in the implementation date. As such, the Company continues with its implementation plan to comply with the original compliance date.
- The recent elections in the U.S. have brought into focus the prospects for significant policy changes, including corporate federal tax reform. Both Congress and the President share the

- same goal of reducing corporate income tax rates for businesses. A reduction in the corporate tax rate would likely have a favourable impact on the Company's effective tax rate in the years subsequent to the year of enactment. Any change in tax laws and rates may affect recorded deferred tax assets and deferred tax liabilities and the effective tax rate in the future. A reduction in the statutory corporate tax rate would result in a reduction in the deferred tax asset or deferred tax liability, which may give rise to a one-time negative impact on the financial results of operations in the year of enactment. Any one-time adjustment to the deferred tax accounts would not affect cash taxes paid.
- During the fourth quarter of 2016, Putnam announced that it was undertaking US\$65 million in expense reductions and was realigning its resources to better position itself for current and future opportunities. These expense reductions are being addressed through a reduction in staff, elimination of certain non-core business programs and vendor consolidation. As of December 31, 2016, approximately US\$40 million in annualized reductions has been achieved, with the remainder to be realized over 2017. As part of this effort, Putnam has reduced its staff by nearly eight percent, primarily operations and technology professionals, but also a small number of investment management professionals. For the three months ended December 31, 2016, the Company incurred restructuring costs relating to these initiatives that reduced net earnings by US\$15 million. These restructuring costs are included in the U.S. Corporate results.

# BUSINESS UNITS - UNITED STATES

#### FINANCIAL SERVICES

## **2016 DEVELOPMENTS**

- Premiums and deposits for the twelve months ended December 31, 2016 of US\$10.7 billion were comparable to the same period last year. Premiums and deposits for the three months ended December 31, 2016 were US\$2.7 billion, a decrease of US\$1.1 billion compared to the same quarter last year, primarily due to fewer large plan sales in Empower Retirement.
- Sales for the twelve months ended December 31, 2016 were U\$\$39.3 billion, down from U\$\$43.2 billion during the same period last year. Sales in the fourth quarter of 2016 were U\$\$5.5 billion, a decrease of U\$\$10.0 billion compared to the same quarter in 2015, primarily due to fewer large plan sales in Empower Retirement.
- Fee and other income for the twelve months ended December 31, 2016 was US\$1,029 million compared to US\$973 million for the same period in 2015. Fee and other income for the three months ended December 31, 2016 was US\$288 million, an increase of US\$28 million from the same quarter last year.
- Net earnings for the twelve months ended December 31, 2016 were US\$250 million compared to US\$299 million for the same period in 2015. Net earnings for the three months ended December 31, 2016 were US\$59 million, a decrease of US\$4 million from the same quarter last year.

- Empower Retirement continues to incur strategic and business development expenses as it focuses on enhancements, which will improve the client-facing experience as well as streamline the back-office processing over the next several years. The Company originally anticipated investing approximately US\$150 million in total on this multi-year initiative and had invested US\$149 million by December 31, 2016. The Company expects the remaining investment to complete integration activities to be approximately US\$10 million. In 2015, these costs decreased net earnings by US\$34 million. For the three and twelve months ended December 31, 2016, these costs have decreased net earnings by US\$3 million and US\$22 million, respectively.
- The Company has set an annual cost savings target of US\$40 million to US\$50 million pre-tax, expected from the investment in the Empower Retirement business. Integration activities are expected to be completed by the second quarter of 2017 with the annual reduction of operating costs fully reflected upon the completion of the business transformation in the next two to three years. These synergies are expected to be achieved through efficiencies from the conversion of business onto a single back-office platform, increased utilization of Great-West Global, which launched in the third quarter of 2015, with over 565 professionals based in India, as well as scale-driven cost improvements. Ongoing operations will include amortization expense from system and infrastructure enhancements. 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 over 8 million at December 31, 2016 from over 7.5 million at December 31, 2015.

## **OPERATING RESULTS**

	For the three months ended							For the twelve months		
	 Dec. 31 2016	Sept. 30 2016		Dec. 31 2015		Dec. 31 2016		Dec. 31 2015		
Premiums and deposits	\$ 3,525	\$	3,575	\$	5,087	\$	14,156	\$	13,798	
Sales	7,265		11,670		20,761		52,747		55,865	
Fee and other income	383		335		349		1,362		1,247	
Net earnings	80		89		86		333		384	
Premiums and deposits (US\$)	\$ 2,650	\$	2,729	\$	3,796	\$	10,680	\$	10,688	
Sales (US\$)	5,462		8,908		15,493		39,324		43,195	
Fee and other income (US\$)	288		256		260		1,029		973	
Net earnings (US\$)	59		68		63		250		299	

## **Premiums and deposits**

Premiums and deposits for the fourth quarter of 2016 decreased by US\$1.1 billion to US\$2.7 billion compared to the same quarter last year, primarily due to lower large plan sales in Empower Retirement in 2016.

For the twelve months ended December 31, 2016, premiums and deposits of US\$10.7 billion were comparable to the same period last year. Empower Retirement had lower sales partially offset by higher deposits from existing participants and higher net transfers from retail investment options. This net decrease was offset by higher sales in the executive benefits, retail bank insurance and individual annuity lines of business for Individual Markets.

Premiums and deposits for the fourth quarter of 2016 of US\$2.7 billion were comparable to the previous quarter.

#### Sales

Sales in the fourth quarter of 2016 decreased by US\$10.0 billion to US\$5.5 billion compared to the same quarter last year, primarily due to a decrease in Empower Retirement sales. The decrease in

Empower Retirement - customer account values (US\$)

Empower Retirement sales was primarily due to lower large plan sales driven by two large plan sales in the fourth quarter of 2015, which did not recur in 2016. Large plan sales can be highly variable from period to period and tend to be lower margin.

For the twelve months ended December 31, 2016, sales decreased by US\$3.9 billion to US\$39.3 billion compared to the same period last year, due to a decrease of US\$4.3 billion in Empower Retirement sales, partially offset by an increase of US\$0.4 billion in Individual Markets. The decrease in Empower Retirement sales was primarily due to lower large plan sales. The increase in Individual Markets was due to higher sales in the executive benefits, retail bank insurance and individual annuity lines of business.

Sales in the fourth quarter of 2016 decreased by US\$3.4 billion compared to the previous quarter. The decrease was primarily due to a decrease of US\$3.2 billion in Empower Retirement sales, driven by lower large plan sales reflecting one large plan sale in the third quarter of 2016 that did not recur, as well as lower sales in the executive benefits line of business for Individual Markets.

	twelve months ended December 31					1	at December 3	r <b>31</b>		
	_	2016		2015		2016	2015		% Change	
General account – fixed options	\$	1,226	\$	527	\$	12,219	\$	10,993	11%	
Segregated funds – variable options		(162)		(801)		19,421		19,583	(1)	
Proprietary mutual funds (1)		3,665		9,212		19,950		16,285	23	
Unaffiliated retail investment options & administrative services only		34,243		(12,930)		398,825		364,582	9	
	\$	38 972	\$	(3 992)	\$	450 415	\$	411 443	9%	

Change for the

(1) At December 31, 2016, proprietary mutual funds included US\$8.2 billion in Putnam managed funds (US\$6.6 billion at December 31, 2015).

Empower Retirement customer account values at December 31, 2016 increased by US\$39.0 billion compared to December 31, 2015, 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 2016 increased by US\$28 million to US\$288 million compared to the same quarter last year. Included in fee and other income for the fourth quarter of 2016 were reclassification adjustments of US\$33 million while the fourth quarter of 2015 included adjustments of US\$18 million relating to variable-asset based fee income. Excluding these adjustments, fee and other income increased US\$13 million, primarily due to higher average equity market levels and growth in participants.

For the twelve months ended December 31, 2016, fee and other income increased by US\$56 million to US\$1,029 million compared to the same period last year. Excluding the adjustments discussed for the in-quarter results, the increase in fee and other income was US\$41 million, primarily due to higher asset-based fees, driven by growth in these assets, due to positive net cash flows and higher average equity market levels.

Fee and other income for the fourth quarter of 2016 increased by US\$32 million compared to the previous quarter, primarily due to the adjustment discussed for the in-quarter results.

## **Net earnings**

Net earnings for the fourth quarter of 2016 decreased by US\$4 million to US\$59 million compared to the same quarter last year. Included in net earnings for the fourth quarter of 2015 was an adjustment of US\$11 million to the contingent consideration related to the J.P. Morgan Retirement Plan Services (RPS) acquisition. Excluding this adjustment, net earnings increased by US\$7 million, primarily due to higher contributions from contract liability basis changes, higher net fee income and higher contributions from investment experience, partially offset by higher operating expenses, driven primarily by business growth. Fourth quarter 2016 results included US\$2 million of strategic and business development expenses related to Empower Retirement, compared to US\$7 million for the fourth quarter of 2015.

For the twelve months ended December 31, 2016, net earnings decreased by US\$49 million to US\$250 million compared to the same period last year. Net earnings in 2016 included the positive impact of a management election to claim foreign tax credits of US\$19 million, while net earnings in 2015 included an adjustment of US\$11 million discussed for the in-quarter results. Excluding these items, net earnings decreased by US\$57 million primarily due to higher operating expenses and lower contributions from investment experience, partially offset by higher contributions from contract liability basis changes. Included in the year-to-date net earnings were US\$16 million of strategic and development expenses related to Empower Retirement, compared to US\$28 million for the same period in 2015.

Net earnings for the fourth quarter of 2016 decreased by US\$9 million compared to the previous quarter, primarily due to higher operating expenses.

## 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 2017, 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 2016, 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 2017, investments will continue to be made to improve the customer web experiences, including adding innovative capabilities and ease of service products. These efforts in 2016 and 2017 are expected to increase customer retention and ultimately increase participant retirement savings.

In 2017, Great-West Financial will continue to pursue operational efficiencies. The conversion of the recordkeeping business to a single back-office platform continues and is expected to be completed in the first half of 2017. Upon completion of the conversion, Empower Retirement will provide a single recordkeeping platform. This platform includes a unique, interactive web-based experience which was launched in 2015 to help participants understand their retirement income needs. Great-West Global non-client facing operations 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 2016 and 2015. 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. Since June 2016, the Company has added 45 new broker dealers to its annuity platform, bringing the total number of advisors within the primary distribution channel for retirement income products, to more than 45,000. The new products launched in 2016 are expected to increase sales in 2017. 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 that generated higher regional and corporate bank sales in 2016 are expected to drive future sales growth.

### ASSET MANAGEMENT

## **2016 DEVELOPMENTS**

- Putnam's ending assets under management (AUM) at December 31, 2016 of US\$152.1 billion increased by US\$3.8 billion compared to the same period last year, while average AUM for the twelve months ended December 31, 2016 of US\$148.0 billion decreased by US\$7.8 billion compared to the same period last year.
- Sales for the twelve months ended December 31, 2016 were US\$34.3 billion compared to US\$31.1 billion for the same period in 2015. Putnam's sales for the three months ended December 31, 2016 were US\$8.4 billion compared to US\$8.1 billion for the same period last year, driven by an increase in mutual fund sales.
- Fee income for the twelve months ended December 31, 2016 was US\$716 million compared to US\$885 million for the same period in 2015. For the three months ended December 31, 2016, fee income was US\$178 million, a decrease of US\$38 million compared to the same period last year.
- Putnam continues to sustain strong investment performance relative to its peers. As of December 31, 2016, approximately 85% of Putnam's fund assets performed at levels above the Lipper median on a five-year basis.
- For the 27th 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 25 of those years and the winner of DALBAR's Total Client Experience award for the past five years.
- In the fourth quarter of 2016, Putnam was ranked as the number one digital engagement leader for financial advisors, brokers and other intermediaries by DST kasina, LLC.

### **OPERATING RESULTS**

	For the three months ended					For the twelve months ended				
	_	Dec. 31 2016	!	Sept. 30 2016			_	Dec. 31 2016		Dec. 31 2015
Sales	\$	11,119	\$	11,341	\$	10,869	\$	45,471	\$	39,850
Fee income										
Investment management fees		194		194		218		775		864
Performance fees		(6)		(13)		14		(30)		28
Service fees		37		39		44		157		173
Underwriting & distribution fees		11		11		12		47		66
Fee income		236		231		288		949		1,131
Core net earnings (loss) (1) (3)		(4)		9		23		(17)		56
Less: Financing and other expenses (after-tax) (1)		1		(15)		18		(35)		(24)
Reported net earnings (loss) (3)	_	(3)		(6)		41		(52)		32
Sales (US\$) Fee income (US\$)	\$	8,360	\$	8,657	\$	8,111	\$	34,295	\$	31,097
Investment management fees (US\$)		146		148		163		585		676
Performance fees (US\$)		(4)		(10)		11		(23)		23
Service fees (US\$)		28		30		33		119		135
Underwriting & distribution fees (US\$)		8		8		9		35		51
Fee income (US\$)	_	178		176		216		716		885
Core net earnings (loss) (US\$) (1) (3)		(3)		7		17		(12)		43
Less: Financing and other expenses (after-tax) (US\$) (1)		1		(12)		14		(27)		(18)
Reported net earnings (loss) (US\$) (3)		(2)		(5)		31		(39)		25
Pre-tax operating margin (2) (3)		(0.1)%		7.0%		13.5%		(1.9)%		8.5%
Average assets under management (US\$)	\$	151,903	\$	151,740	\$	151,216	\$	148,003	\$	155,778

<sup>(1)</sup> 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.

## Sales

Sales for the fourth quarter of 2016 were US\$8.4 billion compared to US\$8.1 billion for the same quarter last year. The increase was due to an increase in mutual fund sales of US\$0.4 billion, partially offset by lower institutional sales of US\$0.1 billion.

For the twelve months ended December 31, 2016, sales increased by US\$3.2 billion to US\$34.3 billion compared to the same period last year. Institutional sales increased by US\$4.7 billion, while mutual fund sales decreased by US\$1.5 billion.

Sales in the fourth quarter of 2016 decreased by US\$0.3 billion compared to the previous quarter, due to a US\$1.2 billion decrease in institutional sales, mostly offset by a US\$0.9 billion increase in mutual fund 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 2016 decreased by US\$38 million to US\$178 million compared to the same quarter last year. The decrease was primarily due to lower asset-based fees reflecting lower average AUM, driven by a reduction in mutual funds, reflective of the decline in industry flows in the segments where Putnam operates, as well as lower performance fees on mutual funds and institutional products.

For the twelve months ended December 31, 2016, fee income decreased by US\$169 million to US\$716 million compared to the same period last year. The decrease was primarily due to the same reasons discussed for the in-quarter results, as well as lower service fees reflecting a decrease in the number of accounts.

Fee income for the fourth quarter of 2016 increased by US\$2 million compared to the previous quarter, primarily due to increased performance fees due to the seasonality in which these fees were earned, partially offset by lower investment management fees as discussed for the in-quarter results.

<sup>(2)</sup> 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.

<sup>(3)</sup> 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.

## **Net earnings**

The core net loss (a non-IFRS financial measure) for the fourth quarter of 2016 was US\$3 million, excluding restructuring costs of US\$15 million, compared to core net earnings of US\$17 million for the same quarter last year. The decrease in net earnings was primarily due to lower net fee income and lower net investment income, driven by unrealized losses on seed capital, partially offset by lower compensation costs. In the fourth quarter of 2016, the reported net loss, including financing and other expenses, was US\$2 million compared to reported net earnings of US\$31 million for the same quarter last year. Financing and other expenses for the fourth quarter of 2016 represent an expense recovery of US\$1 million, compared to an expense recovery of US\$14 million for the same quarter last year. Included in financing and other expenses was the positive impact of an adjustment to certain income tax estimates of US\$11 million for the current quarter, compared to US\$27 million for the same quarter last year.

For the twelve months ended December 31, 2016, the core net loss was US\$12 million, excluding restructuring costs discussed for the in-quarter results, compared to core net earnings of US\$43 million for the same period last year. The decrease was primarily due to lower net fee income, partially offset by higher net investment income and lower compensation costs. For the twelve months ended December 31, 2016, the reported net loss, including financing and other expenses, was US\$39 million compared to reported net earnings of US\$25 million for the same period last year. Financing and other expenses for the twelve month period ended December 31, 2016 increased by US\$9 million to US\$27 million compared to the same period last year, primarily due to the positive impact of adjustments to certain income tax estimates of US\$17 million for the current year compared to US\$27 million for the same period last year.

The core net loss for the fourth quarter of 2016 was US\$3 million, excluding restructuring costs discussed for the in-quarter results, compared to core net earnings of US\$7 million for the previous quarter. Core net earnings for the third quarter of 2016 included a one-time expense recovery of US\$8 million relating to the amortization of certain sales-based commissions due to a change in accounting estimate. Excluding this item, the core net loss increased by US\$2 million, primarily due to lower net investment income, driven by unrealized losses on seed capital, mostly offset by lower compensation costs. The reported net loss, including financing and other expenses, for the fourth quarter of 2016 was US\$2 million compared to US\$5 million for the previous quarter. Financing and other expenses for the fourth quarter of 2016 represent an expense recovery of US\$1 million compared to expenses of US\$12 million for the previous quarter. This change was primarily due to the positive impact of adjustments to certain income tax estimates discussed for the in-quarter results.

#### ASSETS UNDER MANAGEMENT

#### Assets under management (\$US)

	For t	he three months en	ded	For the twelve months ended				
	Dec. 31 2016	Sept. 30 2016	Dec. 31 2015	Dec. 31 2016	Dec. 31 2015			
Beginning assets	\$ 153,798	\$ 147,650	\$ 146,638	\$ 148,370	\$ 157,572			
Sales – Mutual funds	4,636	3,771	4,252	17,115	18,593			
Redemptions – Mutual funds	(5,560)	(5,363)	(6,543)	(24,654)	(22,735)			
Net asset flows – Mutual funds	(924)	(1,592)	(2,291)	(7,539)	(4,142)			
Sales – Institutional	3,724	4,886	3,859	17,180	12,504			
Redemptions – Institutional	(4,251)	(2,838)	(2,772)	(13,025)	(11,221)			
Net asset flows – Institutional	(527)	2,048	1,087	4,155	1,283			
Net asset flows – Total	(1,451)	456	(1,204)	(3,384)	(2,859)			
Impact of market/performance	(225)	5,692	2,936	7,136	(6,343)			
Ending assets	\$ 152,122	\$ 153,798	\$ 148,370	\$ 152,122	\$ 148,370			
Average assets under management								
Mutual funds	71,679	72,563	80,180	72,326	84,689			
Institutional assets	80,224	79,177	71,036	75,677	71,089			
Total average assets under management	\$ 151,903	\$ 151,740	\$ 151,216	\$ 148,003	\$ 155,778			

Average AUM for the three months ended December 31, 2016 was US\$151.9 billion, an increase of US\$0.7 billion compared to the same quarter last year, primarily due to the cumulative impact of positive markets over the twelve month period, mostly offset by the cumulative impact of net asset outflows over the same period. Net asset outflows for the fourth quarter of 2016 were US\$1.5 billion compared to US\$1.2 billion for the same quarter last year. In-quarter mutual fund net asset outflows were US\$0.9 billion and institutional net asset outflows were US\$0.6 billion.

Average AUM for the twelve months ended December 31, 2016 decreased by US\$7.8 billion to US\$148.0 billion compared to the same period last year, primarily due to the cumulative impact of net asset outflows. Net asset outflows for the twelve months ended December 31, 2016 were US\$3.4 billion compared to US\$2.9 billion for the same period last year. Year-to-date mutual fund net asset outflows of US\$7.5 billion were partially offset by institutional net asset inflows of US\$4.1 billion.

Average AUM increased by US\$0.2 billion compared to the previous quarter, primarily due to the impact of markets, driven by the timing of market movements during the quarters.

## 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 2017, 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, Defined Contribution Investment Only and Registered Investment Advisors, while maintaining its industry recognized reputation for service excellence.

Innovation will remain a key differentiator in 2017, 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 2017, while at the same time managing firm-wide expenses, as the firm seeks to build a scalable, profitable asset management franchise.

### UNITED STATES CORPORATE

United States 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 2016, the net loss increased by US\$14 million to US\$16 million compared to the same quarter in 2015, primarily due to higher restructuring costs. Fourth quarter 2016 results included restructuring costs of US\$15 million relating to Putnam and US\$1 million relating to RPS, compared to US\$2 million of RPS related restructuring costs for the same quarter last year.

For the twelve months ended December 31, 2016, the net loss increased by US\$17 million to US\$23 million compared to the same period in 2015, primarily due to higher restructuring costs as well as a legal settlement related to discontinued operations. Included in the year-to-date results were US\$15 million of restructuring costs relating to Putnam and US\$6 million of restructuring costs relating to RPS, compared to US\$6 million of RPS related restructuring costs for the same period last year.

The net loss for the three months ended December 31, 2016 increased by US\$13 million to US\$16 million compared to the previous quarter, primarily due to higher restructuring costs, partially offset by a legal settlement related to discontinued operations in third quarter of 2016 that did not recur.

## **E**UROPE

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 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 £35 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. In 2015, the Company acquired a block of payout annuities from Equitable Life for £875 million with the agreement that Canada Life would provide future pension payments on the annuities. The transfer of the block of annuities was completed in February, 2016 following court approval.

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. On August 1, 2016, Irish Life completed the acquisition of Aviva Health Insurance Ireland Limited and assumed control of GloHealth Financial Services Limited. The new Irish health insurance business operates under the Irish Life Health brand. Irish Life Health offers individual and corporate health plans, distributed through independent brokers and direct channels. Irish Life Investment Managers (ILIM) is the Company's fund management operation in Ireland and manages over €63 billion of assets. ILIM manages assets on behalf of companies in the Lifeco group as well as a wide range of institutional and retail clients. occupational defined benefit and defined contribution pensions, large multinational corporations, charities and domestic companies and is the largest manager of Irish pension assets.

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 and casualty 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 (5)
- A market leader in group income protection, with 19% share (5)
- Among the top three insurers in payout annuities, with a market share in excess of 10% (Advisor only)(2)
- A market leading international life company selling into the U.K. market, with 24% market share(3)
- Among the top five in the onshore unit-linked single premium bond market, with 6% market share(3)
- (1) As at December 31, 2016
- (2) Market share based on annualized Q1 to Q3 2016 data through IFAs, restricted whole market advisors and Non-Advised Distributor
- (3) As at September 30, 2016
- (4) As at June 30, 2016
- (5) As at December 31, 2015

### INSURANCE & ANNUITIES (CONT'D)

#### MARKET POSITION (CONT'D)

#### Ireland

- The market leading life assurance company, with 43% share<sup>(4)</sup>
- Strong position in the retail life and pensions market, with a 31% share<sup>(4)</sup>
- Leading positions in the group pensions, group risk and corporate annuities markets with a 57% share<sup>(4)</sup>
- ILIM is the largest institutional fund manager in Ireland with a 47% share<sup>(5)</sup> and over € 63 billion assets under management<sup>(1)</sup>
- Third largest health insurance business through its Irish Life Health brand<sup>(5)</sup>

## Germany

- One of the top three insurers in the independent intermediary unitlinked market<sup>(5)</sup>
- $\bullet \ \ \ Among the top ten in the overall unit-linked market <math display="inline">^{(5)}$

#### PRODUCTS AND SERVICES

#### U.K.

- Individual and Bulk Payout Annuities
- Fixed Term Annuities
- · Pension Investment
- · Savings
- Life Insurance
- · Income Protection (Disability)
- · Critical Illness

#### 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 2016 data through IFAs, restricted whole market advisors and Non-Advised Distributor
- (3) As at September 30, 2016
- (4) As at June 30, 2016
- (5) As at December 31, 2015

#### REINSURANCE

#### MARKET POSITION

- Among the top two life reinsurers in the U.S. for assumed structured life reinsurance<sup>(1)</sup>
- Positioned to participate in the developments of the evolving European structured life reinsurance market
- 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

#### **D**ISTRIBUTION

- Independent Reinsurance Brokers
- · Direct Placements

(1) As at November, 2015

# **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 three unit-linked single premium bond provider in the U.K.

The market for payout annuities increased in 2016. 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 and maintained its market share in this market 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 2016 remained relatively flat. The more profitable retail sales have been maintained and this is an area of continued focus. Future estate planning continues to be an area of focus for U.K. advisors and Canada Life International is among the leading companies in this sector of the market. In the fourth quarter of 2016, Canada Life added a Capital Redemption Bond option to the key products in both the Isle of Man and Ireland, the first international life group to offer this choice in both jurisdictions.

The impact of Brexit remains uncertain as both the U.K. and EU prepare to start exit negotiations later in 2017.

#### **I**RELAND

The Company maintained its market-leading presence in Ireland through Irish Life and continues to be the largest life assurance company growing its market share to 43%. 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 (ILIM) is Ireland's largest institutional fund manager with over €63 billion of assets under management, including funds managed for other companies within the Lifeco group, as at December 31, 2016.

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

Setanta Asset Management (Setanta), 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 €8.5 billion of assets under management as at December 31, 2016.

#### **G**ERMANY

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. The market for traditional German insurance products has been challenging following the introduction of Solvency II and the further reduction

in the statutory guaranteed interest rate on these products. Similar to 2015, 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 products. Several competitors are now focusing on growing their share of this market, which increased competition for this business. However, an industry survey released in November 2015 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 clients' value diversification. 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.

The 2016 Atlantic Hurricane season was the most active and costly since 2012. There was only one event, Hurricane Matthew, which had a material impact on the U.S. Current industry estimates of insured losses arising from Hurricane Matthew range from US\$4 billion to US\$9 billion. The Company does not expect to incur claims from this hurricane. The pricing in the property catastrophe market continues to be challenging, driven by capacity in the industry.

### Selected consolidated financial information - Europe

		For the three months ended								hs ended
	Dec. 31 2016			Sept. 30 2016		Dec. 31 2015		Dec. 31 2016		Dec. 31 2015
Premiums and deposits	\$	8,714	\$	8,292	\$	6,056	\$	33,178	\$	27,763
Fee and other income		340		328		327		1,296		1,221
Net earnings – common shareholders		307		313		303		1,200		1,174
Total assets	\$	159,145	\$	162,181	\$	167,265				
Proprietary mutual funds and institutional net assets		33,664		34,461		29,210				
Total assets under management		192,809		196,642		196,475				
Other assets under administration		38,952		40,044		41,587				
Total assets under administration (1)	\$	231,761	\$	236,686	\$	238,062				

(1) At December 31, 2016, total assets under administration excludes \$7.9 billion of assets managed for other business units within the Lifeco group of companies (\$7.2 billion at September 30, 2016).

## Net earnings - common shareholders

	For the three months ended							For the twelve months ended				
			Sept. 30 2016		ec. 31 2015	Dec. 31 2016			Dec. 31 2015			
Insurance & Annuities	\$ 225	\$	251	\$	234	\$	927	\$	886			
Reinsurance	86		54		73		277		313			
Europe Corporate	(4)		8		(4)		(4)		(25)			
Net earnings	\$ 307	\$	313	\$	303	\$	1,200	\$	1,174			

## **2016 DEVELOPMENTS**

- Net earnings for the twelve months ended December 31, 2016 were \$1,200 million, an increase of \$26 million compared to the same period in 2015. Net earnings for the three months ended December 31, 2016 were \$307 million, an increase of \$4 million from the same quarter last year.
- Premiums and deposits for the twelve months ended December 31, 2016 increased by \$5.4 billion to \$33.2 billion compared to the same period in 2015. Premiums and deposits for the three months ended December 31, 2016 were \$8.7 billion compared to \$6.1 billion for the same quarter last year, primarily due to new reinsurance agreements and higher fund management sales in Ireland.
- Fee and other income for the twelve months ended December 31, 2016 increased by \$75 million to \$1,296 million compared to the same period in 2015. Fee and other income for the three months ended December 31, 2016 increased by \$13 million to \$340 million compared to the same quarter last year, primarily due to higher management fees and from other income.
- Market volatility continues following the U.K.'s June 23, 2016 vote to leave the European Union, most notably resulting in a weaker British pound and higher U.K. equity markets. The Company remains committed to its operations in the U.K. which are strong and are primarily domestic businesses with well-diversified investment portfolios. 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 enter a period of negotiation and agree on their new relationship. The Company's other European businesses may also see some impacts arising from the market uncertainty in Europe from Brexit, but the impacts are not currently expected to be significant.
- In Europe, Solvency II regulations have been effective throughout 2016. All of the Company's regulated European-based subsidiaries have met the new requirements. The new governance regime focuses on more active and risk-focused Board of Directors involvement, which fits well with the Company's existing philosophy and culture. The capital regime has moved from a factor-based approach to a more risk-based methodology, which is more sensitive to interest rate movements. In 2016, the Company effectively managed capital volatility under the new regulations. Transitional measures and other measures approved by the regulators for long-term guaranteed business act to reduce the impact of current market volatility on Solvency II regulatory capital.

- On August 1, 2016, the Company completed the acquisition of Aviva Health Insurance Ireland Limited (Aviva Health), an Irish health insurance company, and assumed control of GloHealth Financial Services Limited (GloHealth), where the Company recorded a gain of \$24 million, to reflect the fair value of the GloHealth investment. The Company operates the new Irish health insurance business under the Irish Life Health brand. The Company has set annual cost savings targets of €16 million pre-tax to be achieved through operating efficiencies from the combination of the businesses. Integration activities, with an expected cost of €16 million pre-tax, are anticipated to be completed in the next 18 to 24 months. For the three and twelve months ended December 31, 2016, these costs have decreased net earnings by nil and €8 million, respectively. For the three and twelve months ended December 31, 2016, annualized synergies achieved have been €3 million and €4 million, respectively.
- Subsequent to December 31, 2016, in January 2017 the Company agreed to sell its 30.43% ownership of Allianz Ireland to a subsidiary of Allianz SE. The transaction is expected to be complete in the first quarter of 2017 and is subject to court approval. The impact of the transaction on net earnings is not expected to be material. Refer to note 5 in the Company's December 31, 2016 annual consolidated financial statements for further details on the Company's investment in Allianz Ireland.
- During the fourth quarter of 2016, the Company received a number of awards:
  - Canada Life International, a subsidiary of Canada Life in the U.K., received a number of awards at the 2016 International Fund & Product Awards, including Best International Life Group (U.K.) and Best International Portfolio Bond.
  - Canada Life achieved '5 stars' in the 2016 Financial Adviser Service Awards in both the 'Life and Pensions' and 'Investment Providers and Packagers' categories.
  - At the 2016 Irish Pension Awards:
    - the Irish Life Corporate business won the Communications award;
    - ILIM won Passive Manager of the Year; and
    - Setanta was awarded Equities Manager of the Year, for the fifth consecutive year.

# **B**USINESS **U**NITS - **E**UROPE

### Insurance & Annuities

#### **OPERATING RESULTS**

	For the three months ended						For the twelve months ende				
	Dec. 31         Sept. 30           2016         2016		Dec. 31 2015		Dec. 31 2016			Dec. 31 2015			
Premiums and deposits (1)	\$ 4,984	\$	5,325	\$	4,497	\$	22,276	\$	22,127		
Sales (1)	4,410		4,645		3,917		19,179		19,485		
Fee and other income	333		324		320		1,276		1,197		
Net earnings	225		251		234		927		886		

<sup>(1)</sup> For the three and twelve months ended December 31, 2016, premiums and deposits and sales exclude \$0.4 billion and \$7.5 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, 2016).

## **Premiums and deposits**

Premiums and deposits for the fourth quarter of 2016 increased by \$0.5 billion to \$5.0 billion compared to the same quarter last year. The increase was primarily due to higher fund management sales, partially offset by lower wealth management sales in the U.K. and the impact of currency movement.

For the twelve months ended December 31, 2016, premiums and deposits were \$22.3 billion compared to \$22.1 billion for the same period last year, which included two large sales in 2015. Excluding the impact of these two large sales, premiums and deposits increased by \$5.3 billion, primarily due to higher fund management sales and higher sales of payout annuities, partially offset by the impact of currency movement.

Premiums and deposits for the fourth quarter of 2016 decreased by \$0.3 billion compared to the previous quarter, primarily due to lower payout annuities and fund management sales as well as the impact of currency movement, partially offset by higher pension sales in Germany.

#### Sales

Sales for the fourth quarter of 2016 increased by \$0.5 billion to \$4.4 billion compared to the same quarter last year, primarily due to the same reasons discussed for premiums and deposits for the same period.

For the twelve months ended December 31, 2016, sales decreased by \$0.3 billion to \$19.2 billion compared to the same period last year, which included two large sales in 2015. Excluding the impact of these two large sales, sales increased by \$4.8 billion, primarily due to the same reasons discussed for premiums and deposits for the same period.

Sales for the fourth quarter of 2016 decreased by \$0.2 billion from the previous quarter, 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 2016 increased by \$13 million to \$333 million compared to the same guarter last year, primarily due to higher asset management fees and higher other income, which can be highly variable from quarter to quarter, partially offset by the impact of currency movement.

For the twelve months ended December 31, 2016, fee and other income increased by \$79 million to \$1,276 million compared to the same period last year. The increase was primarily due to higher investment gain related fee income associated with a closed block of Irish unit-linked business and higher other income as well as the impact of currency movement. The fee income on the closed block of Irish unit-linked business is particularly sensitive to market levels at the start and end of a reporting period.

Fee and other income for fourth quarter of 2016 increased by \$9 million compared the previous quarter, primarily due to higher investment gain related fee income associated with a closed block of Irish unit-linked business and higher other income as well as the impact of currency movement.

### **Net earnings**

Net earnings for the fourth quarter of 2016 decreased by \$9 million to \$225 million compared to the same quarter last year. The decrease was primarily due to less favourable morbidity experience, a higher percentage of earnings subject to lower rates of income tax in foreign jurisdictions in the prior year and the impact of currency movement. These decreases were partially offset by higher contributions from investment experience and favourable mortality experience in the U.K.

Net earnings for the twelve months ended December 31, 2016 increased by \$41 million to \$927 million compared to the same period last year. The increase was primarily due to higher contributions from insurance contract liability basis changes and investment experience, favourable mortality experience and lower income taxes. These increases were partially offset by less favourable morbidity experience and the impact of currency movement.

Net earnings for the fourth quarter of 2016 decreased by \$26 million compared to the previous quarter, primarily due to lower contributions from insurance contract liability basis changes, partially offset by higher contributions from investment experience.

# 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.

In Europe, the implementation of Solvency II regulations has been the focus of the Company's regulated European businesses during 2016. Transitional measures, matching adjustments and volatility adjustments were applied for by a number of the Company's European subsidiaries and were approved as planned in 2015. In 2017, work will continue refining the Company's internal risk models and management of capital volatility under the new regulations.

United Kingdom - The outlook for payout annuities in 2017 is stable with signs of further 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 Company will also continue to develop additional products for individuals who require additional pension flexibility. The overall size of the retirement market continues to grow as more retirees have defined contribution pensions due to the closure of defined benefit 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 2017 is cautiously optimistic with an expectation that the market will start to grow once again, albeit slowly after a relatively stable 2016. The private banking business is expected to stabilize; however, 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. During 2015 and 2016, small employers began to enroll in this initiative and now present the operation with an opportunity to increase the penetration of the U.K. Group Market with new business sales. 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 show pricing discipline, reflecting the low interest rate environment.

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

Ireland - Overall economic growth is expected to be robust in 2016 and 2017, with forecasts of GDP growth of 4.2% and 3.5%, respectively. These forecasts have been revised marginally downwards since the beginning of 2016, largely as a result of the U.K. referendum and other potential trade-related uncertainty. Uncertainty surrounding the U.K. and the weakening of British pound are likely to hinder Irish export growth in 2017.

Domestic sources of growth remain relatively robust. The labour market continues to improve and the unemployment rate is expected to fall to 6.8% by the end of 2017. Although the consumer sentiment index has not increased in recent months, the figure remains above the long-term average. This activity and consumer confidence are expected to favourably influence the retention and new activity measures of the Irish businesses. Irish Life is looking to maintain market share and improve profitability across its retail, corporate and investment management businesses following its multi-channel distribution strategy. Irish Life is also encouraging collaboration across the Company to capture synergies and extend its presence into new market segments.

In 2017, the new Irish health insurance businesses will operate under the Irish Life Health (ILH) brand. The economic drivers in Ireland have resulted in an increase in the Irish health insurance market in 2016 and ILH has marginally increased its share of this market to approximately 21%.

ILIM is the largest investment management firm in Ireland with a 47% share of the domestic market and continues to expand its business relationships in North America. ILIM now provides active equity management services to companies in the Lifeco group in Canada as well as Lifeco's affiliates, including Investors Group and Mackenzie Funds. ILIM will also continue to work with Putnam to build new distribution opportunities in the Irish market.

Germany - The outlook for the German business continues to be positive and the Company expects continued growth in assets under management in 2017.

Sales of pension unit-linked products have continued to grow significantly in 2016, with sales up 30% from 2015 levels and 79% from 2014 levels. In 2017, the Company expects to continue to grow its market share of unit-linked products, as the market for traditional fixed interest guaranteed products declines, due to lower interest rates and increasing costs of guarantees, following the introduction of Solvency II. 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 have continued to grow in 2016, with sales up over 20% from 2015 levels and over 65% from 2014 levels. The Company expects the growth to continue in 2017.

For the twelve menths anded

# REINSURANCE

## **OPERATING RESULTS**

	For the three months ended						ror the twelve months e				
	Dec. 31 2016		Sept. 30 2016		Dec. 31 2015		Dec. 31 2016		Dec. 31 2015		
Premiums and deposits	\$ 3,730	\$	2,967	\$	1,559	\$	10,902	\$	5,636		
Fee and other income	7		4		7		20		24		
Net earnings	86		54		73		277		313		

# **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 2016 were \$3.7 billion compared to \$1.6 billion for the same quarter last year. The increase was primarily due to new reinsurance agreements.

For the twelve months ended December 31, 2016, premiums and deposits increased by \$5.3 billion to \$10.9 billion compared to the same period last year. The increase was primarily due to new and restructured reinsurance agreements.

Premiums and deposits for the fourth quarter of 2016 were \$3.7 billion compared to \$3.0 billion for the previous quarter. The increase was primarily due to new reinsurance agreements.

### Fee and other income

For the three menths anded

Fee and other income for the fourth quarter of 2016 of \$7 million was comparable to the same quarter last year. A one-time fee in 2016 related to the completion of a reinsurance agreement was offset by certain life treaties being restructured in 2015, resulting in lower fee income on an ongoing basis.

For the twelve months ended December 31, 2016, fee and other income decreased by \$4 million to \$20 million compared to the same period last year. Certain life treaties were restructured in 2015 resulting in lower fee income on an ongoing basis.

Fee and other income for the fourth quarter of 2016 increased by \$3 million compared to previous quarter, primarily due to the onetime fee discussed for the in-quarter results.

## **Net earnings**

Net earnings for the fourth quarter of 2016 increased by \$13 million to \$86 million compared to the same quarter last year. The increase was primarily due to favourable morbidity experience and higher new business volumes, partially offset by lower contributions from insurance contract liability basis changes.

For the twelve months ended December 31, 2016, net earnings decreased by \$36 million to \$277 million compared to the same period last year. The decrease was primarily due to less favourable mortality experience for the traditional life business, partially offset by higher contributions from insurance contract liability basis changes and favourable morbidity experience. In addition, net earnings in 2015 were positively impacted by changes to certain income tax estimates, which did not recur in 2016.

Net earnings for the fourth quarter of 2016 increased by \$32 million compared to the previous quarter, primarily due to favourable mortality experience and higher new business volumes, partially offset by lower 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 incoming 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. Additionally, new U.S. regulatory rules (Principle-Based Reserving) affecting the calculation of statutory reserves are expected to be effective in 2017.

In Europe, Solvency II is expected to continue to be the main driver of the business in 2017 and beyond. The Company's reinsurance operation is preparing to help European clients and other affiliated companies meet the capital challenges and business opportunities arising from these regulatory changes.

While the 2016 Atlantic hurricane season was the most active and costly since 2012, the Company expects 2017 pricing for the property and casualty market will continue to soften, although not as significantly as in previous years. Hedge fund capacity, collateralized covers and catastrophe bond issuance are expected to continue to grow in 2017, while buyer demand is under downward pressure due to increasing client retention. The primary focus for 2017 will be to continue to move further away from exposure risk, continue to utilize the most recent U.S. modeling updates from Risk Management Solutions (RMS) and manage geographic exposures without significant impact on margins.

#### **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.

The net loss for the fourth quarter of 2016 of \$4 million was comparable to the same quarter last year.

For the twelve months ended December 31, 2016, Europe Corporate had a net loss of \$4 million compared to \$25 million for the same period last year. Following the transaction to assume control of GloHealth in the third quarter of 2016, the Company reported a gain to reflect the fair value of the GloHealth investment, which increased net earnings by \$24 million. Excluding this item, the net loss increased by \$3 million, primarily due to lower restructuring costs. Included in the year-to-date results were \$15 million of restructuring and acquisition costs primarily relating to Aviva Health and GloHealth, compared to \$20 million of Irish Life and Legal & General International (Ireland) Limited restructuring costs for the same period in 2015.

The net loss for the three months ended December 31, 2016 was \$4 million compared to net earnings of \$8 million in the previous quarter. Excluding the fair value gain related to GloHealth discussed for the year-to-date results, the net loss decreased by \$12 million, primarily due to restructuring and acquisition costs relating to Aviva Health and GloHealth in the third quarter of 2016, which did not recur.

## 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, 2016 of \$12 million increased from a net loss of \$7 million for the same quarter last year, primarily due to higher operating expenses.

For the twelve months ended December 31, 2016, Lifeco Corporate had a net loss of \$26 million, an increase from a net loss of \$16 million for the same period last year, primarily due to higher operating expenses and higher income taxes, driven by the impact of changes to certain income tax estimates in 2015.

The net loss for the three months ended December 31, 2016 of \$12 million increased from a net loss of \$6 million for the previous quarter, primarily due to higher operating expenses and lower net investment income. These increases were partially offset by the negative impact of changes to certain income tax estimates in the third quarter of 2016, which did not recur.

# 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.

### ENTERPRISE RISK MANAGEMENT FRAMEWORK

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

### RISK STRATEGY AND CULTURE

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.

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. 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;
- Approving the risk limit framework, associated risk limits and monitoring adherence to those limits;
- Evaluating the Company's risk culture;
- · Discussing risks in aggregate and by type of risk;

- · Reviewing Risk Function reports including stress testing and Dynamic Capital Adequacy Testing (DCAT);
- Reviewing the Own Risk and Solvency Assessment (ORSA);
- · Reviewing and assessing the performance and compensation of the Company's Chief Risk Officer (CRO) and providing input on succession planning; and
- Reviewing and assessing 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.

Members of the Board Risk Committee are independent of management. The Governance and Nominating Committee of the Board of Directors regularly assess Board and Board Committee effectiveness.

## **Senior Management Committees**

The Executive Risk Management Committee (ERMC) is the key senior management committee that oversees all forms of risk and the implementation of the ERM Framework. 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 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. 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 Management Policies**

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 APPETITE FRAMEWORK AND LIMITS

A key component of the Company's ERM Framework is the Risk Appetite Framework (RAF). The RAF includes a Risk Appetite Statement that reflects the levels and types of risk that the Company is willing to accept 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 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 requires the structured analysis of the current and emerging risks facing the Company, so that they are understood and appropriately controlled. Processes 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.

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, stress and scenario testing to ensure appropriate escalation and resolution of potential issues in a timely manner.

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.

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 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 Risks
- 2. Credit Risks
- 3. Insurance Risks
- 4. Operational / Other Risks

### 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 through the immunization of the assets and liabilities, either directly or indirectly (e.g. using derivatives).

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.

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.

## 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'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 in the U.K., the Isle of Man, Ireland and Germany in the Europe segment.

The Company has net investments in foreign operations. 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 U.S. dollar, British pound
  and euro would decrease (increase) operating earnings in 2016
  by \$16 million, \$38 million and \$22 million, respectively.
- 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 \$334 million, \$247 million and \$107 million, respectively, as at December 31, 2016.

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 3			
		2016		2015(1)
Cash, cash equivalents and short-term bonds	\$	7,874	\$	7,056
Other liquid assets and marketable securities				
Government bonds		36,873		36,584
Corporate bonds		43,044		43,140
Common/Preferred shares (public)		7,989		7,054
Residential mortgages – insured		3,652		3,704
		91,558		90,482
Total	\$	99,432	\$	97,538

## Cashable liability characteristics

	Deceil	ibei	1 3 1
	2016		2015
Surrenderable insurance and investment contract liabilities			
At market value	\$ 20,369	\$	19,641
At book value	49,751		47,403
Total	\$ 70,120	\$	67,044

Docombox 21

(1) Comparative figures have been reclassified for presentation purposes.

The carrying value of the Company's liquid assets and marketable securities is approximately \$99.4 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. As well, 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.

## 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 within issuers, connected companies, industries or individual geographies by emphasizing diversification as well as by limiting new exposures to investment grade assets as per the Company's Investment Policy. 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 is enabled with 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 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 stochastic 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 Corporate Reinsurance Ceded 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 damage 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 damage risk is a non-core business risk for which the Company takes extra measures to manage and mitigate.

## 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:

- · Corporate Product Design and Pricing Risk Management Policy and Corporate Reinsurance Ceded 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 Damage Risk**

Property damage 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, 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 and protect 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 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 transfers 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. Scenario analysis is employed to identify and quantify potential severe operational risk exposures. Key risk indicators, risk appetite preferences, and other processes are leveraged to measure, manage and monitor operational risks. 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.

The Risk Function monitors the status of actions being undertaken to remediate risks to ensure that risk exposures are mitigated in a timely manner and has processes 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 risk arises 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. The requirements scope covers 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 Recruitment and Retention 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. Human resource programs, including competitive compensation programs, succession planning and assessing and addressing employee engagement, are in place to manage these risks.

#### 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, 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 short-term 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 is an integral component of Infrastructure Risk. Similar to other major financial institutions, the Company faces heightened technology and cyber risks due to its reliance on the internet and use of technologies to serve customers. The risks faced include the threat of corporate espionage, identity theft and hacking, including the risk of denial of service or ransomware attacks.

To remain resilient to such threats and to protect customers, brand and reputation, the Company continues to invest in capabilities to prevent, detect, respond and manage such cyber security threats. More specifically, the Company has established enterprise-wide cyber security programs, benchmarked capabilities to sound industry practices, and has implemented robust threat and vulnerability assessment and response capabilities.

# **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 management initiatives such as business model changes, major systems implementation, new product introductions and leadership changes.

Risk management ensures 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. 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

Fraud can result in a financial loss or reputational impact to the Company. Fraud management is built around the principles of 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 sophisticated data analytics 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.

The Company utilizes a supplier risk management program to minimize risks when engaging suppliers and to provide effective oversight and monitoring throughout the entire supplier relationship. This program helps to ensure the arrangements, transactions and other interactions with suppliers meet standards for quality of service and risk management expectations.

## **O**THER **R**ISKS

# CONDUCT RISK

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.

The Company manages conduct risk by ensuring appropriate clarity of communications; applying 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. 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

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.

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 disposing of or acquiring businesses or offering new, or discontinuing existing products and services. 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 or offering new, or discontinuing existing, products and services. 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

	2016	2015
Mortality – 2% increase	\$ (281)	\$ (282)
Annuitant mortality – 2% decrease	\$ (384)	\$ (314)
Morbidity – 5% adverse change	\$ (242)	\$ (225)
Investment returns		
Parallel shift in yield curve		
1% increase	\$ _	\$ _
1% decrease	\$ -	\$ -
Change in range of interest rates		
1% increase	\$ 149	\$ 109
1% decrease	\$ (491)	\$ (430)
Change in equity markets		
10% increase	\$ 43	\$ 45
10% decrease	\$ (50)	\$ (108)
Change in best estimate returns for equities		
1% increase	\$ 407	\$ 433
1% decrease	\$ (438)	\$ (457)
Expenses – 5% increase	\$ (117)	\$ (108)
Policy termination and renewal – 10% adverse change	\$ (608)	\$ (602)

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 7 in the Company's December 31, 2016 annual consolidated financial statements for disclosure of the Company's financial instruments fair value measurement at December 31, 2016.

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. 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, which is calculated using the present value of estimated future cash flows expected to be generated.

#### 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. Mortality improvement has been projected to occur for the next 25 years. 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 \$281 million.

Annuitant mortality is also studied regularly and the results used to modify established industry experience annuitant mortality tables. Mortality improvement has been projected to occur throughout future years for annuitants. A 2% decrease in the best estimate assumption would cause a decrease in net earnings of approximately \$384 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 \$242 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 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. Given the continuing low interest rates experienced over the past several years, the Actuarial Standards Board has indicated a plan to revisit the reinvestment assumptions in 2017. While the magnitude of any potential changes is uncertain, the Company expects the change to be more modest than the changes included in the sensitivity disclosure that follows.

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 would not change the total provision for interest rates.
- The effect of an immediate 1% parallel decrease in the yield curve on the prescribed scenarios would not change the total provision for interest rates.

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 \$202 million causing an increase in net earnings of approximately \$149 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 \$677 million causing a decrease in net earnings of approximately \$491 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 \$51 million, causing an increase in net earnings of approximately \$43 million.
- A 10% decrease in equity values would be expected to additionally increase non-participating insurance and investment contract liabilities by approximately \$61 million, causing a decrease in net earnings of approximately \$50 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 \$504 million causing an increase in net earnings of approximately \$407 million.
- A 1% decrease in the best estimate assumption would be expected to increase non-participating insurance contract liabilities by approximately \$552 million causing a decrease in net earnings of approximately \$438 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 \$117 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 \$608 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 noncontributory 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. All new hires 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 dependants. 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 23 in the Company's December 31, 2016 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. 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

	Defined benefit	Other post-employment benefits			
At December 31	2016	2015	2016	2015	
Actuarial assumptions used to determine benefit cost					
Discount rate – past service liabilities	3.8%	3.5%	4.1%	3.9%	
Discount rate – future service liabilities	3.8%	3.6%	4.5%	4.0%	
Rate of compensation increase	3.2%	3.2%	-	-	
Future pension increases (1)	1.5%	1.1%	-	-	
Actuarial assumptions used to determine defined benefit obligation					
Discount rate – past service liabilities	3.3%	3.8%	3.8%	4.1%	
Rate of compensation increase	3.2%	3.2%	_	_	
Future pension increases (1)	1.1%	1.5%	-	-	
Medical cost trend rates:					
Initial medical cost trend rate			5.1%	5.2%	
Ultimate medical cost trend rate			4.5%	4.5%	
Year ultimate trend rate is reached			2029	2029	

<sup>(1)</sup> Represents the weighted average of plans subject to future pension increases.

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

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

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

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

#### Impact of a change of 1.0% in actuarial assumptions on defined benefit obligation

	1% increase						1% decrease			
	2016			2015		2016		2015		
Defined benefit pension plans:										
Impact of a change to the discount rate	\$	(1,138)	\$	(1,026)	\$	1,458	\$	1,353		
Impact of a change to the rate of compensation increase		303		314		(264)		(272)		
Impact of a change to the rate of inflation		550		551		(498)		(536)		
Other post-employment benefits:										
Impact of a change to assumed medical cost trend rates		33		34		(28)		(28)		
Impact of a change to the discount rate		(46)		(44)		56		54		

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 \$190 million (\$158 million in 2015) to the pension plans and made benefit payments of \$19 million (\$19 million in 2015) for post-employment benefits. The Company's subsidiaries expect to contribute \$254 million to the benefit pension plans and make benefit payments of \$19 million for post-employment benefits in 2017.

#### 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 2016, 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 IFRS 11 Joint Arrangements, IAS 16 Property, Plant and Equipment, IAS 38 Intangible Assets, IAS 1 Presentation of Financial Statements, IFRS 10 Consolidated Financial Statements, IFRS 12 Disclosure of Interests in Other Entities, IAS 28 Investments in Associates and Joint Ventures and Annual Improvements 2012 - 2014 Cycle effective January 1, 2016. The adoption of these narrow scope amendments did not have a significant impact on the Company's financial statements.

IFRS that have changed or may change subsequent to 2016 and could impact the Company in future reporting periods, are set out in the following table:

New Standard	SUMMARY OF FUTURE CHANGES							
IFRS 17 – Insurance Contracts (exposure draft)	In June 2013, the IASB issued a revised IFRS 4, <i>Insurance Contracts</i> exposure draft proposing changes to the accounting for insurance contracts. The intent of the revised standard is to eliminate inconsistencies by providing a single principle based framework to account for all types of insurance contracts, including reinsurance. The new standard will also provide requirements for presentation and disclosure items to enhance comparability between entities. IFRS 17, <i>Insurance Contracts</i> will replace IFRS 4, <i>Insurance Contracts</i> in its entirety and is expected to be issued in the first half of 2017 with a proposed effective date of January 1, 2021.							
	During 2016, at the request of the IASB, the Company participated in additional field testing of the exposure draft to address potential interpretation and operational challenges; the proposed standard differs significantly from the Company's current accounting and actuarial practices under the Canadian Asset Liability Method (CALM). The Company is actively monitoring developments in this area and will continue to measure insurance contract liabilities under current accounting and actuarial policies, including CALM, until IFRS for insurance contract measurement is issued and effective.							
IFRS 4 – Insurance Contracts	In September 2016, the IASB issued an amendment to IFRS 4, <i>Insurance Contracts</i> (IFRS 4). The amendment "Applying IFRS 9, <i>Financial Instruments</i> with IFRS 4, <i>Insurance Contracts</i> " provides qualifying insurance companies with two options to address the potential volatility associated with implementing the IFRS 9, <i>Financial Instruments</i> (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 the new insurance contract standard simultaneously on January 1, 2021.							

New Standard	SUMMARY OF FUTURE CHANGES
IFRS 9 – Financial Instruments	In July 2014, the IASB issued a final version of IFRS 9, <i>Financial Instruments</i> to replace IAS 39, <i>Financial Instruments</i> : <i>Recognition and Measurement</i> . 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.    Control of the control o
	Due to applying the deferral method as noted above, the standard will be effective for the Company on January 1, 2021.
IFRS 15 – Revenue from Contracts with Customers	In May 2014, the IASB issued IFRS 15, <i>Revenue from Contracts with Customers</i> , which provides a single revenue recognition standard to align the financial reporting of revenue from contracts with customers and related costs. The revenue arising from insurance contracts, leases and financial instruments is not required to apply the revenue recognition requirements in IFRS 15. A company would recognize revenue when it transfers goods or services to a customer in the amount of consideration the company expects to receive from the customer.
	In September 2015, the IASB issued an amendment to IFRS 15 providing a deferral of one year of the effective date of the standard, from January 1, 2017 to January 1, 2018.
	In April 2016, an additional amendment to IFRS 15 was issued clarifying requirements of the standard and providing additional transitional relief for companies implementing the standard.
	The Company is evaluating the impact of the adoption of this standard. The Company does not anticipate a significant impact for the adoption of this standard; however, it is not possible as yet to provide a reliable estimate of the impact on the Company's financial statements.
IFRS 16 – Leases	In January 2016, the IASB issued IFRS 16, <i>Leases</i> , 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 financial statements.
IAS 40 – Investment Property	In December 2016, the IASB issued an amendment to IAS 40, <i>Investment Property</i> to clarify the requirements on transfers to, or from, investment property.
	The amendment is effective January 1, 2018. The Company is evaluating the impact of the adoption of this standard.
IFRS 2 – Share-based Payment	In June 2016, the IASB issued narrow scope amendments to IFRS 2, <i>Share-based Payments</i> clarifying how to account for certain types of share-based payment transactions.
	The amendment is effective January 1, 2018. The Company is evaluating the impact of the adoption of this amendment.
IFRIC 22 – Foreign Currency Transactions and Advance Consideration	In December 2016, the IASB issued IFRIC Interpretation 22, <i>Foreign Currency Transactions and Advance Consideration</i> 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 is evaluating the impact of the adoption of this interpretation.

New Standard	Summary of Changes						
Annual Improvements 2014 – 2016 Cycle	In December 2016, the IASB issued <i>Annual Improvements 2014 - 2016 Cycle</i> 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, <i>Disclosure of Interests in Other Entities</i> , IFRS 1, <i>First-time Adoption of International Financial Reporting Standards</i> and IAS 28, <i>Investments in Associates and Joint Ventures</i> .						
	The amendments to IFRS 12 are effective January 1, 2017, while 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 7 – Statement of Cash Flows	In January 2016, the IASB issued an amendment to IAS 7, <i>Statement of Cash Flows</i> that requires additional disclosures to enable users of the financial statements to evaluate changes in liabilities arising from financing activities.						
	The amendment is effective January 1, 2017. Adoption of this amendment will not have a significant impact on the Company's consolidated financial statements.						
IAS 12 – Income Taxes	In January 2016, the IASB issued an amendment to IAS 12, <i>Income Taxes</i> that clarifies the accounting for deferred tax assets for unrealized losses on debt instruments measured at fair value.						
	The amendment is effective January 1, 2017. Adoption of this amendment will not have an impact on the Company's consolidated financial statements.						

# OTHER INFORMATION

# SELECTED ANNUAL INFORMATION

		Years ended December 3					
(in \$ millions, except per share amounts)	2016	2015	2014				
Total revenue	\$ 46,381	\$ 33,820	\$ 39,181				
Net earnings – common shareholders							
Net earnings	2,641	2,762	2,546				
Net earnings per common share							
Basic	2.668	2.774	2.549				
Diluted	2.663	2.768	2.546				
Total assets							
Total assets	\$ 399,912	\$ 399,935	\$ 356,709				
Proprietary mutual funds and institutional net assets	259,215	252,480	216,271				
Total assets under management	659,127	652,415	572,980				
Other assets under administration	589,291	560,102	490,353				
Total assets under administration	\$1,248,418	\$1,212,517	\$1,063,333				
Total liabilities	\$ 374,904	\$ 374,675	\$ 334,812				
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	0.912500	0.912500				
Series O First Preferred (1)	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	0.799185				
Common	1.384	1.304	1.230				

<sup>(1)</sup> The Series O First Preferred Shares were issued on December 31, 2015.

<sup>(2)</sup> 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.

# QUARTERLY FINANCIAL INFORMATION

(in \$ millions,	2016							2015						
except per share amounts)	Q4 <sup>(2)</sup>		Q3		Q2		Q1	Q4		Q3		Q2		Q1
Total revenue (1)	\$ 7,678	\$	13,408	\$	12,807	\$	12,352	\$ 8,321	\$	8,596	\$	4,224	\$	12,679
Common shareholders														
Net earnings														
Total (2)	676		674		671		620	683		720		659		700
Basic – per share (2)	0.686		0.682		0.675		0.625	0.688		0.724		0.661		0.702
Diluted – per share (2)	0.685		0.681		0.674		0.623	0.686		0.722		0.659		0.700

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

Lifeco's consolidated net earnings attributable to common shareholders were \$676 million for the fourth quarter of 2016 compared to \$683 million reported a year ago. On a per share basis, this represents \$0.686 per common share (\$0.685 diluted) for the fourth quarter of 2016 compared to \$0.688 per common share (\$0.686 diluted) a year ago.

Total revenue for the fourth quarter of 2016 was \$7,678 million and comprises premium income of \$8,905 million, regular net investment income of \$1,507 million, a negative change in fair value through profit or loss on investment assets of \$3,943 million and fee and other income of \$1,345 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, 2016 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, 2016 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.

<sup>(2)</sup> Net earnings for the fourth quarter of 2016 include restructuring costs relating to a realignment of the Asset Management business unit. Excluding the impact of these restructuring costs, net earnings for the fourth quarter of 2016 were \$696 million or \$0.707 per common share (\$0.706 diluted).

#### 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.

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.

At December 31, 2016 the Company held \$42 million (\$43 million in 2015) of debentures issued by IGM.

During the normal course of business in 2016, the Company purchased residential mortgages of \$184 million from IGM (\$206 million in 2015).

In October 2016, the Company made an investment in Portag3 Ventures which invests in the FinTech sector. The investment is 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.

As at December 31, 2016 and December 31, 2015, there were no significant outstanding loans or guarantees and no loans or guarantees issued during 2016 or 2015 with related parties. There were no provisions for uncollectible amounts from related parties during 2016 or 2015.

#### 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

		2016								2015							
Period ended	D	ec. 31	S	ept. 30	J	une 30	N	/lar. 31	D	ec. 31	S	ept. 30	Ju	une 30	IV	1ar. 31	
United States dollar																	
Balance sheet	\$	1.34	\$	1.31	\$	1.30	\$	1.30	\$	1.38	\$	1.34	\$	1.25	\$	1.27	
Income and expenses	\$	1.33	\$	1.31	\$	1.29	\$	1.37	\$	1.34	\$	1.31	\$	1.23	\$	1.24	
British pound																	
Balance sheet	\$	1.66	\$	1.71	\$	1.72	\$	1.87	\$	2.04	\$	2.02	\$	1.96	\$	1.88	
Income and expenses	\$	1.66	\$	1.71	\$	1.85	\$	1.96	\$	2.03	\$	2.03	\$	1.89	\$	1.88	
Euro																	
Balance sheet	\$	1.42	\$	1.47	\$	1.44	\$	1.48	\$	1.50	\$	1.50	\$	1.39	\$	1.36	
Income and expenses	\$	1.44	\$	1.46	\$	1.46	\$	1.51	\$	1.46	\$	1.46	\$	1.36	\$	1.40	

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 A. Mahon

President and Chief Executive Officer **Garry MacNicholas** 

Executive Vice-President and Chief Financial Officer

& Mac Nicholas

February 9, 2017

# **CONSOLIDATED STATEMENTS OF EARNINGS**

(in Canadian \$ millions except per share amounts)

For the years ended December 31	2	2016	2015
Income			
Premium income			
Gross premiums written	\$ 3	35,050	\$ 28,129
Ceded premiums		(3,925)	(3,628)
Total net premiums	3	31,125	24,501
Net investment income (note 5)			
Regular net investment income		6,252	6,271
Changes in fair value through profit or loss		3,903	(2,010)
Total net investment income		10,155	4,261
Fee and other income		5,101	5,058
		46,381	33,820
Benefits and expenses			
Policyholder benefits	_		
Gross Ceded		28,315	22,553
		(2,103)	 (2,000)
Total net policyholder benefits	2	26,212	20,553
Policyholder dividends and experience refunds		1,502	1,477
Changes in insurance and investment contract liabilities		6,961	 812
Total paid or credited to policyholders	3	34,675	22,842
Commissions		2,602	2,218
Operating and administrative expenses (note 27)		4,799	4,466
Premium taxes		411	339
Financing charges (note 14)		302	303
Amortization of finite life intangible assets (note 9)		177	146
Restructuring and acquisition expenses (note 28)		63	 35
Earnings before income taxes		3,352	3,471
Income taxes (note 26)		396	460
Net earnings before non-controlling interests		2,956	3,011
Attributable to non-controlling interests (note 18)		192	123
Net earnings		2,764	2,888
Preferred share dividends		123	126
Net earnings – common shareholders	\$	2,641	\$ 2,762
Earnings per common share (note 20)			
Basic	\$	2.668	\$ 2.774
Diluted	\$	2.663	\$ 2.768

# CONSOLIDATED STATEMENTS OF COMPREHENSIVE INCOME

(in Canadian \$ millions)

For the years ended December 31	2016	2015
Net earnings	\$ 2,764	\$ 2,888
Other comprehensive income		
Items that may be reclassified subsequently to Consolidated Statements of Earnings		
Unrealized foreign exchange gains (losses) on translation of foreign operations	(1,485)	2,058
Unrealized foreign exchange gains (losses) on euro debt designated as hedge of the net investment in foreign operations	42	(50)
Income tax (expense) benefit	(6)	9
Unrealized gains (losses) on available-for-sale assets	115	(20)
Income tax (expense) benefit	(10)	7
Realized gains on available-for-sale assets	(80)	(104)
Income tax expense	12	17
Unrealized gains (losses) on cash flow hedges	107	(251)
Income tax (expense) benefit	(40)	95
Realized losses on cash flow hedges	2	2
Income tax benefit	(1)	(1)
Non-controlling interests	48	(57)
Income tax (expense) benefit	(10)	3
Total items that may be reclassified	(1,306)	1,708
Items that will not be reclassified to Consolidated Statements of Earnings		
Re-measurements on defined benefit pension and other post-employment benefit plans (note 23)	(231)	167
Income tax (expense) benefit	60	(32)
Non-controlling interests	6	(5)
Income tax (expense) benefit	(1)	2
Total items that will not be reclassified	(166)	132
Total other comprehensive income (loss)	(1,472)	1,840
Comprehensive income	\$ 1,292	\$ 4,728

# **CONSOLIDATED BALANCE SHEETS**

(in Canadian \$ millions)

December 31	2016	2015
Assets		(note 33)
Cash and cash equivalents (note 4)	\$ 3,259	\$ 2,813
Bonds (note 5)	116,773	114,943
Mortgage loans (note 5)	21,651	22,021
Stocks (note 5)	8,665	7,873
Investment properties (note 5)	4,340	5,237
Loans to policyholders	8,467	8,694
	163,155	161,581
Funds held by ceding insurers (note 6)	10,781	15,512
Goodwill (note 9)	5,977	5,913
Intangible assets (note 9)	3,972	4,036
Derivative financial instruments (note 29)	528	461
Owner occupied properties (note 10)	649	653
Fixed assets (note 10)	304	298
Other assets (note 11)	2,263	2,643
Premiums in course of collection, accounts and interest receivable	4,311	3,553
Reinsurance assets (note 12)	5,627	5,131
Current income taxes	97	69
Deferred tax assets (note 26)	1,845	1,891
Investments on account of segregated fund policyholders (note 13)	200,403	198,194
Total assets	\$ 399,912	\$ 399,935
Total assets	<del> </del>	<del>*************************************</del>
Liabilities		
Insurance contract liabilities (note 12)	\$ 155,940	\$ 158,492
Investment contract liabilities (note 12)	2,009	2,253
Debentures and other debt instruments (note 15)	5,980	5,395
Capital trust securities (note 16)	161	161
Funds held under reinsurance contracts	320	356
Derivative financial instruments (note 29)	2,012	2,624
Accounts payable	2,049	1,755
Other liabilities (note 17)	3,836	3,367
Current income taxes	549	492
Deferred tax liabilities (note 26)	1,645	1,586
Investment and insurance contracts on account of segregated fund policyholders (note 13)	200,403	198,194
Total liabilities	374,904	374,675
Equity		
Non-controlling interests (note 18)		
Participating account surplus in subsidiaries	2,782	2,626
Non-controlling interests in subsidiaries	224	195
Shareholders' equity		
Share capital (note 19)		
Preferred shares	2,514	2,514
Common shares	7,130	7,156
Accumulated surplus	11,465	10,416
Accumulated other comprehensive income (note 24)	746	2,218
Contributed surplus	147	135
Total equity	25,008	25,260
Total liabilities and equity	\$ 399,912	\$ 399,935

Approved by the Board of Directors:

Jeffrey Orr Paul Mahon

Chair of the Board President and Chief Executive Officer

# CONSOLIDATED STATEMENTS OF CHANGES IN EQUITY

(in Canadian \$ millions)											
		Share capital		tributed ırplus		Decembe cumulated 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 loss	_	_		_		_		(1,472)		(43)	(1,515)
		9,670		135		13,180		746		2,970	26,701
Dividends to shareholders						(400)					(4.55)
Preferred shareholders (note 20)		-		-		(123)		-		_	(123)
Common shareholders		-		-		(1,369)		-		_	(1,369)
Shares exercised and issued under share-based payment plans (note 19)		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										(55)	(55)
Normal Course Issuer Bid (note 19)		(267)		_		_		_		_	(267)
Excess of redemption proceeds over stated capital per		, ,									, ,
Normal Course Issuer Bid (note 19)		210		_		(210)		_		_	_
Dilution loss on non-controlling interests		_		_		(13)		_		13	_
Balance, end of year	\$	9,644	\$	147	\$	11,465	\$	746	\$	3,006	\$ 25,008
						December 31,	2015 (r	note 33)			
	_						Ac	cumulated			
		C.I.	_			1 . 1		other		Non-	T . I
		Share capital		tributed urplus	A	ccumulated surplus		nprehensive income		ontrolling nterests	Total equity
Balance, beginning of year	\$	9,616	\$	126	\$	9,119	\$	378	\$	2,658	\$ 21,897
Net earnings		-		_		2,888		-		123	3,011
Other comprehensive income		-		-		-		1,840		57	1,897
		9,616		126		12,007		2,218		2,838	26,805
Dividends to shareholders											
Preferred shareholders (note 20)		_		_		(126)		_		_	(126)
Common shareholders		_		-		(1,298)		_		_	(1,298)

	Share capital	 tributed urplus	 cumulated surplus	com	other prehensive income	Non- ntrolling nterests	Total equity
Balance, beginning of year	\$ 9,616	\$ 126	\$ 9,119	\$	378	\$ 2,658	\$ 21,897
Net earnings	_	_	2,888		_	123	3,011
Other comprehensive income	-	-	_		1,840	57	1,897
	9,616	126	12,007		2,218	2,838	26,805
Dividends to shareholders							
Preferred shareholders (note 20)	_	_	(126)		_	-	(126)
Common shareholders	_	_	(1,298)		_	-	(1,298)
Shares exercised and issued under share-based							
payment plans (note 19)	99	(49)	-		_	39	89
Share-based payment plans expense	-	58	-		_	-	58
Equity settlement of Putnam share-based plans	_	_	_		_	(47)	(47)
Shares purchased and cancelled under							
Normal Course Issuer Bid (note 19)	(221)	_	-		_	-	(221)
Excess of redemption proceeds over stated capital per							
Normal Course Issuer Bid (note 19)	176	_	(176)		_	-	_
Dilution gain on non-controlling interests	-	-	9		-	(9)	_
Balance, end of year	\$ 9,670	\$ 135	\$ 10,416	\$	2,218	\$ 2,821	\$ 25,260

# CONSOLIDATED STATEMENTS OF CASH FLOWS

(in Canadian \$ millions)

For the years ended December 31	2016	2015		
Operations				
Earnings before income taxes	\$ 3,352	\$ 3,47		
Income taxes paid, net of refunds received	(223)	(36		
Adjustments:				
Change in insurance and investment contract liabilities	7,128	(1,08		
Change in funds held by ceding insurers	505	82		
Change in funds held under reinsurance contracts	18	2		
Change in deferred acquisition costs	42	3		
Change in reinsurance assets	(567)	36		
Changes in fair value through profit or loss	(3,903)	2,01		
Other	(98)	(15		
	6,254	5,12		
Financing Activities				
Issue of common shares (note 19)	31	9		
Purchased and cancelled common shares (note 19)	(267)	(22		
Issue of euro-denominated debt (note 15)	706			
Decrease in line of credit of subsidiary	(31)	(13		
Increase (decrease) in debentures and other debt instruments	8	(		
Dividends paid on common shares	(1,369)	(1,29		
Dividends paid on preferred shares	(123)	(12		
	(1,045)	(1,68		
Investment Activities				
Bond sales and maturities	29,949	29,08		
Mortgage loan repayments	2,616	2,92		
Stock sales	2,717	2,10		
Investment property sales	427	20		
Change in loans to policyholders	48	:		
Business acquisitions, net of cash and cash equivalents acquired (note 3)	(33)	(4		
Investment in bonds	(34,186)	(32,01		
Investment in mortgage loans	(3,264)	(3,03		
Investment in stocks	(2,737)	(2,42)		
Investment in investment properties	(102)	(27		
	(4,565)	(3,42		
Effect of changes in exchange rates on cash and cash equivalents	(198)	29		
Increase in cash and cash equivalents	446	31		
Cash and cash equivalents, beginning of year	2,813	2,49		
Cash and cash equivalents, end of year	\$ 3,259	\$ 2,81		
Supplementary cash flow information				
Interest income received	\$ 5,303	\$ 5,38		
Interest paid	\$ 294	\$ 29		
Dividend income received	\$ 251	\$ 23		

# 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, 2016 were approved by the Board of Directors on February 9, 2017.

#### 2. Basis of Presentation and Summary of Accounting Policies

The 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 IFRS 11 *Joint Arrangements*, IAS 16 *Property, Plant and Equipment*, IAS 38 *Intangible Assets*, IAS 1 *Presentation of Financial Statements*, IFRS 10 *Consolidated Financial Statements*, IFRS 12 *Disclosure of Interests in Other Entities*, IAS 28 *Investments in Associates and Joint Ventures* and *Annual Improvements 2012 - 2014 Cycle* effective January 1, 2016. The adoption of these narrow scope amendments did not have a significant impact on the Company's financial statements.

#### **Basis of Consolidation**

The consolidated financial statements of the Company were prepared as at and for the year ended December 31, 2016 with comparative information for December 31, 2015. 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 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 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).
- 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 8).
- 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 9).
- Management evaluates the synergies and 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 9).
- 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 11 and 17).
- 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 12).
- 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 23).

- 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 26).
- · Management assesses the recoverability of the deferred income tax asset carrying values based on future years' taxable income projections and believes the carrying values of the deferred income tax assets as of December 31, 2016 are recoverable (note 26).
- · 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 30).
- 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 32).
- 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 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.

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, and Allianz Ireland, an unlisted general insurance company operating in Ireland.

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

#### 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. As well, when determined to be impaired, interest is no longer accrued and previous interest accruals are reversed.

### 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 in Europe, 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.

#### Other Assets and Other Liabilities

Other assets, which include prepaid expenses, deferred acquisition costs and miscellaneous other assets, are measured at cost. Other liabilities, which include, deferred income reserves and bank overdraft, are measured at cost. Pension and other postemployment benefits also included within other assets and other liabilities are measured in accordance with note 2(w).

#### **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

The Company includes disclosure of the maximum credit risk, future credit exposure, credit risk equivalent and risk weighted equivalent in note 29 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 on 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.

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

#### 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 in other comprehensive income 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.

#### (h) 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.

# (i) 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 on 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.

# (j) 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.

# (k) 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 in 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.

# 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 6 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.

# (m) 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 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. 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 period and method are appropriate. If indicators of impairment have been identified, a test for impairment is performed and then the amortization of these assets are adjusted or impairment is recognized as necessary.

#### (n) 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.

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

#### (o) 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 charged to write-off the cost of assets, over their estimated useful lives, using the straight-line method, on the following bases:

15 - 20 years Owner occupied properties 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.

#### (p) 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.

# (q) 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 in 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.

#### (r) 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 12 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 7 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.

#### **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.

#### (t) 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.

# 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 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.

# (u) 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.

#### (v) 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.

# (w) 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 23). 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. 2. Basis of Presentation and Summary of Accounting Policies (cont'd)

### (x) Share Capital and Surplus

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 remeasurements 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.

#### (y) 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 22). 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.

### (z) 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.

### (aa) 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 lease 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.

### (ab) 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 Insurance, Wealth Management and Group Insurance 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.

# (ac) Future Accounting Policies

IFRS that have been issued by the IASB and could impact the Company are as follows:

New Standard	Summary of Future Changes
IFRS 4 — Insurance Contracts	In September 2016, the IASB issued an amendment to IFRS 4, Insurance Contracts (IFRS 4). The amendment "Applying IFRS 9, Financial Instruments with IFR 4, Insurance Contracts" provides qualifying insurance companies with two options to address the potential volatility associated with implementing the IFR 9, Financial Instruments (IFRS 9) standard before the new proposed insurance contract standard is effective. The two options are as follows:
	<ul> <li>Deferral Approach — provides the option to defer implementation of IFRS 9 until the year 2021 or the effective date of the new insurance contracts standard, whichever is earlier; or</li> </ul>
	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 the new insurance contract standard simultaneously on January 1, 2021.
IFRS 9 — Financial Instruments	In July 2014, the IASB issued a final version of IFRS 9, Financial Instruments to replace IAS 39, Financial Instruments: Recognition and Measurement. The standar provides changes to financial instruments accounting for the following:
	<ul> <li>classification and measurement of financial instruments based on a business model approach for managing financial assets and the contractual cas flow characteristics of the financial asset;</li> </ul>
	impairment based on an expected loss model; and
	hedge accounting that incorporates the risk management practices of an entity.
	Due to applying the deferral method as noted above, the standard will be effective for the Company on January 1, 2021.
IFRS 15 — Revenue from Contracts with Customers	In May 2014, the IASB issued IFRS 15, Revenue from Contracts with Customers, which provides a single revenue recognition standard to align the financial reporting of revenue from contracts with customers and related costs. The revenue arising from insurance contracts, leases and financial instruments are not required to apply the revenue recognition requirements in IFRS 15. A company would recognize revenue when it transfers goods or services to a custome in the amount of consideration the company expects to receive from the customer.
	In September 2015, the IASB issued an amendment to IFRS 15 providing a deferral of one year of the effective date of the standard, from January 1, 201 to January 1, 2018.
	In April 2016, an additional amendment to IFRS 15 was issued clarifying requirements of the standard and providing additional transitional relief for companies implementing the standard.
	The Company is evaluating the impact of the adoption of this standard. The Company does not anticipate a significant impact for the adoption of this standard, however it is not yet possible to provide a reliable estimate of the impact on the Company's financial statements.
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 mode for lessees, replacing the operating and finance lease accounting models that currently exist. The new accounting model will generally require all lessee to recognize lease assets and liabilities on the balance sheet, initially measured at the present value of unavoidable lease payments for all leases with 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 provid a reliable estimate of the impact on the Company's financial statements.
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 scop amendments to IFRS. Three amendments were included in this issue relating to IFRS 12, Disclosure if 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 are effective January 1, 2017, while the amendments to IFRS 1 and IAS 28 are effective January 1, 2018. Adoption of thes amendments will not have an impact on the Company's consolidated financial statements.
IAS 40 – Investment	In December 2016, the IASB issued an amendment to IAS 40, Investment Property to clarify the requirements on transfers to, or from, investment property
Property	The amendment is effective January 1, 2018. The Company is evaluating the impact of the adoption of this standard.
IAS 7 — Statement of Cash Flows	In January 2016, the IASB issued an amendment to IAS 7, Statement of Cash Flows that requires additional disclosures to enable users of the financial statements to evaluate changes in liabilities arising from financing activities.
	The amendment is effective January 1, 2017. Adoption of this amendment will not have a significant impact on the Company's consolidated financial statement
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 is evaluating the impact of the adoption of this amendment.
IAS 12 — Income Taxes	In January 2016, the IASB issued an amendment to IAS 12, Income Taxes that clarifies the accounting for deferred tax assets for unrealized losses on debinstruments measured at fair value.
	The amendment is effective January 1, 2017. Adoption of this amendment will not have an impact on the Company's consolidated financial statements.
IFRIC 22 – Foreign Currency Transactions and	In December 2016, the IASB issued IFRIC Interpretation 22, Foreign Currency Transactions and Advance Consideration that provides requirements about whice exchange rate to use in reporting foreign currency transactions when payment is made or received in advance.
Advance Consideration	

# 3. Business Acquisitions

On August 1, 2016, the Company, through an indirect wholly owned Irish subsidiary, Irish Life Group Limited (Irish Life), completed the acquisition of Aviva Health Insurance Ireland Limited (Aviva Health), an Irish health insurance company, and obtained control of GloHealth Financial Services Limited (GloHealth), where Irish Life previously held 49%. The fair value of the 49% equity interest in GloHealth at acquisition was \$32 which includes a fair value increase of \$24 recorded in net investment income for the period ended December 31, 2016. The Company now holds 100% of the equity interest of GloHealth.

During the fourth quarter of 2016, the Company completed its comprehensive evaluation of the fair value of the net assets acquired from both Aviva Health and GloHealth and the purchase price allocation. As a result, initial goodwill presented in the September 30, 2016 interim financial statements of \$126 recognized upon the acquisition of Aviva Health and GloHealth has been adjusted in the fourth quarter of 2016. Adjustments were made to the provisional amounts disclosed in the September 30, 2016 interim unaudited financial statements for the recognition and measurement of intangible assets.

The amounts assigned to the assets acquired, goodwill, liabilities assumed and contingent consideration on August 1, 2016 reported as at December 31, 2016 for both Aviva Health and GloHealth are as follows:

## Assets acquired and goodwill

Cash and cash equivalents	\$ 85
Portfolio investments	123
Reinsurance assets	242
Other assets	292
Intangibles	35
Goodwill	95
Total assets acquired and goodwill	\$ 872
Liabilities assumed and contingent consideration	
Insurance contract liabilities	\$ 360
Other liabilities	318
Contingent consideration	37
	 715

The following provides the change in the carrying value from September 30 to December 31 of the goodwill on the acquisition:

Goodwill previously reported at September 30, 2016	\$ 126
Recognition and measurement of intangible assets	(35)
Deferred tax liabilities and other adjustments to purchase price allocation	4
Goodwill reported at December 31, 2016	\$ 95

The goodwill represents the excess of the purchase price over the fair value of the net assets, representing the synergies or future economic benefits arising from other assets acquired that are not individually identified and separately recognized in the acquisition. The goodwill is not deductible for tax purposes.

Aviva Health was rebranded as Irish Life Health, the combined operations of Aviva Health and GloHealth contributed \$117 in revenue and incurred net losses of \$8, which included acquisition and restructuring expenses of \$13, from the date of acquisition to December 31, 2016. These amounts are included in the Consolidated Statements of Earnings and Comprehensive Income.

#### 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.

	2016	2015		
Cash	\$ 1,559	\$	1,792	
Short-term deposits	1,700		1,021	
Total	\$ 3,259	\$	2,813	

At December 31, 2016 cash of \$185 was restricted for use by the Company (\$159 at December 31, 2015) 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:

20	)16	20	015
Carrying value	Fair value	Carrying value	Fair value
\$ 85,739	\$ 85,739	\$ 83,688	\$ 83,688
2,586	2,586	2,815	2,815
11,478	11,478	11,535	11,535
16,970	18,484	16,905	18,253
116,773	118,287	114,943	116,291
8,062	8,260	7,783	8,148
13,589	14,290	14,238	15,298
21,651	22,550	22,021	23,446
7,606	7,606	6,647	6,647
48	48	57	57
391	391	534	534
620	610	635	601
8,665	8,655	7,873	7,839
4,340	4,340	5,237	5,237
\$ 151,429	\$ 153,832	\$ 150,074	\$ 152,813
	\$ 85,739 2,586 11,478 16,970 116,773 8,062 13,589 21,651 7,606 48 391 620 8,665 4,340	\$ 85,739 \$ 85,739 2,586 2,586 11,478 11,478 16,970 18,484 116,773 118,287  8,062 8,260 13,589 14,290 21,651 22,550  7,606 7,606 48 48 391 391 620 610 8,665 8,655 4,340 4,340	Carrying value         Fair value         Carrying value           \$ 85,739         \$ 85,739         \$ 83,688           2,586         2,586         2,815           11,478         11,478         11,535           16,970         18,484         16,905           116,773         118,287         114,943           8,062         8,260         7,783           13,589         14,290         14,238           21,651         22,550         22,021           7,606         7,606         6,647           48         48         57           391         391         534           620         610         635           8,665         8,655         7,873           4,340         4,340         5,237

<sup>(1)</sup> 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

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

	2016								
	_	Term to maturity							
	1 year or less		Over 1–5 years		Over 5 years			Total	
Bonds Mortgage loans	\$	11,841 1,259	\$	26,601 6,764	\$	78,016 13,571	\$	116,458 21,594	
Total	\$	13,100	\$	33,365	\$	91,587	\$	138,052	
	2015								
	Term to maturity								
	_	1 year or less	1	Over 1–5 years		Over 5 years		Total	
Bonds	\$	11,679	\$	25,784	\$	77,113	\$	114,576	
Mortgage loans		1,358		6,037		14,598		21,993	
Total	\$	13,037	\$	31,821	\$	91,711	\$	136,569	

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

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.

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

5. Portfolio Investments (cont'd)

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

(i) Stocks include 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 9,202,706 shares of IGM at December 31, 2016 (9,203,174 at December 31, 2015) representing a 3.83% ownership interest (3.73% at December 31, 2015). 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 services agreements that influence the financial and operating policies of both companies.

	20	2016			
Carrying value, beginning of year	\$	358	\$	356	
Equity method share of IGM earnings		23		23	
Dividends received		(20)		(21)	
Carrying value, end of year	\$	361	\$	358	
Share of equity, end of year	\$	181	\$	180	
Fair value, end of year	\$	351	\$	325	

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 financial statements.

IGM's financial information as at December 31, 2016 can be obtained in its publicly available information.

At December 31, 2016 and 2015 IGM owned 39,737,388 common shares of the Company.

(ii) Stocks include the Company's 30.43% investment (30.43% at December 31, 2015), held through Irish Life, in Allianz Ireland, an unlisted general insurance company operating in Ireland.

	2	2016			
Carrying value, beginning of year	\$	218	\$	191	
Equity method share of Allianz comprehensive income		2		18	
Dividends received		(18)		(4)	
Changes in foreign exchange rate		(10)		13	
Carrying value, end of year	\$	192	\$	218	
Share of equity, end of year	\$	140	\$	161	

The fair value of Allianz Ireland at December 31, 2016 and December 31, 2015 approximates the carrying value.

The Company and Allianz Ireland both have a year-end date of December 31. The Company's year-end financial results are approved and reported before Allianz Ireland reports its financial results; therefore, the Company reports Allianz Ireland's financial information by estimating the amount of income attributable to the Company, based on prior quarter information, 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 financial statements.

# (d) Included in portfolio investments are the following:

(i) Carrying amount of impaired investments

	2016		2015
Impaired amounts by classification			
Fair value through profit or loss	\$ 283	\$	355
Available-for-sale	10	i	11
Loans and receivables	79	,	30
Total	\$ 372	\$	396

The carrying amount of impaired investments includes \$315 bonds and \$57 mortgage loans at December 31, 2016 (\$367 bonds, \$1 stocks and \$28 mortgage loans at December 31, 2015). The above carrying values for loans and receivables are net of allowances of \$43 at December 31, 2016 and \$20 at December 31, 2015.

(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:

			2	016					2	015		
	Во	nds		rtgage oans	Т	otal	Во	ınds		rtgage oans	1	Total .
Balance, beginning of year	\$	-	\$	20	\$	20	\$	_	\$	18	\$	18
Net provision for credit losses – in year		7		28		35		_		_		-
Write-offs, net of recoveries		_		(6)		(6)		_		-		-
Other (including foreign exchange rate changes)		_		(6)		(6)		_		2		2
Balance, end of year	\$	7	\$	36	\$	43	\$	_	\$	20	\$	20

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:

					2016			
		Bonds	ortgage Ioans	Stocks		estment perties	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 receivable	S	(7)	(28)	_		_	_	(35)
Other income and expenses		-	_	_		(84)	(107)	(191)
		4,333	944	270		241	464	6,252
Changes in fair value on fair value through profit or loss asse	ts:							
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

							2015				
			M	ortgage			Inv	estment			
		Bonds		loans	S	Stocks	pro	perties	(	Other	Total
Regular net investment income:											
Investment income earned	\$	4,252	\$	965	\$	279	\$	356	\$	416	\$ 6,268
Net realized gains											
Available-for-sale		104		_		2		_		_	106
Other classifications		10		97		_		_		_	107
Other income and expenses		_		_		-		(100)		(110)	(210)
		4,366		1,062		281		256		306	6,271
Changes in fair value on fair value through profit or loss a	ssets:										
Classified fair value through profit or loss		13		_		_		_		_	13
Designated fair value through profit or loss		(2,000)		_		(409)		_		137	(2,272)
Recorded at fair value through profit or loss		_		_		-		249		-	249
		(1,987)		-		(409)		249		137	(2,010)
Total	\$	2,379	\$	1,062	\$	(128)	\$	505	\$	443	\$ 4,261

#### 5. Portfolio Investments (cont'd)

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. 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:

	20	016	2015	
Balance, beginning of year	\$	5,237	\$ 4,613	
Additions		102	278	
Change in fair value through profit or loss		61	249	
Disposals		(427)	(282)	
Foreign exchange rate changes		(633)	379	
Balance, end of year	\$	4,340	\$ 5,237	

# (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, 2016 and December 31, 2015. 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, 2016, the Company had loaned securities (which are included in invested assets) with a fair value of \$7,520 (\$6,593 at December 31, 2015).

# Funds Held by Ceding Insurers

At December 31, 2016, the Company had amounts on deposit of \$10,781 (\$15,512 at December 31, 2015) for funds held by ceding insurers on the Consolidated Balance Sheets. Income and expenses arising from the agreements are included in net investment income on the Consolidated Statements of Earnings.

During 2016, the Company completed the transfer of approximately \$1,600 of annuity policies from The Equitable Life Assurance Company (Equitable Life) acquired during 2015. As a result, the related assets presented as Funds Held by Ceding Insurers at December 31, 2015 are recorded in Portfolio Investments at December 31, 2016.

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. As a result, the related assets presented in Funds Held by Ceding Insurers at December 31, 2015 are recorded in Portfolio Investments at December 31, 2016.

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:

	<b>2016</b> 2015							
		arrying value		Fair value	(	Carrying value		Fair value
Cash and cash equivalents	\$	214	\$	214	\$	180	\$	180
Bonds		8,391		8,391		13,472		13,472
Other assets		118		118		178		178
Total	\$	8,723	\$	8,723	\$	13,830	\$	13,830
Supporting:								
Reinsurance liabilities	\$	8,218	\$	8,218	\$	13,222	\$	13,222
Surplus		505		505		608		608
Total	\$	8,723	\$	8,723	\$	13,830	\$	13,830

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

	2016		2015
Bonds issued or guaranteed by:			
Treasuries	\$ 1,143	\$	2,357
Government related	1,506		2,153
Agency securitized	3		20
Non-agency securitized	1,126		1,580
Financials	1,764		2,679
Communications	132		205
Consumer products	692		1,248
Energy	276		557
Industrials	252		435
Technology	72		243
Transportation	164		233
Utilities	1,228		1,738
Total long-term bonds	8,358		13,448
Short-term bonds	33		24
Total	\$ 8,391	\$	13,472

# (c) Asset quality

Bond Portfolio By Credit Rating

	2016	2015
AAA	\$ 618	\$ 3,697
AA	3,792	3,405
A	3,300	5,186
BBB	476	798
BB and lower	205	386
Total	\$ 8,391	\$ 13,472

# 7. 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.

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 require only the purchase of investment-grade assets and 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 guarterly 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 Corporate Reinsurance Ceded 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.

	2016	2015
Cash and cash equivalents	\$ 3,259	\$ 2,813
Bonds		
Fair value through profit or loss	88,325	86,503
Available-for-sale	11,478	11,535
Loans and receivables	16,970	16,905
Mortgage loans	21,651	22,021
Loans to policyholders	8,467	8,694
Funds held by ceding insurers (1)	10,781	15,512
Reinsurance assets	5,627	5,131
Interest due and accrued	1,310	1,430
Accounts receivable	1,835	1,420
Premiums in course of collection	1,166	703
Trading account assets	516	590
Finance leases receivable	273	293
Other assets (2)	648	772
Derivative assets	528	461
Total	\$ 172,83 <b>4</b>	\$ 174,783

(1) Includes \$8,723 (\$13,830 at December 31, 2015) of funds held by ceding insurers where the Company retains the credit risk of the assets supporting the liabilities ceded (note 6). (2) Includes items such as current income taxes receivable and miscellaneous other assets of the Company (note 11).

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 \$149 of collateral received from counterparties as at December 31, 2016 (\$107 at December 31, 2015) 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:

					016			
		anada		United States		Europe		Total
Bonds issued or guaranteed by:		allaua		Jules		Luiope		
Treasuries	\$	1,422	\$	786	\$	10,880	\$	13,088
Government related		18,379	Ÿ	3,903	4	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
otal	\$	44,718	\$	32,973	\$	39,082	\$	116,773
		2015						
		anada		United States		Europe		Total
Bonds issued or guaranteed by:								
Treasuries	\$	1,376	\$	1,064	\$	10,974	\$	13,414
Government related		17,171		3,972		7,095		28,238
Agency securitized		105		4,161		218		4,484
Non-agency securitized		2,851		3,790		2,131		8,772
Financials		3,467		2,970		5,916		12,353
Communications		652		1,204		1,028		2,884
Consumer products		2,689		2,935		3,075		8,699
Energy		1,565		2,047		928		4,540
Industrials		1,432		3,706		1,635		6,773
Technology		513		877		247		1,637
Transportation		2,160		802		912		3,874
Utilities		5,898		4,307		4,277		14,482
Total long-term bonds		39,879		31,835		38,436		110,150
Short-term bonds		3,241		216		1,336		4,793
Total	\$	43,120	\$	32,051	\$	39,772	\$	114,943

# 7. Financial Instruments Risk Management (cont'd)

The followin

			20	16		
		e family dential	lti-family sidential	C	ommercial	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
			20	)15		
		e family dential	ılti-family sidential	C	ommercial	Total
Canada	\$	1,962	\$ 3,674	\$	7,055	\$ 12,691
United States		-	1,770		3,162	4,932
Europe		-	377		4,021	4,398
Total	\$	1,962	\$ 5,821	\$	14,238	\$ 22,021
Asset Quality						
Bond Portfolio By Credit Rating						
					2016	2015

# (iii)

2016	2015
\$ 27,762	\$ 36,434
29,816	20,364
37,787	35,623
20,116	20,984
1,292	1,538
\$ 116,773	\$ 114,943
	\$ 27,762 29,816 37,787 20,116 1,292

# Derivative Portfolio By Credit Rating

	20	2016		2015
Over-the-counter contracts (counterparty ratings):				
AA	\$	221	\$	209
A		288		248
BBB		16		_
Exchange-traded		3		4
Total	\$	528	\$	461

# (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:

	20	2016				
Less than 30 days	\$	54	\$	33		
30 – 90 days		-		2		
Greater than 90 days		2		3		
Total	\$	56	\$	38		

# (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:

	2016			2015
Participating	\$	1,155	\$	1,395
Non-participating		1,791		2,163
Total	\$	2,946	\$	3,558

# (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 69% in 2015) 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	\$	6,013	\$	712	\$	200	\$	_	\$	500	\$	_	\$	4,601
Capital trust securities (1)		150		_		_		_		_		-		150
Purchase obligations		283		108		53		62		42		15		3
Pension contributions		273		273		_		_		_		_		_
Total	\$	6,719	\$	1,093	\$	253	\$	62	\$	542	\$	15	\$	4,754

<sup>(1)</sup> Payments due have not been reduced to reflect that the Company held capital trust securities of \$37 principal amount (\$50 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 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.

#### 7. Financial Instruments Risk Management (cont'd)

#### (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 0.14% (0.18% in 2015). 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:

- The effect of an immediate 1% parallel increase in the yield curve on the prescribed scenarios would not change the total provision for interest rates.
- The effect of an immediate 1% parallel decrease in the yield curve on the prescribed scenarios would not change the total provision for interest rates.

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:

		201		201	15			
	1%	increase	1%	decrease	1%	increase	1% (	decrease
Change in interest rates								
Increase (decrease) in insurance and investment contract liabilities	\$	(202)	\$	677	\$	(163)	\$	614
Increase (decrease) in net earnings	\$	149	\$	(491)	\$	109	\$	(430)

### (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:

	2016					2015				
	10% increase 10% decrea			lecrease	10%	increase	10% decrea			
Change in equity values										
Increase (decrease) in non-participating insurance and investment contract liabilities	\$	(51)	\$	61	\$	(53)	\$	139		
Increase (decrease) in net earnings	\$	43	\$	(50)	\$	45	\$	(108)		

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:

		201					
	1% increase 1% decrease		1%	increase	1% (	decrease	
Change in best estimate return assumptions							
Increase (decrease) in non-participating insurance contract liabilities	\$	(504)	\$ 552	\$	(534)	\$	573
Increase (decrease) in net earnings	\$	407	\$ (438)	\$	433	\$	(457)

7. Financial Instruments Risk Management (cont'd)

### (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-thecounter 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.

		2016										
			Re	lated amou in the Bala								
	of f inst pres the	s amount financial cruments sented in Balance Sheet	cour	setting nterparty sition (1)	co	nancial Ilateral ceived/ dged <sup>(2)</sup>	e	Net kposure				
Financial instruments – assets	•		_	(244)		(474)						
Derivative financial instruments  Total financial instruments – assets	\$\$	528 528	\$ \$	(341)	\$ \$	(131)	\$ \$	56 56				
	_			. ,		. ,						
Financial instruments – liabilities	<b>*</b>	2.042	<b>.</b>	(244)	<b>.</b>	(402)		4 260				
Derivative financial instruments	\$	2,012	\$	(341)	\$	(403)	\$	1,268				
Total financial instruments – liabilities	\$	2,012	\$	(341)	\$	(403)	\$	1,268				
				20	15							
	_		Related amounts not set-off in the Balance Sheet									
	of I inst pres the	ss amount financial truments sented in Balance Sheet	coul	fsetting nterparty sition (1)	co re	nancial llateral ceived/ edged <sup>(2)</sup>	e	Net xposure				
Financial instruments – assets												
Derivative financial instruments Reverse repurchase agreements <sup>(3)</sup>	\$	461 43	\$	(302) –	\$	(104) (43)	\$	55 -				
Total financial instruments – assets	\$	504	\$	(302)	\$	(147)	\$	55				
Financial instruments – liabilities												
Derivative financial instruments	\$	2,624	\$	(302)	\$	(586)	\$	1,736				
Total financial instruments – liabilities	\$	2,624	\$	(302)	\$	(586)	\$	1,736				

<sup>(1)</sup> 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.

<sup>(2)</sup> 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 \$159 (\$107 at December 31, 2015), received on reverse repurchase agreements was nil (\$44 at December 31, 2015), and pledged on derivative liabilities was \$475 (\$671 at December 31, 2015).

<sup>(3)</sup> Assets related to reverse repurchase agreements are included in bonds, in the Consolidated Balance Sheets.

### 8. 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:

	2016											
	Lev	vel 1	I	Level 2	L	evel 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	\$ 1	1,345	\$	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				

<sup>(1)</sup> Excludes collateral received from counterparties of \$149.

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

<sup>(2)</sup> Excludes collateral pledged to counterparties of \$425.

## NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

## 8. Fair Value Measurement (cont'd)

	I	evel 1	Level 2	L	evel 3		Total
Assets measured at fair value							
Cash and cash equivalents	\$	2,813	\$ _	\$	_	\$	2,813
Financial assets at fair value through profit or loss							
Bonds		-	86,493		10		86,503
Stocks		6,573	8		66		6,647
Total financial assets at fair value through profit or loss		6,573	86,501		76		93,150
Available-for-sale financial assets							
Bonds		_	11,534		1		11,535
Stocks		56	-		1		57
Total available-for-sale financial assets		56	11,534		2		11,592
Investment properties		-	_		5,237		5,237
Funds held by ceding insurers		180	13,472		-		13,652
Derivatives (1)		4	457		-		461
Other assets:							
Trading account assets		381	204		5		590
Total assets measured at fair value	\$	10,007	\$ 112,168	\$	5,320	\$	127,495
Liabilities measured at fair value							
Derivatives (2)	\$	3	\$ 2,621	\$	_	\$	2,624
Investment contract liabilities		_	2,226		27		2,253
Total liabilities measured at fair value	\$	3	\$ 4,847	\$	27	\$	4,877

<sup>(1)</sup> Excludes collateral received from counterparties of \$107.

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

<sup>(2)</sup> Excludes collateral pledged to counterparties of \$608.

## NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

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:

		2016													
	thro pro	value ough fit or bonds	for	ilable- -sale onds	thi profit	value rough t or loss ocks <sup>(3)</sup>	for	lable- -sale ocks		restment operties	ass tra	ther ets – ding ount <sup>(4)</sup>	Total Level 3 assets	COI	stment ntract pilities
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	\$	-
	_														

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

<sup>(2)</sup> Transfers into Level 3 are due primarily to increased 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.

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

<sup>(4)</sup> 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.

## 8. Fair Value Measurement (cont'd)

		2015														
	th	r value rough ofit or s bonds	for	lable- -sale inds	thr profit	value ough t or loss ocks <sup>(3)</sup>	for	ilable- -sale ocks		vestment operties	ass	ther ets – ding ount <sup>(4)</sup>		Total Level 3 assets	100	stment ntract pilities
Balance, beginning of year	\$	86	\$	1	\$	17	\$	1	\$	4,613	\$	_	\$	4,718	\$	28
Total gains																
Included in net earnings		5		_		7		_		249		_		261		_
Included in other																
comprehensive income	(1)	-		_		_		-		379		_		379		_
Purchases		-		_		50		-		278		5		333		_
Sales		-		_		(4)		-		(282)		_		(286)		_
Repayments		(47)		_		-		-		-		-		(47)		-
Other		_		-		-		-		-		-		-		(1)
Transfers into Level 3 (2)		_		-		-		-		-		-		-		-
Transfers out of Level 3 (2)		(34)		-		(4)		-		-		-		(38)		-
Balance, end of year	\$	10	\$	1	\$	66	\$	1	\$	5,237	\$	5	\$	5,320	\$	27
Total gains for the year included in net investment income	\$	5	\$	_	\$	7	\$	-	\$	249	\$	_	\$	261	\$	
Change in unrealized gains for the year included in earnings for assets held						_										
at December 31, 2015	\$	5	\$	_	\$	7	\$		\$	243	\$		\$	255	\$	

<sup>(1)</sup> Amount of other comprehensive income for investment properties represents the unrealized gains on foreign exchange.

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	Discount rate  Reversionary rate	Range of 2.9% – 10.3%  Range of 5.0% – 8.3%	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.  A decrease in the reversionary rate would result in an increase in fair value. An increase in the
	cash flows (such as future leasing assumptions, rental rates, capital and operating expenditures) and discount, reversionary and overall capitalization	Vacancy rate	Weighted average of 3.1%	reversionary rate would result in a decrease in fair value.  A decrease in the expected vacancy rate would
	rates applicable to the asset based on current market rates.			generally result in an increase in fair value. An increase in the expected vacancy rate would generally result in a decrease in fair value.

<sup>(2)</sup> Transfers into Level 3 are due primarily to increased 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.

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

<sup>(4)</sup> 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 presents the Company's assets and liabilities disclosed at fair value on a recurring basis by hierarchy level:

					2016			
	Le	evel 1	Level 2	L	evel 3	liabil helo	r assets/ lities not l 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 Available-for-sale financial assets	_	-	49,372		129		-	49,501
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

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

<sup>(2)</sup> 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 over which the Company exerts significant influence but does not control.

				;	2015			
	Le	evel 1	Level 2	L	evel 3	liabi helo	er assets/ lities not d at fair value	Total
Assets disclosed at fair value								
Loans and receivables financial assets								
Bonds	\$	_	\$ 18,145	\$	108	\$	_	\$ 18,253
Mortgage loans		_	23,446		_		_	23,446
Loans to policyholders		_	8,694		_		_	8,694
Total loans and receivables financial assets Available-for-sale financial assets		-	50,285		108		-	50,393
Stocks (1)		_	_		_		534	534
Other stocks (2)		325	_		_		276	601
Funds held by ceding insurers		-	_		-		178	178
Total assets disclosed at fair value	\$	325	\$ 50,285	\$	108	\$	988	\$ 51,706
Liabilities disclosed at fair value								
Debentures and other debt instruments	\$	467	\$ 5,565	\$	_	\$	_	\$ 6,032
Capital trust securities		_	215		-		-	215
Total liabilities disclosed at fair value	\$	467	\$ 5,780	\$	-	\$	-	\$ 6,247

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

<sup>(2)</sup> 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, and a joint venture in GloHealth where the Company obtained control in 2016 (note 3).

## **Goodwill and Intangible Assets**

### Goodwill

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

	2016	2015		
Balance, beginning of year	\$ 5,913	\$	5,855	
Business acquisitions (note 3)	95		_	
Changes in foreign exchange rates	(31)		58	
Balance, end of year	\$ 5,977	\$	5,913	

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

	2016	2015
Balance, beginning of year	\$ 1,241	\$ 1,043
Changes in foreign exchange rates	(36)	198
Balance, end of year	\$ 1,205	\$ 1,241

(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:

		201	15
Canada			
Group	\$ 1,0	<b>47</b> \$ 1	1,047
Individual Insurance/Wealth Management	2,7	40 2	2,740
Europe			
Insurance and Annuities	1,9	B <b>4</b> 1	1,915
Reinsurance		1	1
United States			
Financial Services	2	05	210
Total	\$ 5,9	77 \$ 5	5,913

# (b) Intangible Assets

 $Intangible\ assets\ of\ \$3,972\ (\$4,036\ in\ 2015)\ include\ indefinite\ life\ and\ finite\ life\ intangible\ assets.\ The\ carrying\ value\ and\ changes\ in\ and\ changes\ in\ and\ changes\ in\ changes\ in\ changes\ in\ changes\ in\ change\ ch$ the carrying value of these intangible assets are as follows:

# (i) Indefinite life intangible assets:

	2016							
		ands and demarks		ustomer ract related	po acqui part	eholders' rtion of red future icipating unt profit		Total
Cost			_		_		_	
Balance, beginning of year	\$	1,020	\$	3,019	\$	354	\$	4,393
Transfer to finite life		(44)		(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	4	32	7	_	4	37
Balance, end of year	\$	(157)	\$	(1,084)	\$	-	\$	(1,241)
Net carrying amount	\$	822	\$	1,854	\$	354	\$	3,030
	Shareholders' portion of acquired future Brands and Customer participating trademarks contract related account profit						Total	
Cost	ŕ	021	÷	2 502	¢	254	¢	2.067
Balance, beginning of year Business acquisitions	\$	921	\$	2,592 3	\$	354	\$	3,867 3
Changes in foreign exchange rates		99		424		_		523
Balance, end of year	\$	1,020	\$	3,019	\$	354	\$	4,393
Accumulated impairment		(1.40)	<u></u>	(020)	¢			/1 070
Balance, beginning of year Changes in foreign exchange rates	\$	(140) (22)	\$	(939) (177)	\$	_	\$	(1,079) (199)
Balance, end of year	\$	(162)	\$	(1,116)	\$	_	\$	(1,278)
Net carrying amount	\$	858	\$	1,903	\$	354	\$	3,115
Net carrying amount	\$	858	\$	1,903	\$	354	\$	3,

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

		2015
Canada		
Individual Insurance/Wealth Management	\$ 9	<b>73</b> \$ 973
Europe		
Insurance and Annuities	2	16 246
United States		
Asset Management	1,8	<b>11</b> 1,896
Total	\$ 3,0	3,115

# 9. Goodwill and Intangible Assets (cont'd)

# (iii) Finite life intangible assets:

Contraction of contract contracts         Contract contracts         Distribution of bistribution         Technology of Salva (Salva)         Total (Salva) </th <th></th> <th colspan="5">2016</th> <th></th>		2016									
Amortization method         Straight-line         St		CC	ontract						Total		
Cost         S         810         \$118         \$1,106         \$2,034           Additions         39         —         183         222           Transfer from indefinite life         3         —         —         3         —         —         3         —         —         3         —         —         3         —         —         3         —         —         3         —         —         3         —         —         3         —         —         —         3         —         —         —         3         —         —         —         3         —         —         —         3         —         —         —         5         6         8         3         —         7         6         5         6         8         2         2         7         1	Amortization period range	9 – 3	9 – 30 years		9 – 30 years		0 years	3 – 1	10 years		
Balance, beginning of year         \$ 810         \$ 118         \$ 1,006         \$ 2,034           Additions         39         -         183         222           Changes in foreign exchange rates         (21)         (12)         (22)         (25)         (58)           Balance, end of year         \$ 831         \$ 106         \$ 1,264         \$ 2,201           Accumulated amortization and impairment         Balance, beginning of year         \$ (418)         \$ (49)         \$ (666)         \$ (1113)           Changes in foreign exchange rates         \$ (50)         (4)         \$ (123)         \$ (1725)           Amortization         \$ (36)         \$ (48)         \$ (75)         \$ (1725)           Balance, end of year         \$ (36)         \$ (48)         \$ (75)         \$ (1725)           Net carrying amount         \$ (36)         \$ (48)         \$ (75)         \$ (125)           Amortization period range         \$ 2,20 years         \$ 30 years         \$ 3-10 years           Amortization period range         \$ 720 years         \$ 30 years         \$ 3-10 years           Amortization period range         \$ 745         \$ 100 years         \$ 101 years         \$ 171 years           Balance, beginning of year         \$ 745         \$	Amortization method	Strai	ght-line	Straig	ht-line	Strai	ght-line				
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         \$2,000           Accumulated amortization and impairment         8         \$ (48)         \$ (49)         \$ (41)         \$ (11)           Balance, beginning of year         8         \$ 5         18         31           Amortization         \$ (48)         \$ (48)         \$ (75)         \$ (172)           Balance, end of year         \$ (46)         \$ (48)         \$ (75)         \$ (172)           Net carrying amount         \$ (30)         \$ (48)         \$ (75)         \$ (172)           Amortization period range         \$ (30)         \$ (30)         \$ (30)         \$ (30)           Amortization period range         \$ (20)         \$ (30)         \$ (30)         \$ (30)         \$ (30)         \$ (30)         \$ (30)         \$ (30)         \$ (30)         \$ (30)         \$ (30)         \$ (30)         \$ (30)         \$ (30)         \$ (30)         \$ (30)         \$ (30)         \$ (30)         \$ (30)         \$ (	Cost										
Transfer from indefinite life Changes in foreign exchange rates         3         -         -         3         3         -         -         3         3         -         -         3         5         6         5         6         8         5         18         3         1         6         1,264         \$         2,201         1         2         2         1         8         2         1         8         7         1	Balance, beginning of year	\$	810	\$	118	\$	1,106	\$	2,034		
Changes in foreign exchanger rates         (21)         (12)         (25)         (58)           Balance, end of year         8831         \$ 106         \$ 1,264         \$ 2,201           Accumulated amortization and impairment         \$ (418)         \$ (49)         \$ (646)         \$ (1,113)           Balance, beginning of year         \$ (418)         \$ (49)         \$ (646)         \$ (1,13)           Amortization         \$ (50)         \$ (48)         \$ (75)         \$ (1,25)           Palance, end of year         \$ (460)         \$ (48)         \$ (75)         \$ (1,25)           Net carrying amount         \$ (346)         \$ (48)         \$ (75)         \$ (1,25)           Net carrying amount         \$ (346)         \$ (348)         \$ (75)         \$ (1,25)           Net carrying amount         \$ (348)         \$ (348)         \$ (35)         \$ (348)         \$ (35)         \$ (34)         \$ (35)         \$ (34)         \$ (35)         \$ (34)         \$ (35)         \$ (34)         \$ (35)         \$ (34)         \$ (35)         \$ (35)         \$ (35)         \$ (35)         \$ (35)         \$ (35)         \$ (35)         \$ (35)         \$ (35)         \$ (35)         \$ (35)         \$ (35)         \$ (35)         \$ (35)         \$ (35)         \$ (35) <t< td=""><td></td><td></td><td></td><td></td><td>_</td><td></td><td>183</td><td></td><td></td></t<>					_		183				
Balance, end of year         \$ 831         \$ 106         \$ 1,264         \$ 2,201           Accumulated amortization and impairment         \$ (418)         \$ (49)         \$ (646)         \$ (1,113)           Balance, beginning of year         8         5         18         31           Amortization         (50)         (4)         (123)         (177)           Balance, end of year         \$ (460)         \$ (48)         \$ (751)         \$ (1,259)           Net carrying amount         \$ 371         \$ 58         \$ 513         \$ 92           Amortization period range         9 - 20 years related         \$ 30 years veature         \$ 3 - 10 years veature         \$ 5 raight-line											
Accumulated amortization and impairment Balance, beginning of year         \$ (418)         \$ (49)         \$ (646)         \$ (113)           Changes in foreign exchange rates         8         5         18         31           Amortization         (50)         (4)         (123)         (177)           Balance, end of year         \$ (460)         \$ (48)         \$ (751)         \$ (1259)           Net carrying amount         \$ 371         \$ 58         \$ 513         \$ 942           Amortization period range         9 - 20 years         30 years         3 - 10 years         Technology/ Software         Total           Amortization method         \$ 745         \$ 109         \$ 864         \$ 1,718           Additions         \$ 745         \$ 109         \$ 864         \$ 1,718           Additions         \$ 745         \$ 109         \$ 864         \$ 1,718           Additions         \$ 745         \$ 109         \$ 864         \$ 1,718           Additions         \$ 745         \$ 109         \$ 864         \$ 1,718           Accumulated amortization and impairment         \$ 810         \$ 118         \$ 1,06         \$ 2,03           Balance, beginning of year         \$ (33)         \$ (42)         \$ (501)         \$ (81)							. ,				
Balance, beginning of year         \$ (418)         \$ (49)         \$ (646)         \$ (1113)           Changes in foreign exchange rates         8         5         18         31           Amortization         (50)         (44)         (123)         (1775)           Balance, end of year         \$ (460)         \$ (48)         \$ (751)         \$ (1,259)           Net carrying amount         \$ (460)         \$ (48)         \$ (751)         \$ (1,259)           Amortization period range         \$ (30)	Balance, end of year	\$	831	\$	106	\$	1,264	\$	2,201		
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           Customer contract         \$ 20 years         \$ 100 years         \$ 50 years         \$ 761           Amortization period range         \$ 720 years         30 years         \$ 710 years         \$ 710 years           Amortization method         \$ 745         \$ 109         \$ 864         \$ 1,718           Additions         \$ 745         \$ 109         \$ 864         \$ 1,718           Additions         \$ 7         \$ 109         \$ 864         \$ 1,718           Additions         \$ 7         \$ 109         \$ 864         \$ 1,718           Additions         \$ 7         \$ 109         \$ 864         \$ 1,718           Additions         \$ 1         \$ 161         161         161           Changes in foreign exchange rates         \$ 810         \$ 118         \$ 1,00         \$ 2,034           Accumulated amortization and impairment         \$ 3         \$ 3											
Manoritization   Samo   Good   Gale   Gale		\$		\$		\$	, ,	\$	,		
Balance, end of year         \$ (460)         \$ (48)         \$ (751)         \$ (1,259)           Net carrying amount         \$ 371         \$ 58         \$ 513         \$ 942           Customer contract contract related         Distribution contrology/ Software         Technology/ Software	3 3		_								
Net carrying amount         \$ 371         \$ 58         \$ 513         \$ 942           Customer contract contract contracts and in pairment         Extraight-line contracts and impairment         Straight-line contracts and impairment           Balance, beginning of year         \$ 745         \$ 109         \$ 864         \$ 1,718           Changes in foreign exchange rates         \$ 510         \$ 118         \$ 1,106         \$ 2,034           Accumulated amortization and impairment         \$ 810         \$ 118         \$ 1,106         \$ (881)           Balance, beginning of year         \$ (338)         \$ (42)         \$ (501)         \$ (881)           Impairment         \$ (338)         \$ (42)         \$ (501)         \$ (881)           Impairment         \$ (338)         \$ (42)         \$ (501)         \$ (881)           Changes in foreign exchange rates         \$ (31)         \$ (33)         \$ (50)         \$ (84)           Amortization         \$ (48)         \$ (48)         \$ (48)         \$ (48)         \$ (48)         \$ (48)         \$ (48) <td></td> <td></td> <td>. ,</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>			. ,								
Customer contract related   Customer celated   Cu		<u> </u>	. ,		. ,		. ,				
Customer contract related         Distribution channels         Technology/ Software         Total           Amortization period range         9 – 20 years         30 years         3 – 10 years           Amortization method         Straight-line         Straight-line         Straight-line           Cost         Straight-line         Straight-line         Straight-line           Balance, beginning of year         \$ 745         \$ 109         \$ 864         \$ 1,718           Additions         — — — — 161         161         161           Changes in foreign exchange rates         65         9         81         155           Balance, end of year         \$ 810         \$ 118         \$ 1,106         \$ 2,034           Accumulated amortization and impairment         \$ (338)         \$ (42)         \$ (501)         \$ (881)           Impairment         — — — — — (2)         (2)         (2)           Changes in foreign exchange rates         (31)         (3)         (50)         (84)           Amortization         (49)         (4)         (93)         (146)           Balance, end of year         \$ (418)         \$ (49)         \$ (646)         \$ (1,113)	Net carrying amount	\$	371	\$	58	\$	513	\$	942		
contract related         Distribution channels         Technology/ Software         Total           Amortization period range         9 – 20 years Straight-line         3 0 years Straight-line         3 – 10 years Straight-line           Amortization method         Straight-line         Straight-line         Straight-line           Cost         S         109         864         1,718           Balance, beginning of year         65         9         81         161           Changes in foreign exchange rates         \$810         118         1,106         2,034           Accumulated amortization and impairment         \$138         (42)         (501)         (881)           Impairment         9         109         109         109           Changes in foreign exchange rates         31         3         50         841           Amortization         49         49         9         141         161           Balance, end of year         5         418         1,00         5         2,00         2,00           Changes in foreign exchange rates         31         3         5         3         1,00         3         3         1,00         3         1,00         3         1,00         3         1,00					2	015					
Amortization method         Straight-line         St		C	ontract						Total		
Amortization method         Straight-line         St	Amortization period range	9 – 2	9 – 20 years		0 years	3 –	10 years				
Balance, beginning of year         \$ 745         \$ 109         \$ 864         \$ 1,718           Additions         -         -         -         161         161           Changes in foreign exchange rates         65         9         81         155           Balance, end of year         \$ 810         \$ 118         \$ 1,106         \$ 2,034           Accumulated amortization and impairment         8         420         \$ (501)         \$ (881)           Impairment         -         -         -         (2)         (2)           Changes in foreign exchange rates         (31)         (3)         (50)         (84)           Amortization         (49)         (4)         (93)         (146)           Balance, end of year         \$ (418)         \$ (49)         \$ (646)         \$ (1,113)	· -				Straight-line		Straight-line Str				
Additions       -       -       -       161       161         Changes in foreign exchange rates       65       9       81       155         Balance, end of year       \$ 810       \$ 118       \$ 1,106       \$ 2,034         Accumulated amortization and impairment       \$ (338)       \$ (42)       \$ (501)       \$ (881)         Impairment       -       -       -       (2)       (2)         Changes in foreign exchange rates       (31)       (3)       (50)       (84)         Amortization       (49)       (4)       (93)       (146)         Balance, end of year       \$ (418)       \$ (49)       \$ (646)       \$ (1,113)	Cost										
Changes in foreign exchange rates         65         9         81         155           Balance, end of year         \$ 810         \$ 118         \$ 1,106         \$ 2,034           Accumulated amortization and impairment         \$ 338         \$ (42)         \$ (501)         \$ (881)           Impairment         -         -         -         (2)         (2)           Changes in foreign exchange rates         (31)         (3)         (50)         (84)           Amortization         (49)         (4)         (93)         (146)           Balance, end of year         \$ (418)         \$ (49)         \$ (646)         \$ (1,113)	Balance, beginning of year	\$	745	\$	109	\$	864	\$	1,718		
Balance, end of year       \$ 810       \$ 118       \$ 1,106       \$ 2,034         Accumulated amortization and impairment         Balance, beginning of year       \$ (338)       \$ (42)       \$ (501)       \$ (881)         Impairment       -       -       -       (2)       (2)         Changes in foreign exchange rates       (31)       (3)       (50)       (84)         Amortization       (49)       (4)       (93)       (146)         Balance, end of year       \$ (418)       \$ (49)       \$ (646)       \$ (1,113)											
Accumulated amortization and impairment         Balance, beginning of year       \$ (338)       \$ (42)       \$ (501)       \$ (881)         Impairment       -       -       -       (2)       (2)         Changes in foreign exchange rates       (31)       (3)       (50)       (84)         Amortization       (49)       (4)       (93)       (146)         Balance, end of year       \$ (418)       \$ (49)       \$ (646)       \$ (1,113)	Changes in foreign exchange rates		65		9		81		155		
Balance, beginning of year       \$ (338)       \$ (42)       \$ (501)       \$ (881)         Impairment       -       -       -       (2)       (2)         Changes in foreign exchange rates       (31)       (3)       (50)       (84)         Amortization       (49)       (4)       (93)       (146)         Balance, end of year       \$ (418)       \$ (49)       \$ (646)       \$ (1,113)	Balance, end of year	\$	810	\$	118	\$	1,106	\$	2,034		
Impairment         -         -         -         (2)         (2)           Changes in foreign exchange rates         (31)         (3)         (50)         (84)           Amortization         (49)         (4)         (93)         (146)           Balance, end of year         \$ (418)         \$ (49)         \$ (646)         \$ (1,113)											
Changes in foreign exchange rates         (31)         (3)         (50)         (84)           Amortization         (49)         (4)         (93)         (146)           Balance, end of year         \$ (418)         \$ (49)         \$ (646)         \$ (1,113)		\$	(338)	\$	(42)	\$		\$	. ,		
Amortization       (49)       (4)       (93)       (146)         Balance, end of year       \$ (418)       \$ (49)       \$ (646)       \$ (1,113)											
Balance, end of year \$ (418) \$ (49) \$ (646) \$ (1,113)											
·											
Net carrying amount \$ 392 \$ 69 \$ 460 \$ 921											
	Net carrying amount	\$	392	\$	69	\$	460	\$	921		

 $The weighted average \ remaining \ amortization \ period \ of the \ customer \ contract \ related \ and \ distribution \ channels \ are \ 10 \ and \ 17 \ and \ 17$ years respectively (9 and 18 years respectively at December 31, 2015).

#### (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 2016, the Company conducted its annual impairment testing of goodwill and indefinite life intangible assets based on September 30, 2016 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.

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.

## 10. 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:

		2016	2015	
Carrying value, beginning of year	\$	715	\$	671
Less: accumulated depreciation/impairments		(62)		(52)
Net carrying value, beginning of year		653		619
Additions		21		10
Impairments		_		(1)
Disposals		(2)		(1)
Depreciation		(10)		(9)
Foreign exchange		(13)		35
Net carrying value, end of year	\$	649	\$	653

The net carrying value of fixed assets is \$304 at December 31, 2016 (\$298 at December 31, 2015).

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

	2	2016	2015		
Canada	\$	548	\$	531	
United States		270		277	
Europe		135		143	
Total	\$	953	\$	951	

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

## 11. Other Assets

		2015		
Deferred acquisition costs	\$ 597	\$ 704		
Trading account assets (1)	516	590		
Finance leases receivable	273	293		
Defined benefit pension plan assets (note 23)	214	250		
Prepaid expenses	112	103		
Miscellaneous other assets	551	703		
Total	\$ 2,263	\$ 2,643		

<sup>(1)</sup> Includes bonds of \$141 and stocks of \$375 at December 31, 2016 (bonds of \$124 and stocks of \$466 at December 31, 2015).

Total other assets of \$1,203 (\$1,421 at December 31, 2015) 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		2016		2015
Balance, beginning of year	\$	704	\$	685
Additions		93		120
Amortization		(73)		(111)
Changes in foreign exchange		(74)		66
Disposals		(53)		(56)
Balance, end of year	\$	597	\$	704

### 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 two finance leases on properties in Europe. These properties have been leased for a 35-year term.

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

		2016					
	Minimum lease payments		Present valu of minimum lease payments				
One year	\$	24	\$	23			
Over one to five years		94		74			
Over five years		524		176			
		642		273			
Less: unearned finance lease income		369		-			
Total finance leases receivable	\$	273	\$	273			

The internal rate of return for the leases is fixed at the contract dates and will remain fixed for the duration of the contract, ranging between 5.4% and 7.5%.

## 12. Insurance and Investment Contract Liabilities

(a)

Insurance and investment contract liabilities						
			2016			
	Gross liability		nsurance 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		
		2015 (note 33)				
	Gross liability		nsurance assets	Net		
Insurance contract liabilities	\$ 158,492	\$	5,131	\$ 153,361		
Investment contract liabilities	2,253		_	2,253		
Total	\$ 160,745	\$	5,131	\$ 155,614		

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

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

		2016				
		Gross ability		nsurance nssets		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	\$ 1	57,949	\$	5,627	\$	152,322
	2015 (note 33)					
		Gross ability		nsurance assets		Net
Participating						
Canada	\$	32,072	\$	(419)	\$	32,491
United States		12,278		16		12,262
Europe		1,519		_		1,519
Non-Participating						
Canada		28,162		794		27,368
United States		27,625		339		27,286
officed states		FO 000		4.401		54,688
Europe		59,089		4,401		34,000

## 12. Insurance and Investment Contract Liabilities (cont'd)

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

					20	)16			
	_		IV	1ortgage			estment/		
		Bonds		loans	Stocks	pr	operties	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		17,464		3,699	1,979		13	5,970	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		14,996		952	_		59	200,948	216,955
Total equity		6,047		628	1,499		179	16,655	25,008
Total carrying value	\$	116,773	\$	21,651	\$ 8,665	\$	4,340	\$ 248,483	\$ 399,912
Fair value	\$	118,287	\$	22,550	\$ 8,655	\$	4,340	\$ 248,483	\$ 402,315
	_				2015 /	note 33)			
	_		N	Mortgage	2013 (1		vestment		
		Bonds		loans	Stocks		operties	Other	Total
Carrying value									
Participating liabilities									
Canada	\$	15,332	\$	7,816	\$ 4,112	\$	1,341	\$ 3,471	\$ 32,072
United States		5,887		485	_		_	5,906	12,278
Europe		1,087		40	154		71	167	1,519
Non-participating liabilities									
Canada		18,848		3,839	1,732		7	3,736	28,162
United States		23,023		3,813	-		-	789	27,625
Europe		31,982		4,358	226		3,342	19,181	59,089
Other		13,048		941	_		65	199,876	213,930
Total equity		5,736		729	1,649		411	16,735	25,260
Total carrying value	\$	114,943	\$	22,021	\$ 7,873	\$	5,237	\$ 249,861	\$ 399,935
	_								

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.

\$

23,446

\$

7,839

\$

5,237

\$ 249,861

\$ 402,674

116,291

Fair value

### (c) Change in insurance contract liabilities

Normal change in force

Balance, end of year

Management action and changes in assumptions

Business movement from/to external parties

Impact of foreign exchange rate changes

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

actuariai estilliates.				
		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-participati	ng	
	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
		2015		
		Participating		
	Gross liability	Reinsurance assets	Net	
Balance, beginning of year	\$ 42,893	\$ (144	43,037	
Impact of new business	23	-	23	
Normal change in force	1,046	(70		
Management action and changes in assumptions	(276)			
Impact of foreign exchange rate changes	2,158	3	2,155	
Balance, end of year	\$ 45,844	\$ (403	\$ 46,247	
		Non-participatir	ng	
	Gross liability	Reinsurance assets	Net	Total Net
Balance, beginning of year	\$ 102,305	\$ 5,295	\$ 97,010	\$ 140,047
Impact of new business	4,380	126	4,254	4,277

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.

(5,711)

1,588

10,575

\$ 112,648

(489)

(178)

(78)

(2)

371

5,534

(5,533)

1,590

10,204

\$ 107,114

(411)

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.

(4,417)

(495)

1,590

12,359

\$ 153,361

#### 12. Insurance and Investment Contract Liabilities (cont'd)

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.

In 2015, the major contributors to the increase in net insurance contract liabilities were the impact of foreign exchange rate changes of \$12,359, the impact of new business of \$4,277, and business movement from/to external parties of \$1,590, which was primarily due to the acquisition of Equitable Life's annuity business during the first quarter of 2015, partially offset by decreases due to the normal changes in the in force business of \$4,417, which was primarily due to the change in fair value, and management actions and assumption changes of \$495.

Net non-participating insurance contract liabilities decreased by \$411 in 2015 due to management actions and assumption changes including a \$50 decrease in Canada, a \$331 decrease in Europe and a \$30 decrease in the United States.

The decrease in Canada was primarily due to updated mortality assumptions of \$159, updated economic assumptions of \$15 and updated expense and tax assumptions of \$12, partially offset by increases due to updated policyholder behaviour assumptions of \$85, and modeling refinements of \$49.

The decrease in Europe was primarily due to updated longevity assumptions of \$292, updated economic assumptions of \$184, updated morbidity assumptions of \$12 and updates to other provisions of \$10, partially offset by increases due to updated mortality assumptions of \$64, updated expense and tax assumptions of \$55, modeling refinements of \$37 and updated policyholder behaviour assumptions of \$11.

The decrease in the United States was primarily due to updated economic assumptions of \$30 and updated mortality assumptions of \$8, partially offset by increases due to updated policyholder behaviour assumptions of \$6.

Net participating insurance contract liabilities decreased by \$84 in 2015 due to management actions and assumption changes. The decrease was primarily due to provisions for future policyholder dividends of \$4,991, updated expense and tax assumptions of \$545 and updated mortality assumptions of \$412, partially offset by increases due to lower investment returns of \$5,527, updated policyholder behaviour assumptions of \$188, and modeling refinements of \$149.

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

	2016		2015
		(r	note 33)
Balance, beginning of year	\$ 2,253	\$	922
Normal change in force business	(220)		(89)
Investment experience	93		18
Management action and changes in assumptions	(46)		7
Business movement from/to external parties	-		1,330
Impact of foreign exchange rate changes	(71)		65
Balance, end of year	\$ 2,009	\$	2,253

The carrying value of investment contract liabilities approximates their fair value. No investment contract liabilities have been reinsured. In 2015, business movement from/to external parties is primarily due to a retrocession agreement to assume a block of investment contract liabilities in the form of structured settlements with fixed terms and amount.

### (e) Gross premiums written and gross policyholder benefits

#### (i) Premium Income

	2016	2015
Direct premiums	\$ 23,772	\$ 22,120
Assumed reinsurance premiums	11,278	6,009
Total	\$ 35,050	\$ 28,129
Policyholder Benefits		
	2016	2015
Direct	\$ 16,721	\$ 15,880
Assumed reinsurance	11,594	6,673
Total	\$ 28,315	\$ 22,553

#### (f) Actuarial Assumptions

(ii)

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. Mortality improvement has been projected to occur for the next 25 years. 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. Mortality improvement has been projected to occur throughout future years for annuitants.

#### 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.

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

#### 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 7(c)).

## 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		
	 2016		2015
Mortality – 2% increase	\$ (281)	\$	(282)
Annuitant mortality – 2% decrease	\$ (384)	\$	(314)
Morbidity – 5% adverse change	\$ (242)	\$	(225)
Investment returns			
Parallel shift in yield curve			
1% increase	\$ -	\$	-
1% decrease	\$ -	\$	-
Change in range of interest rates			
1% increase	\$ 149	\$	109
1% decrease	\$ (491)	\$	(430)
Change in equity markets			
10% increase	\$ 43	\$	45
10% decrease	\$ (50)	\$	(108)
Change in best estimate returns for equities			
1% increase	\$ 407	\$	433
1% decrease	\$ (438)	\$	(457)
Expenses – 5% increase	\$ (117)	\$	(108)
Policy termination and renewal – 10% adverse change	\$ (608)	\$	(602)

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.

		2016			2015	(note 33)	
	Gross liability	nsurance assets	Net	Gross liability		nsurance assets	Net
Canada	\$ 63,144	\$ 480	\$ 62,664	\$ 60,234	\$	375	\$ 59,859
United States	40,871	323	40,548	39,903		355	39,548
Europe	53,934	4,824	49,110	60,608		4,401	56,207
Total	\$ 157,949	\$ 5,627	\$ 152,322	\$ 160,745	\$	5,131	\$ 155,614

#### (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.

## 13. 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 \$1,547 at December 31, 2016 (\$1,390 at December 31, 2015).

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 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. Most are a return of premium on death with the guarantee expiring at age 70.

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., Ireland and Germany. Certain GMWB products offered by the Company offer levels of death and maturity guarantees. At December 31, 2016, the amount of GMWB product in-force in Canada, the U.S., Ireland and Germany was \$3,917 (\$3,488 at December 31, 2015).

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, 2016 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

	2016	2015
Cash and cash equivalents	\$ 12,487	\$ 11,656
Bonds	41,619	42,160
Mortgage loans	2,622	2,596
Stocks and units in unit trusts	81,033	80,829
Mutual funds	51,726	50,101
Investment properties	11,019	10,839
	200,506	198,181
Accrued income	359	382
Other liabilities	(2,009)	(1,759
Non-controlling mutual funds interest	1,547	1,390
Total	\$ 200,403	\$ 198,194

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

	2016	2015
Balance, beginning of year	\$ 198,194	\$ 174,966
Additions (deductions):		
Policyholder deposits	21,358	21,592
Net investment income	2,379	2,855
Net realized capital gains on investments	4,275	4,780
Net unrealized capital gains (losses) on investments	6,311	(2,938)
Unrealized gains (losses) due to changes in foreign exchange rates	(10,584)	12,933
Policyholder withdrawals	(21,895)	(21,934)
Business and other acquisitions	193	5,465
Segregated fund investment in General Fund	8	43
General Fund investment in Segregated Fund	(13)	(11)
Net transfer from General Fund	20	65
Non-controlling mutual funds interest	157	378
Total	2,209	23,228
Balance, end of year	\$ 200,403	\$ 198,194

## (c) Investment income on account of segregated fund policyholders

	2016	2015
Net investment income	\$ 2,379	\$ 2,855
Net realized capital gains on investments	4,275	4,780
Net unrealized capital gains (losses) on investments	6,311	(2,938)
Unrealized gains (losses) due to changes in foreign exchange rates	(10,584)	12,933
Total	2,381	17,630
Change in investment and insurance contracts liability on account of segregated fund policyholders	2,381	17,630
Net	\$ -	\$ -

## (d) Investments on account of segregated fund policyholders by fair value hierarchy level (note 8)

	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.		20	015	
	Level 1	Level 2	Level 3	Total
Investments on account of correspond found notice holders (1)				
Investments on account of segregated fund policyholders (1)	\$ 120,283	\$ 67,333	\$ 11,765	\$ 199,381

<sup>(1)</sup> Excludes other liabilities, net of other assets, of \$1,187.

2016

2015

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

During 2016, certain foreign stock holdings valued at \$18 have been transferred from Level 2 to Level 1 (\$412 were transferred from Level 1 to Level 2 at December 31, 2015) based on the Company's ability to utilize observable, quoted prices in active markets. Level 2 assets include those assets where fair value is not available from normal market pricing sources and where the Company does not have visibility through to the underlying assets.

As at December 31, 2016, \$6,726 (\$5,925 at December 31, 2015) 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 25).

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:

	2016	2015
Balance, beginning of year	\$ 11,765	\$ 10,390
Total gains (losses) included in segregated fund investment income	(109)	1,039
Purchases	584	944
Sales	(370)	(607)
Transfers into Level 3	175	_
Transfers out of Level 3	_	(1)
Balance, end of year	\$ 12,045	\$ 11,765

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 2016, fee and other income earned by the Company resulting from the Company's interests in these structured entities was \$4,323 (\$4,399 during 2015).

Included within other assets (note 11) at December 31, 2016 is \$435 (\$501 at December 31, 2015) of investments by the Company in bonds and stocks of Putnam sponsored funds and \$81 (\$89 at December 31, 2015) of investments in stocks of sponsored unit trusts in Europe.

### 14. Financing Charges

Financing charges consist of the following:	2016	2015
Operating charges:	2010	2013
Interest on operating lines and short-term debt instruments	\$ 6	\$ 5
Financial charges:		
Interest on long-term debentures and other debt instruments	258	260
Interest on capital trust securities (note 16)	11	11
Other	27	27
	296	298
Total	\$ 302	\$ 303

### 15. Debentures and Other Debt Instruments

	2016				2		2015			
	Carry	Carrying value Fair value		Fair value		Fair value Carrying value		ying value	alue Fair v	
Short-term										
Commercial paper and other short-term debt instruments with interest rates from										
0.670% to 0.792% (0.213% to 0.223% at December 31, 2015), unsecured	\$	133	\$	133	\$	129	\$	129		
Revolving credit facility with interest equal to LIBOR plus 0.70% or U.S. Prime Rate Loan										
(U.S. \$220; U.S. \$245 at December 31, 2015), unsecured		295		295		338		338		
Total short-term		428		428		467		467		
Long-term										
Capital:										
Lifeco										
6.14% Debentures due March 21, 2018, unsecured		200		211		200		220		
6.74% Debentures due November 24, 2031, unsecured		193		261		192		264		
6.67% Debentures due March 21, 2033, unsecured		392		523		391		527		
5.998% Debentures due November 16, 2039, unsecured		342		441		342		438		
4.65% Debentures due August 13, 2020, unsecured		499		549		499		561		
2.50% Debentures due April 18, 2023, unsecured, (500 euro)		706		778		745		798		
1.75% Debentures due December 7, 2026, unsecured, (500 euro)		704		718		_		-		
		3,036		3,481		2,369		2,808		
Canada Life										
6.40% subordinated debentures due December 11, 2028, unsecured		100		128		100		127		
Irish Life										
5.25% 200 euro subordinated debentures callable on February 8, 2017,										
includes associated fixed to floating swap, unsecured		285		277		311		324		
Great-West Life & Annuity Insurance Capital, LP										
6.625% Deferrable debentures due November 15, 2034, unsecured (U.S. \$175)		231		240		238		282		
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%		402		345		414		412		
Great-West Lifeco Finance (Delaware) LP										
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		999		994		998		1,052		
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		499		536		498		560		
Total long-term		5,552		6,001	_	4,928		5,565		
Total	_	5,980	\$	6,429	\$	5,395	\$	6,032		

During 2016, Great-West Life & Annuity Insurance Capital, LP II, a subsidiary, elected to not call its U.S. \$3007.153% 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 eurodenominated foreign operations with changes in foreign exchange on the debt instrument recorded in other comprehensive income.

## Subsequent event:

On February 8, 2017 Irish Life Assurance, a subsidiary of the Company, redeemed its 5.25% 200 euro subordinated debenture notes at their principal amount together with accrued interest.

## 16. Capital Trust Securities

	2016			2016				
Carrying value		Fair value		Carrying value		Fair value		
Canada Life Capital Trust (CLCT)								
7.529% due June 30, 2052, unsecured	\$	150	\$	212	\$	150	\$	215
Acquisition related fair value adjustment		11		-		11		_
Total	\$	161	\$	212	\$	161	\$	215

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 on the Consolidated Statements of Earnings (note 14). The fair value for capital trust securities is determined by the bid-ask price. Refer to note 7 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.

### 17. Other Liabilities

	2016	2015
Pension and other post-employment benefits (note 23)	\$ 1,436	\$ 1,261
Bank overdraft	447	479
Deferred income reserve	309	437
Other	1,644	1,190
Total	\$ 3,836	\$ 3,367

Total other liabilities of \$2,091 (\$1,669 at December 31, 2015) are expected to be realized within 12 months from the reporting date. This amount excludes deferred income reserve, the changes in which are noted below.

Deferred income reserve	20	)16	2015		
Balance, beginning of year	\$	437	\$	429	
Additions		29		42	
Amortization		(39)		(39)	
Changes in foreign exchange		(76)		51	
Disposals		(42)		(46)	
Balance, end of year	\$	309	\$	437	

## 18. 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, 2016 and December 31, 2015.

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.

## (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:

	2016	2015
Net earnings attributable to participating account before policyholder dividends		
Great-West Life	\$ 167	\$ 177
London Life	843	844
Canada Life	453	349
Great-West Financial	4	4
	1,467	1,374
Policyholder dividends		
Great-West Life	(156)	(150)
London Life	(803)	(805)
Canada Life	(314)	(301)
Great-West Financial	(4)	(4)
	(1,277)	(1,260)
Net earnings – participating account	190	114
Non-controlling interests in subsidiaries	2	9
Total	\$ 192	\$ 123

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, 2016 was \$(43) (\$57 for the year ended December 31, 2015).

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

	2016	2015		
Participating account surplus in subsidiaries:		(	(note 33)	
Great-West Life	\$ 610	\$	607	
London Life	1,798		1,780	
Canada Life	357		222	
Great-West Financial	17		17	
Total	\$ 2,782	\$	2,626	
Non-controlling interests in subsidiaries	\$ 224	\$	195	

## 19. Share Capital

Authorized

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

Issued and outstanding and fully paid

	20	2016			.015	
			arrying	N I		arrying
	Number		value	Number		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
Total	100,540,032	\$	2,514	100,540,032	\$	2,514
Common shares						
Balance, beginning of year	993,350,331	\$	7,156	996,699,371	\$	7,102
Purchased and cancelled under Normal Course Issuer Bid	(7,967,881)		(267)	(6,279,856)		(221)
Excess of redemption proceeds over stated capital per Normal Course Issuer Bid	_		210	_		176
Exercised and issued under stock option plan	1,015,885		31	2,930,816		99
Balance, end of year	986,398,335	\$	7,130	993,350,331	\$	7,156

## **Preferred Shares**

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 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 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 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 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 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 to but excluding the date of redemption.

The Series N, Non-Cumulative 5-Year Rate Reset First Preferred Shares carry an annual fixed dividend rate of 2.176% 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 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 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 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 redeemable at the option of the Company on or after March 31, 2017 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 redeemable at the option of the Company on or after September 30, 2017 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 redeemable at the option of the Company on or after December 31, 2017 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, 2016, the Company announced a normal course issuer bid commencing January 8, 2016 and terminating January 7, 2017 to purchase for cancellation up to but not more than 8,000,000 of its common shares at market prices. On February 22, 2016, the Company announced an amendment to the current normal course issuer bid allowing the Company to purchase up to 20,000,000 of its common shares at market prices. The amended normal course issuer bid was effective February 23, 2016 and will continue until January 7, 2017.

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 would be 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 occur on or before January 7, 2017. As of December 31, 2016 the Company had entered into a private agreement for the repurchase of 1,600,000 of its common shares.

During 2016, the Company repurchased and subsequently cancelled 7,967,881 common shares pursuant to its previous normal course issuer bid at a cost of \$267, which includes shares repurchased under a private agreement (6,279,856 during 2015 under the previous normal course issuer bid at a cost of \$221). 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 \$210 and was recognized as a reduction to equity (\$176 during 2015 under the previous normal course issuer bid).

#### Subseauent event

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.

## 20. Earnings Per Common Share

		2016		2015
Earnings				
Net earnings	\$	2,764	\$	2,888
Preferred share dividends		(123)		(126)
Net earnings – common shareholders	\$	2,641	\$	2,762
Number of common shares				
Average number of common shares outstanding	989	9,986,009	995	,609,685
Add:				
- Potential exercise of outstanding stock options		1,681,577	2	2,245,143
Average number of common shares outstanding – diluted basis	99	1,667,586	997	7,854,828
Basic earnings per common share	\$	2.668	\$	2.774
Diluted earnings per common share	\$	2.663	\$	2.768
Dividends per common share	\$	1.384	\$	1.304

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

	2016	2015
Adjusted Net Tier 1 Capital	\$ 13,071	\$ 13,195
Net Tier 2 Capital	 2,798	2,535
Total Capital Available	\$ 15,869	\$ 15,730
Total Capital Required	\$ 6,618	\$ 6,599
Tier 1 Ratio	198%	200%
Total Ratio	 240%	238%

At December 31, 2016, the Risk-Based Capital ratio of Great-West Life & Annuity Insurance Company, Lifeco's regulated U.S. operating company was estimated to be 455% 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 has changed to the Solvency II basis, effective January 1, 2016. During 2016, the Company's regulated European insurance and reinsurance businesses were developing internal risk models and undertook steps to manage the potential capital volatility under the new regulations in cooperation with the European regulators. At the end of 2016 all European regulated entities met all 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, 2016 and December 31, 2015 the Company maintained capital levels above the minimum local regulatory requirements in each of its other foreign operations.

## 22. 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 2016, 3,146,800 common share options were granted (2,793,820 during 2015). The weighted average fair value of common share options granted during 2016 was \$3.87 per option (\$5.54 in 2015). 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 2016: dividend yield 3.99% (3.66% in 2015), expected volatility 19.31% (22.79% in 2015), risk-free interest rate 0.94% (1.09% in 2015), and expected life of seven years (seven in 2015).

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

	201	16		2015		
	Options	a	leighted overage rcise price	Options	a	eighted verage rcise price
Outstanding, beginning of year	14,623,832	\$	30.50	14,995,388	\$	29.18
Granted	3,146,800		34.68	2,793,820		35.66
Exercised	(1,015,885)		27.41	(2,930,816)		28.71
Forfeited/expired	(226,997)		35.12	(234,560)		30.01
Outstanding, end of year	16,527,750	\$	31.42	14,623,832	\$	30.50
Options exercisable at end of year	10,259,325	\$	30.13	9,395,978	\$	29.78

The weighted average share price at the date of exercise of stock options for the year ended December 31, 2016 was \$35.05 (\$35.88 in 2015).

Compensation expense due to the Plan transactions accounted for as equity-settled share-based payments of \$11 after-tax in 2016 (\$10 after-tax in 2015) 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, 2016:

		Outstanding		Exercis	sable	
Exercise price ranges	Options	Weighted average remaining contractual life	Weighted average exercise price	Options	Weighted average exercise price	Expiry
\$23.16 - \$37.22	1,174,700	0.19	37.02	1,174,700	37.02	2017
\$23.16 - \$31.27	3,475,717	1.38	30.74	3,475,717	30.74	2018
\$23.16 - \$31.14	268,700	2.53	28.79	268,700	28.79	2019
\$23.16 - \$35.62	666,226	3.37	28.32	666,226	28.32	2020
\$23.16 - \$35.62	1,331,980	4.23	28.31	1,331,980	28.31	2021
\$23.16	1,415,438	5.16	23.16	1,160,058	23.16	2022
\$27.13 - \$28.36	1,323,259	6.16	27.15	858,779	27.15	2023
\$30.33 – \$33.02	1,338,723	7.19	31.10	602,955	31.11	2024
\$35.62 – \$36.63	2,515,545	8.17	35.66	631,210	35.65	2025
\$34.68 - \$35.52	3,017,462	9.16	34.68	89,000	34.68	2026

### 22. 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 2016, \$3 in directors fees were used to acquire DSUs (\$3 in 2015).
- (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, 2016, the Company recognized compensation expense of \$14 (\$12 in 2015) for the PSU plans recorded in operating and administrative expenses on the Consolidated Statements of Earnings. At December 31, 2016, the carrying value of the PSU liability is \$27 (\$22 in 2015) 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, 2016, the Company recognized compensation expense of \$11 (\$10 in 2015) for the ESOP recorded in operating and administrative expenses on the Consolidated Statements of Earnings.
- 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 2016, Putnam granted 990,000 (1,525,218 in 2015) restricted Class B common shares and no options in 2016 or 2015 to certain members of senior management and key employees.
  - Compensation expense recorded for the year ended December 31, 2016 related to restricted Class B common shares and Class B stock options earned was \$37 (\$36 in 2015) and is recorded in operating and administrative expenses on 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, 2016 related to restricted Class C Shares and stock appreciation rights was \$17 in 2016 (\$11 in 2015) and is included as a component of operating and administrative expenses in the Consolidated Statements of Earnings.

## 23. 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. New hires 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, the present value of future expenses to be paid 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.

# 23. 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				
		2016	2015	2016			2015
Change in fair value of plan assets							
Fair value of plan assets, beginning of year	\$	6,093	\$ 5,628	\$	_	\$	-
Interest income		222	200		_		-
Actual return over interest income		231	87		_		-
Employer contributions		125	104		19		19
Employee contributions		20	21		-		-
Benefits paid		(232)	(213)		(19)		(19
Surplus paid out to employer		(8)	_		_		-
Settlements		(19)	-		-		-
Administrative expenses		(13)	(9)		-		-
Net transfer out		(3)	(2)		-		-
Foreign exchange rate changes		(209)	277		_		
Fair value of plan assets, end of year	\$	6,207	\$ 6,093	\$	_	\$	
Change in defined benefit obligation							
Defined benefit obligation, beginning of year	\$	6,627	\$ 6,248	\$	394	\$	395
Current service cost		131	138		2		2
Interest cost		241	221		16		15
Employee contributions		20	21		_		-
Benefits paid		(232)	(213)		(19)		(19
Plan amendments		(1)	15		2		-
Curtailments		(14)	_		(7)		-
Settlements		(19)	- (4.55)		-		-
Actuarial loss (gain) on financial assumption changes		495	(135)		11		(3)
Actuarial gain on demographic assumption changes		(13)	(7)		(3)		(6
Actuarial loss (gain) arising from member experience		(34)	1		1		6
Net transfer out		(3)	(2)		- (4)		_
Foreign exchange rate changes		(256)	340		(1)		4
Defined benefit obligation, end of year	<u>\$</u>	6,942	\$ 6,627	\$	396	\$	394
Asset (liability) recognized in the Consolidated Balance Sheets							
Funded status of plans – surplus (deficit)	\$	(735)	\$ (534)	\$	(396)	\$	(394
Unrecognized amount due to asset ceiling	_	(91)	(83)				
Asset (liability) recognized in the Consolidated Balance Sheets	\$	(826)	\$ (617)	\$	(396)	\$	(394
Recorded in:							
Other assets (note 11)	\$	214	\$ 250	\$	_	\$	-
Other liabilities (note 17)	_	(1,040)	(867)		(396)		(394
Asset (liability) recognized in the Consolidated Balance Sheets	\$	(826)	\$ (617)	\$	(396)	\$	(394
Analysis of defined benefit obligation							
Wholly or partly funded plans	\$	6,636	\$ 6,336	\$	-	\$	-
Wholly unfunded plans	\$	306	\$ 291	\$	396	\$	394

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, the present value of future expenses to be paid 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 pi							
	2	2016						
Change in asset ceiling								
Asset ceiling, beginning of year	\$	83	\$	23				
Interest on beginning of period asset ceiling		3		4				
Change in asset ceiling		5		56				
Asset ceiling, end of year	\$	91	\$	83				

### (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			enefits
	2016			2015	2016		2015	
Defined benefit current service cost	\$	151	\$	159	\$	2	\$	2
Defined contribution current service cost		65		54		_		-
Employee contributions		(20)		(21)		_		-
Employer current service cost		196		192		2		2
Administrative expense		13		7		_		-
Plan amendments		(1)		15		2		-
Curtailments		(14)		_		(7)		-
Net interest cost		22		25		16		15
Expense – profit or loss	_	216		239		13		17
Actuarial (gain) loss recognized		448		(141)		9		(3)
Return on assets greater than assumed		(231)		(85)		_		-
Change in the asset ceiling		5		56		_		-
Actuarial loss – investment in associate (1)		_		6		_		-
Re-measurements – other comprehensive (income) loss	_	222		(164)		9		(3)
Total expense including re-measurements	\$	438	\$	75	\$	22	\$	14

<sup>(1)</sup> This includes the Company's share of pension plan re-measurements for an investment in an associate accounted for under the equity method.

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

	Defined benefit p	ension plans
	2016	2015
Equity securities	47%	51%
Debt securities	41%	36%
Real estate	7%	6%
Cash and cash equivalents	5%	7%
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 \$5,241 at December 31, 2016 and \$5,207 at December 31, 2015, of which \$5,176 (\$5,143 at December 31, 2015) are included in the Consolidated Balance Sheets. Plan assets do not include any property occupied or other assets used by the Company.

# 23. 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					
	2016			2015	2016		2015				
Benefit obligation without future salary increases	\$	6,306	\$	5,987	\$	396	\$	394			
Effect of assumed future salary increases		636		640		-		_			
Defined benefit obligation	\$	6,942	\$	6,627	\$	396	\$	394			

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 benefit					
Benefit obligation without future pension increases	2016			2015	2016		2015				
	\$	6,515	\$	6,053	\$	396	\$	394			
Effect of assumed future pension increases		427		574		-		-			
Defined benefit obligation	\$	6,942	\$	6,627	\$	396	\$	394			

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

# (iii) Maturity Profile of Plan Membership

	Defined benefit	pension plans	Other post-employ	ment benefits
	2016	2015	2016	2015
Actives	43%	45%	21%	22%
Deferred vesteds	20%	17%	-%	-%
Retirees	37%	38%	79%	78%
Total	100%	100%	100%	100%
Weighted average duration of defined benefit obligation	19.1 years	18.9 years	13.0 years	12.4 years

## (e) Cash Flow Information

	sion ans	emplo	r post- syment efits	Total	
Expected employer contributions for 2017:					
Funded (wholly or partly) defined benefit plans	\$ 164	\$	-	\$	164
Unfunded plans	16		19		35
Defined contribution plans	74		_		74
Total	\$ 254	\$	19	\$	273

### (f) Actuarial Assumptions and Sensitivities

#### (i) Actuarial Assumptions

	Defined benefit pension plans		Other post-employr	ment benefits	
	2016	2015	2016	2015	
To determine benefit cost:					
Discount rate – past service liabilities	3.8%	3.5%	4.1%	3.9%	
Discount rate – future service liabilities	3.8%	3.6%	4.5%	4.0%	
Rate of compensation increase	3.2%	3.2%	_	-	
Future pension increases (1)	1.5%	1.1%	-	-	
To determine defined benefit obligation:					
Discount rate – past service liabilities	3.3%	3.8%	3.8%	4.1%	
Rate of compensation increase	3.2%	3.2%	_	-	
Future pension increases (1)	1.1%	1.5%	-	-	
Medical cost trend rates:					
Initial medical cost trend rate			5.1%	5.2%	
Ultimate medical cost trend rate			4.5%	4.5%	
Year ultimate trend rate is reached			2029	2029	

<sup>(1)</sup> 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 benefit		
	2016	2015	2016	2015	
Sample life expectancies based on mortality assumption:					
Male					
Age 65 in fiscal year	22.8	22.8	22.3	22.2	
Age 65 for those age 35 in the fiscal year	25.1	25.2	23.9	23.9	
Female					
Age 65 in fiscal year	24.7	24.7	24.6	24.7	
Age 65 for those age 35 in the fiscal year	26.7	26.9	26.1	26.2	

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 \$201 for the defined benefit pension plans and \$17 for other post-employment benefits.

# (iii) Impact of Changes to Assumptions on Defined Benefit Obligation

	1% increase							
	2016			2015		2016		2015
Defined benefit pension plans:								
Impact of a change to the discount rate	\$	(1,138)	\$	(1,026)	\$	1,458	\$	1,353
Impact of a change to the rate of compensation increase		303		314		(264)		(272)
Impact of a change to the rate of inflation		550		551		(498)		(536)
Other post-employment benefits:								
Impact of a change to assumed medical cost trend rates		33		34		(28)		(28)
Impact of a change to the discount rate		(46)		(44)		56		54

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.

## 24. Accumulated Other Comprehensive Income

								2	016							
	f ex on t	realized oreign cchange gains ranslation foreign erations	foreign gains on eu design hedg net inv in f	ealized exchange (losses) pro debt nated as e of the vestment preign rations	gains on av	ealized (losses) vailable- le assets	gain on o	realized is (losses) cash flow ledges	on bene and em	easurements defined fit pension other post- ployment defit plans		Total		-controlling interest	Sha	areholder
Balance, beginning of year	\$	3,011	\$	(58)	\$	123	\$	(277)	\$	(476)	\$	2,323	\$	(105)	\$	2,218
Other comprehensive		/4 AOE\		42		25		400		(224)		(4.520)		F.4		(4.476
income (loss) Income tax		(1,485)		42 (6)		35 2		109 (41)		(231) 60		(1,530) 15		54 (11)		(1,476
income tax	_	(1,485)		36		37		68		(171)		(1,515)		43		(1,472
	_	,	\$			160	\$		\$	, ,	\$	808	\$		_	746
Balance, end of year	\$	1,526	Ψ	(22)	\$	100	Ą	(209)	Ψ,	(647)	Ψ.	- 000	Ψ.	(62)	\$	740
	2015															
	on t	orealized foreign cchange gains ranslation foreign erations	foreign gains on et desig hedg net in in f	ealized exchange (losses) uro debt nated as e of the vestment oreign rations	gains on a	ealized s (losses) vailable- lle assets	gair on	orealized ns (losses) cash flow nedges	or bene and em	easurements n defined efit pension other post- ployment nefit plans		Total		n-controlling interest	Sh	areholders
Balance, beginning of year	\$	953	\$	(17)	\$	223	\$	(122)	\$	(611)	\$	426	\$	(48)	\$	378
Other comprehensive																
income (loss)		2,058		(50)		(124)		(249)		167		1,802		(62)		1,740
Income tax	_			9		24		94		(32)		95		5		100
		2,058		(41)		(100)		(155)		135		1,897		(57)		1,840
Balance, end of year	\$	3,011	\$	(58)	\$	123	\$	(277)	\$	(476)	\$	2,323	\$	(105)	\$	2,218

## 25. 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 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)

<sup>(1)</sup> Lifeco holds 100% of the voting shares and 96.2% 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 13).

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

	2016						
6.65%, matures December 13, 2027	\$	16	\$	16			
7.45%, matures May 9, 2031		13		14			
7.00%, matures December 31, 2032		13		13			
Total	\$	42	\$	43			

During 2016, the Company purchased residential mortgages of \$184 from IGM (\$206 in 2015).

In October 2016, the Company made an investment in Portag3 Ventures which invests in the FinTech sector. The investment is 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 2016 or 2015. There were no provisions for uncollectible amounts from related parties during 2016 and 2015.

## (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:

	2016	7	2015
Salary	\$ 15	\$	14
Share-based awards	7		11
Option-based awards	3		5
Annual non-equity incentive plan compensation	21		20
Pension value	8		8
Total	\$ 54	\$	58

## 26. Income Taxes

## (a) Components of the income tax expense

(i) Income tax recognized in Consolidated Statements of Earnings

Current income tax

Current income tax expense

Deferred income tax recovery

Total

		2016			
Current year	\$	321	\$	29	
Previously unrecognized tax loss, tax credit or temporary difference of prior year		(32)			
Total current income tax	\$	289	\$	29	
Deferred income tax	:	2016		2015	
Origination and reversal of temporary differences	\$	105	\$	16	
Effect of changes in tax rates or imposition of new taxes		4			
Write-down or reversal of previous write-down of deferred tax assets		5			
Previously unrecognized tax loss, tax credit or temporary difference of prior year		(7)		(	
Total deferred income tax	\$	107	\$	16	
Total income tax expense	\$	396	\$	46	
Income tax recognized in other comprehensive income (note 24)					
	:	2016		2015	
Current income tax recovery	\$	(9)	\$	(	
Deferred income tax recovery		(6)		(9	
Total	\$	(15)	\$	(9	
Income tax recognized in Consolidated Statements of Changes in Equity					
		2016		2015	

(2)

(2)

(1)

(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:

	2016	5	2015	5
Earnings before income taxes	\$ 3,352		\$ 3,471	
Combined basic Canadian federal and provincial tax rate	897	26.75%	929	26.75%
Increase (decrease) in the income tax rate resulting from:				
Non-taxable investment income	(198)	(5.91)%	(220)	(6.34)%
Lower effective tax rates on income not subject to tax in Canada	(213)	(6.35)%	(224)	(6.45)%
Other	(81)	(2.41)%	(28)	(0.80)%
Impact of rate changes on deferred income taxes	(9)	(0.27)%	3	0.10%
Total income tax expense and effective income tax rate	\$ 396	11.81%	\$ 460	13.26%

Deferred tax assets

Total

Deferred tax liabilities

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

				20	16					
	in	urance and vestment act liabilities	 ortfolio estments	Losses carried orward		angible assets	(	Other		Total
Balance, beginning of year	\$	(1,097)	\$ (674)	\$ 1,784	\$	(312)	\$	604	\$	305
Recognized in Statements of Earnings		(140)	42	135		(123)		(21)		(107)
Recognized in Statements of Comprehensive Income		_	(18)	_		-		24		6
Recognized in Statements of Changes in Equity		_	_	_		_		1		1
Acquired in business combinations		_	_	5		(9)		_		(4
Foreign exchange rate changes and other		27	3	(39)		(2)		10		(1)
Balance, end of year	\$	(1,210)	\$ (647)	\$ 1,885	\$	(446)	\$	618	\$	200
				2015 (n	ote 33)					
	in	urance and vestment ract liabilities	 ortfolio estments	Losses carried forward		tangible assets		Other		Total
Balance, beginning of year	\$	(600)	\$ (869)	\$ 1,490	\$	(151)	\$	376	\$	246
Recognized in Statements of Earnings		(378)	247	38		(84)		13		(164
Recognized in Statements of Comprehensive Income		_	24	_		_		69		93
Recognized in Statements of Changes in Equity		_	_	_		_		2		2
Foreign exchange rate changes and other		(119)	(76)	256		(77)		144		128
Balance, end of year	\$	(1,097)	\$ (674)	\$ 1,784	\$	(312)	\$	604	\$	305
								2016		2015
Recorded on Consolidated Balance Sheets:									(n	ote 33)

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.

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, 2016 are recoverable.

At December 31, 2016, the Company has recognized a deferred tax asset of \$1,885 (\$1,784 at December 31, 2015) on tax loss carryforwards totaling \$6,874 (\$4,951 in 2015). Of this amount, \$6,748 expire between 2017 and 2036, while \$126 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 \$1,262 (U.S. \$942) as at December 31, 2016 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 \$23 (\$27 in 2015) on tax loss carryforwards totaling \$101 (\$123 in 2015) that 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.

\$

1.845

(1,645)

1,891

(1,586)

## 27. Operating and Administrative Expenses

	2016	2015
Salaries and other employee benefits	\$ 3,122	\$ 2,923
General and administrative	1,594	1,463
Amortization of fixed assets	83	80
Total	\$ 4,799	\$ 4,466

## 28. Restructuring

In 2016, Putnam recorded a restructuring charge of \$33, which is recorded in restructuring and acquisition expenses in the Consolidated Statements of Earnings. Of this amount, \$19 remains unpaid at December 31, 2016 and is recorded in other liabilities. This charge reflects expense reductions and a realignment of its resources to best position itself for current and future opportunities. The Company expects to pay these remaining amounts during 2017.

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.

#### 29. 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 7 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 \$159 as at December 31, 2016 (\$107 at December 31, 2015).

## (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.

Represents the credit risk equivalent, weighted according to the creditworthiness of the counterparty, Risk Weighted Equivalent

as prescribed by OSFI.

		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							

			2015		
	Notional amount	Maximum credit risk	Future credit exposure	Credit risk equivalent	Risk weighted equivalent
Interest rate contracts					
Futures – long	\$ 2	\$ -	\$ -	\$ -	\$ -
Futures – short	160	_	_	_	_
Swaps	3,085	179	29	208	15
Options purchased	342	49	2	38	5
	3,589	228	31	246	20
Foreign exchange contracts					
Forward contracts	1,501	84	37	59	7
Cross-currency swaps	10,804	143	692	803	61
	12,305	227	729	862	68
Other derivative contracts					
Equity contracts	68	2	4	7	_
Futures – long	13	_	_	_	_
Futures – short	606	4	_	_	_
Other forward contracts	131	_	_	_	-
	818	6	4	7	_
Total	\$ 16,712	\$ 461	\$ 764	\$ 1,115	\$ 88

## 29. 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:

	2016											
	Notional Amount									Total		
	1 ye or le				Over 5 years			Total		timated ir value		
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)		

	Notional Amount									Total
		1 year	Over			Over 5				stimated
		or less	1-	5 years		years		Total	Ť.	air value
Derivatives not designated as accounting hedges										
Interest rate contracts										
Futures – long	\$	2	\$	_	\$	-	\$	2	\$	_
Futures – short		79		80		-		159		_
Swaps		619		847		1,589		3,055		130
Options purchased		49		190		103		342		49
		749		1,117		1,692		3,558		179
Foreign exchange contracts										
Forward contracts		948		_		-		948		(28)
Cross-currency swaps		426		2,138		6,740		9,304		(1,885)
		1,374		2,138		6,740		10,252		(1,913)
Other derivative contracts										
Equity contracts		68		_		-		68		2
Futures – long		13		_		-		13		_
Futures – short		606		_		-		606		1
Other forward contracts		131		_		_		131		
		818		_		_		818		3
Cash flow hedges										
Interest rate contracts										
Swaps		-		-		31		31		12
Foreign exchange contracts										
Cross-currency swaps		-		1,500		_		1,500		(524)
Net investment hedges										
Foreign exchange forward contracts		_		553				553		80
Total	\$	2,941	\$	5,308	\$	8,463	\$	16,712	\$	(2,163)

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.

The ineffective portion of the cash flow hedges during 2016, which includes interest rate contracts and foreign exchange contracts, and the anticipated net gains (losses) reclassified out of accumulated other comprehensive income within the next twelve months is \$1. The maximum time frame for which variable cash flows are hedged is 29 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.

#### 30. 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.

During the year, a subsidiary of the Company, Canada Life, received the required regulatory approvals and is now in the final stages of implementing the settlement of the class action related to the four partial declared wind-ups in respect of an Ontario defined benefit pension plan.

A subsidiary of the Company, Putnam Advisory Company, LLC, 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.

#### 31. 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. \$2,913 of which U.S. \$2,676 were issued as of December 31, 2016.

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 \$1,172 as at December 31, 2016, with \$1,084 maturing within one year and \$88 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:

	2	2017	2018		2019		2020		2021		2022 and thereafter		Total	
Future lease payments	\$	115	\$	105	\$	77	\$	60	\$	50	\$	274	\$	681

#### (d) Pledged Assets

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

- The amount of assets included in the Company's balance sheet which have a security interest by way of pledging is \$1,709 (\$645 at December 31, 2015) 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, \$62 (\$70 at December 31, 2015) of assets of the Company for the purpose of providing collateral for the counterparty.

#### 32. 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

	2016										
				United			Lifeco				
		Canada		States		Europe 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		66		82		29		-		177	
Restructuring and acquisition 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	

<sup>(1)</sup> Includes commissions, operating and administrative expenses and premium taxes.

## NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

## 32. Segmented Information (cont'd)

	2015									
		Canada		United States		Europe	_	ifeco rporate		Total
Income		canada	States		Europe		corporate			
Total net premiums	\$	11,303	\$	3,858	\$	9,340	\$	_	\$	24,501
Net investment income										
Regular net investment income		2,512		1,676		2,081		2		6,271
Changes in fair value through profit or loss		(358)		(532)		(1,120)		-		(2,010)
Total net investment income		2,154		1,144		961		2		4,261
Fee and other income		1,459		2,378		1,221		-		5,058
		14,916		7,380		11,522		2		33,820
Benefits and expenses										
Paid or credited to policyholders		9,991		4,138		8,713		-		22,842
Other (1)		3,143		2,515		1,349		16		7,023
Financing charges		116		144		42		1		303
Amortization of finite life intangible assets		59		69		18		-		146
Restructuring and acquisition expenses		-		12		23		-		35
Earnings (loss) before income taxes		1,607		502		1,377		(15)		3,471
Income taxes (recovery)		285		77		105		(7)		460
Net earnings (loss) before non-controlling interests		1,322		425		1,272		(8)		3,011
Non-controlling interests		111		10		2		-		123
Net earnings (loss)		1,211		415		1,270		(8)		2,888
Preferred share dividends		103		_		23		-		126
Net earnings (loss) before capital allocation		1,108		415		1,247		(8)		2,762
Impact of capital allocation		87		(6)		(73)		(8)		
Net earnings (loss) – common shareholders	\$	1,195	\$	409	\$	1,174	\$	(16)	\$	2,762

<sup>(1)</sup> Includes commissions, operating and administrative expenses and premium taxes.

#### (b) Consolidated Total Assets and Liabilities

	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	3,171	4,537	18,697	26,405						
Investments on account of segregated fund policyholders	74,909	35,414	90,080	200,403						
Total	\$ 153,524	\$ 87,243	\$ 159,145	\$ 399,912						
	2016									
	Canada	United States	Europe	Total						
Liabilities										
Insurance and investment contract liabilities	\$ 63,144	\$ 40,871	\$ 53,934	\$ 157,949						
Other liabilities	7,026	5,162	4,364	16,552						
Investment and insurance contracts on account of segregated fund policyholders	74,909	35,414	90,080	200,403						
Total	\$ 145,079	\$ 81,447	\$ 148,378	\$ 374,904						
	2015									
	Canada	United States	Europe	Total						
Assets										
Invested assets	\$ 67,701	\$ 43,809	\$ 50,071	\$ 161,581						
Goodwill and intangible assets	5,132	2,465	2,352	9,949						
Other assets	2,793	4,535	22,883	30,211						
Investments on account of segregated fund policyholders	70,269	35,966	91,959	198,194						
Total	\$ 145,895	\$ 86,775	\$ 167,265	\$ 399,935						
	2015 (note 33)									
	Canada	United States	Europe	Total						
Liabilities			· · · · · · · · · · · · · · · · · · ·							
Insurance and investment contract liabilities	\$ 60,234	\$ 39,903	\$ 60,608	\$ 160,745						
Other liabilities	6,703	5,189	3,844	15,736						
Investment and insurance contracts on account of segregated fund policyholders	70,269	35,966	91,959	198,194						
Total	\$ 137,206	\$ 81,058	\$ 156,411	\$ 374,675						

## 33. Comparative Figures

The Company corrected the classification of \$73 of deferred tax liabilities to investment contract liabilities to conform to the current year presentation (notes 8, 12, 26 and 32). The Company corrected an error that resulted from the misallocation of certain commissions in prior periods. This adjustment was applied retrospectively which resulted in an increase to non-controlling interests of \$15 and a decrease to accumulated surplus of \$15 (note 18). The Company also reclassified comparative figures for certain disclosure items.

These adjustments and 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, 2016 and December 31, 2015, 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, 2016 and December 31, 2015, 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 9, 2017

#### **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.

#### **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 2016 and 2015.

## **Sources of Earnings**

(in Canadian \$ millions)

	Shareholders net earnings									
For year to date at December 31, 2016	Canada			Jnited 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 shareholder before adjustments	_	1,218		249		1,200		(26)		2,641
Adjustments after tax										
Net earnings – common shareholders	\$	1,218	\$	249	\$	1,200	\$	(26)	\$	2,641

#### **Sources of Earnings**

(in Canadian \$ millions)

	Shareholders net earnings									
For year to date at December 31, 2015	Canada			United States		Europe		Lifeco Corporate		Total
Expected profit on in-force business	\$	1,209	\$	561	\$	1,006	\$	(13)	\$	2,763
Impact of new business		(11)		(86)		(122)		-		(219)
Experience gains and losses		241		4		53		(3)		295
Management actions and changes in assumptions		79		54		331		_		464
Other		-		(12)		(23)		-		(35)
Earnings on surplus		56		(27)		57		(7)		79
Net earnings before tax		1,574		494		1,302		(23)		3,347
Taxes		(276)		(76)		(105)		7		(450)
Net earnings before non-controlling interests		1,298		418		1,197		(16)		2,897
Non-controlling interests		-		(9)		_		_		(9)
Net earnings – shareholders		1,298		409		1,197		(16)		2,888
Preferred share dividends		(103)		-		(23)		_		(126)
Net earnings – common shareholder before adjustments		1,195		409		1,174		(16)		2,762
Adjustments after tax		-		-		_		_		-
Net earnings – common shareholders	\$	1,195	\$	409	\$	1,174	\$	(16)	\$	2,762

#### **Analysis of Results**

Expected profit on in-force business is the major driver of earnings and accounted for 84% of pre-tax earnings in 2016. The expected profit on in-force business of \$2,642 in 2016 was \$121 lower than 2015. The decrease year-over-year is primarily a result of lower fee income in the U.S., and lower expected margins in Group Canada and Wealth Management Canada, partially offset by higher net fee income in Reinsurance.

The strain on new sales of \$232 in 2016 was \$13 higher than 2015 primarily as a result of a shift in sales mix in the U.S. driving an increase in non-deferrable acquisition expenses, partially offset by higher volumes and sales of annuity business written in the U.K.

Experience gains of \$186 in 2016 were \$109 lower than 2015. 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 results in Group Canada, and policyholder behaviour results in Individual Insurance Canada. The gains in 2015 were primarily a result of investment experience (including yield enhancements) in Canada and the U.S. and longevity results in all segments. These gains were partially offset by expenses and life mortality results in all segments.

Management actions and changes in assumptions contributed \$547 to pre-tax earnings in 2016 compared to \$464 in 2015. The assumption changes and management actions were \$62 in Canada, \$83 in U.S. and \$402 in Europe.

The most significant contributors to the Canada amount of \$62 were updated morbidity assumptions and updated longevity assumptions. These gains were partially offset by updated expense and tax assumptions, economic assumption updates, and updated life mortality assumptions.

The most significant contributors to the U.S. amount of \$83 were economic assumptions updates and updated longevity and life mortality assumptions.

The most significant contributors to the Europe amount of \$402 were updated longevity assumptions, economic assumption updates and modeling refinements. These were partially offset by updated life mortality assumptions, and updated expense and tax assumptions.

Other of \$(68) in 2016 is primarily due to restructuring and acquisition costs related to Putnam, Aviva Health and GloHealth.

Earnings on surplus of \$58 in 2016 was \$21 lower than 2015 primarily due to lower investment income in the U.S. and a property sale in Europe in 2015 which did not repeat, partially offset by higher mark to market real estate gains due to a property sale in Canada.

# FIVE-YEAR SUMMARY (in Canadian \$ millions except per share amounts)

At December 31		2016	2015		2014		2014 2013		2012	
Total assets under administration	\$1	,248,418	\$1	,212,517	\$1	,063,333	\$	758,258	\$	545,903
For the Year Ended December 31										
Premiums and deposits:										
Life insurance, guaranteed annuities and insured health products, net	\$	31,125	\$	24,501	\$	21,222	\$	20,236	\$	19,257
Self-funded premium equivalents (Administrative services only contracts)		2,751		2,625		2,603		2,567		2,666
Segregated funds deposits:										
Individual products		13,512		12,983		11,826		8,308		6,557
Group products		7,846		8,609		9,083		7,553		7,262
Proprietary mutual funds and institutional deposits		62,232		56,257		45,306		38,046		24,496
Total premiums and deposits	\$	117,466	\$	104,975	\$	90,040	\$	76,710	\$	60,238
Condensed Statements of Earnings										
Income										
Total net premiums	\$	31,125	\$	24,501	\$	21,222	\$	20,236	\$	19,257
Net investment income										
Regular net investment income		6,252		6,271		6,010		5,604		5,642
Changes in fair value through profit or loss		3,903		(2,010)		7,527		(2,979)		2,668
Total net investment income	_	10,155		4,261		13,537		2,625		8,310
Fee and other income		5,101		5,058		4,422		3,585		3,030
Total income	_	46,381		33,820						30,597
iotal income	_	40,301		33,020		39,181		26,446		30,397
Benefits and expenses										
Paid or credited to policyholders		34,675		22,842		29,160		17,811		22,875
Other		8,114		7,326		6,468		5,633		5,057
Amortization of finite life intangible assets		177		146		132		117		103
Restructuring and acquisition expenses		63		35		32		104		_
Earnings before income taxes		3,352		3,471		3,389		2,781		2,562
Income taxes		396		460		628		463		364
	_									
Net earnings before non-controlling interests		2,956		3,011		2,761		2,318		2,198
Non-controlling interests		192		123		93		(90)		277
Net earnings – shareholders		2,764		2,888		2,668		2,408		1,921
Preferred share dividends		123		126		122		130		115
Net earnings – common shareholders	\$	2,641	\$	2,762	\$	2,546	\$	2,278	\$	1,806
Earnings per common share	\$	2.668	\$	2.774	\$	2.549	\$	2.340	\$	1.902
Return on common shareholders' equity		13.8%		14.7%		15.7%		16.8%		15.3%
Book value per common share (1)	\$	19.76	\$	20.06	\$	16.80	\$	15.16	\$	12.64
Dividends to common shareholders – per share	\$	1.384	\$	1.304	\$	1.230	\$	1.230	\$	1.230

<sup>(1)</sup> Comparative figures for 2015 have been restated as described in note 33 to the Company's December 31, 2016 consolidated financial statements.

#### **DIRECTORS AND SENIOR OFFICERS**

#### BOARD OF DIRECTORS

R. Jeffrey Orr 3,4,5,6,7

Chair of the Board of the Corporation

President and Chief Executive Officer,

Power Financial Corporation

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

Claude Généreux 3,5,6,7

Executive Vice-President,

Power Corporation of Canada and

Power Financial Corporation

Gary A. Doer, O.M. 3,6,7

Senior Business Advisor,

Dentons Canada LLP

Chaviva M. Hošek, O.C., Ph.D., LL.D. 1,2

President Emeritus,

The Canadian Institute for Advanced Research

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 the Corporation,

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

President, North America

Ericsson

Henri-Paul Rousseau, Ph.D. 3,6,7

Vice-Chairman,

Power Corporation of Canada and

Power Financial Corporation

Raymond Royer, O.C., O.Q., FCPA, FCA<sup>1</sup>

Corporate Director

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 1,2,3,6,7

President and Secretary,

JS Bravo Advisory Sàrl

Emőke J.E. Szathmáry, C.M., O.M., Ph.D. 3

President Emeritus,

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, CPA, CA 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

1. Audit Committee

Chair: Raymond Royer

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

Chair: Claude Généreux

6. Investment Committee

Chair: R. Jeffrey Orr 7. Risk Committee

Chair: Gregory D. Tretiak

University of Manitoba

Ross J. Petersmeyer

Senior Vice-President,

Regulatory Affairs

Nancy D. Russell

Senior Vice-President and Chief Compliance Officer

Laurie A. Speers

Vice-President and

Corporate Secretary

Douglas J. Tkach Senior Vice-President and

Chief Internal Auditor

Dervla M. Tomlin

Executive Vice-President and

Chief Actuary

#### 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,

General Counsel and Compliance

## S. Mark Corbett

Executive Vice-President and Global Chief Investment Officer

#### **Garry MacNicholas**

Executive Vice-President and Chief Financial Officer

## Grace M. Palombo

Executive Vice-President and Chief Human Resources Officer

#### SHAREHOLDER INFORMATION

#### Registered Office of Great-West Lifeco Inc.

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

#### **Stock Exchange Listings**

Great-West Lifeco 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); and Non-Cumulative 5-Year 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 and S 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 211 Quality Circle, College Station TX 77845-4470

**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 and S - 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**

For financial information about Great-West Lifeco Inc. visit www.greatwestlifeco.com or contact:

**Canada Operations** Senior Vice-President and Chief Financial Officer, Canada 204-946-4558

Senior Vice President and Chief Financial Officer 303-737-4002 **United States Operations** 

**Europe Operations** Senior Vice-President and Chief Financial Officer, Europe +44 1707 423198

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

#### **Common Share Investment Data**

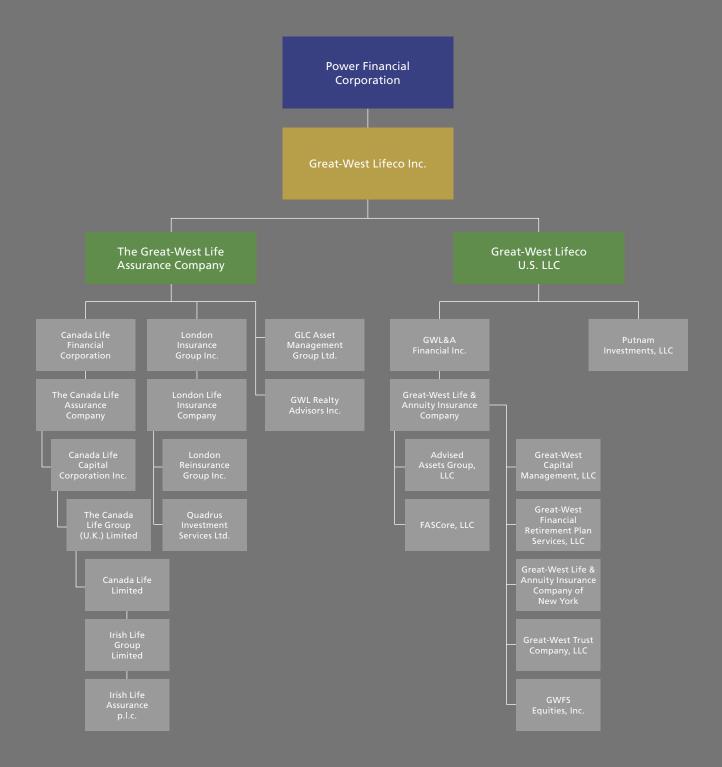
	Marke	et price per common s	Dividends	Dividend	Dividend	
	High	Low	Close	paid (\$)	payout ratio (1)(2)	yield (2)
2016	37.03	31.01	35.17	1.384	51.9%	4.1%
2015	37.52	31.31	34.53	1.304	47.0%	3.8%
2014	33.87	28.95	33.59	1.23	48.3%	3.9%
2013	33.34	24.20	32.75	1.23	58.3%	4.3%
2012	25.01	19.82	24.35	1.23	60.0%	5.5%

<sup>(1)</sup> Ratio based on operating earnings from 2012 to present.

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<sup>(2)</sup> 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, 2016. Great-West Lifeco beneficially owns, directly or indirectly, 100% of the voting securities of each such subsidiary.

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195 Millions BTU net energy **13,534**Pounds of solid waste

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